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# A Legal Regime for the Nile Basin: The Relationship Between the Principles of Equitable Utilization and No Significant Harm

by

Yoseph Endeshaw

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "A Legal Regime for the Nile Basin: The Relationship Between the Principles of Equitable Utilization and No Significant Harm" submitted by Yoseph Endeshaw in partial fulfilment of the requirements for the degree of Master of Laws.

Supervisor, Professor Nigel Bankes
Faculty of Law

Professor Owen Saunders
Faculty of Law

Professor Brenda Baker
Faculty of Humanities, Department of Philosophy

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Date

## ABSTRACT

The principles of equitable utilization and no significant harm are the basic substantive principles that govern the non-navigational uses of international watercourses. The relationship between these principles is the most controversial issue in international water law. This thesis examines the question of what the relationship between these principles should be in the new legal framework to be established in the Nile Basin. What should be the relative priority as between these principles in the Nile context?

After a detailed analysis of the issue, both from legal and fairness perspectives, this thesis concludes that equitable utilization should be the dominant principle in the new legal framework to be established in the Nile Basin. The thesis argues that the optimal, equitable and sustainable utilization of the Nile waters can only be achieved by establishing a legal regime based on the principle of equitable utilization.

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## DEDICATION

To my family

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# INTRODUCTION

The law dealing with the non-navigational uses of international watercourses is one of the important, yet complicated and sensitive, areas of international law. Among other things, the ever-growing world population and increase in economic development have led, in many parts of the world, to scarcity of water. Where there is scarcity of water, disputes or conflicts among states sharing water resources are likely to occur. In addition to water scarcity, issues of water quality such as pollution have further made the regulation of international watercourses very critical. Serious efforts have been undertaken by the international community to formulate and develop rules and principles that govern the use and management of international watercourses since the turn of the twentieth century. Under contemporary international law, as reflected in state practice, the views of jurists and the works of international institutions, the two basic substantive principles in the area are the principles of equitable utilization and no significant harm. These principles, however, may sometimes conflict and the question of what their relationship should be in such situations is not entirely clear or free from controversy. This thesis examines the question of what the relationship between the principles of equitable utilization and no significant harm should be in the new legal framework to be established in the Nile Basin.

The Nile River is one of the longest rivers in the world with a length of about 6,825 kilometers. Its catchment basin covers more than three million square kilometers or one-tenth of the African continent. The average annual discharge of the Nile is about 84 billion cubic meters (BCM). The Nile and its tributaries bring together ten sovereign states: Burundi, Democratic Republic of Congo, Egypt, Eritrea, Ethiopia, Kenya, Rwanda, Sudan, Tanzania and Uganda. Virtually the entire flow of the Nile is derived from rainfall on the Ethiopian highlands and the catchment areas of the Equatorial Lakes. Roughly 72 BCM or 86 per cent of the Nile's water originates in the highlands of Ethiopia, while the Equatorial Lakes Plateau account for the remaining flow of the Nile.

The history of the Nile basin has been dominated by competition, confrontation and conflict among the watercourse states, particularly among Egypt, Sudan and Ethiopia. Some writers even cite the Nile as an example where conflicts over water resources may escalate to the point of war in the near future. The major problem facing the Nile countries is scarcity of water, as there are substantial mismatches between water supply and demand in the region. As a result, it is difficult, if not impossible, to reconcile the respective claims of each watercourse state to the limited flow of the Nile. The inequitable nature of the status quo is another major problem of the Nile basin. There are enormous differences among the Nile countries in terms of actual utilization of the Nile waters. Egypt and, to a lesser extent Sudan, are using almost all of the Nile waters, while the other riparian states have scarcely begun to make use of the Nile waters. For instance, Ethiopia, which is the source of about 86 per cent of the Nile waters, is only using 0.6 BCM or less than 1 per cent of the Nile waters annually.

The problems in the use and management of the Nile waters are further exacerbated by the absence of a valid and an appropriate legal regime that balances the interests of all watercourse states and promotes the optimal and sustainable development of the basin. The existing legal regime of the Nile basin is, to a significant degree, dictated by the region's colonial history and the strategic concerns of its colonial powers. Several agreements were concluded during the colonial time. All of these agreements involved Great Britain, the major colonial power in the region. Mainly due to Britain's strategic interest in Egypt and the Suez Canal, all the colonial time treaties were designed to ensure the unimpeded flow of the Nile to Egypt, with complete disregard of the interests of the other Nile states.

There is no agreement among the Nile states as to the status of the colonial time agreements. While most of the upper Nile states repudiated them once they became independent, Egypt has maintained that they are still in force. Due to its unsettled or controversial state, the law of state succession has not been able to solve this disagreement. In the post-colonial period, the most significant agreement on the Nile waters is the 1959 Agreement between Egypt and

Sudan, which allocated the entire flow of the Nile between the two countries. Since 1959 there have been no significant and concrete agreements on the utilization of the Nile waters.

Since the status of the colonial time Nile waters agreements is not entirely clear, the existing Nile legal framework is uncertain. It is also profoundly inequitable, since it makes no provision for the majority of the Nile states to make any significant use of the resource. Moreover, it is inadequate, as most of the important treaties are bilateral. Due to all these drawbacks, the existing Nile legal regime has proved in practice to be incapable of solving the glaring problems facing the basin. Thus, the establishment of a new comprehensive legal regime that balances the interests of all Nile states and promotes the optimal and sustainable utilization of the resource has become imperative to avoid conflicts and protect the resource from degradation.

Recent developments in the Nile basin indicate that there is an emerging consensus among the Nile states as to the need for a new legal regime. All Nile countries with the exception of Eritrea have been participating in the Nile Basin Initiative (NBI) which was formally launched in 1999. One of the major objectives of the NBI is to establish a new legal framework. The main challenge in establishing a new Nile legal regime would be the determination of the substantive principles on which the regime will be based. Indeed, the relationship between the two basic substantive principles-equitable utilization and no significant harm-is one of the outstanding issues in the ongoing negotiation process to establish a new Nile legal framework. Thus, this thesis addresses the question - what should be the relationship between the no significant harm and equitable utilization principles, or more specifically, which principle should be given precedence, in the new legal framework to be established in the Nile basin?

Establishing a legal regime for any international watercourse requires taking into account the peculiar features of the watercourse in question. Thus, the first Chapter provides general background about the Nile basin. It begins by describing the major geographical, climatic

and hydrological characteristics of the basin. The enormous variations in climate and topography across the basin, the seasonal and annual variation of the Nile flow and the loss of large volumes of water through evaporation and seepage are some of the factors that would have significant impact in determining an effective regime for the use and management of the Nile basin. The discussion of the hydropolitics of the Nile in this Chapter shows how the history of the Nile is dominated by confrontation and the impact of the colonial history of the region. Both affect the status quo. The Chapter further analyzes the contents and status of the various agreements concluded to govern the utilization of the Nile waters. This discussion reveals that the existing legal regime is highly deficient and, thereby establishes the need for a new legal framework. Lastly the Chapter describes the ongoing efforts to establish a new Nile legal framework.

Clarification of the law of international watercourses in general, and critical evaluation of the principles of equitable utilization and no significant harm in particular, depends in large part on a proper understanding about what foundational policy should inform this area of law. Thus, Chapter two examines the theoretical background of international water law. As the question of distributive justice is central in the sharing of international watercourses, the Chapter analyzes the theories of international water law not only from the legal point of view but also from a justice or fairness perspective using Rawls' theory of justice as a standard.

The negotiation and conclusion of special watercourse agreements are not carried out in a legal vacuum. Such agreements are normally negotiated and concluded within the framework of general international water law. Thus, the determination of the relationship between the principles of equitable utilization and no significant harm in the Nile basin requires analysis of how the relationship between these principles has been dealt with under international law. Chapter three discusses the contents of each of these principle as well as their relationship under contemporary international law by analyzing different sources of international law: the works of international organizations, the writings of scholars, the decisions of international tribunals and the provisions of the United Nations Watercourse Convention and other

international instruments in the area. The Chapter also investigates the relevance and value of general international water law to the Nile basin and addresses the issue of priority between the principles of equitable utilization and no significant harm in the Nile basin by taking into account the main features of the basin discussed in Chapter one.

Apart from legal arguments, the Nile states rely on fairness or justice arguments to support their respective claims on the Nile waters. The relationship between the principles of equitable utilization and no significant harm in the new Nile legal regime needs, therefore, to be assessed from a justice or fairness point of view. Thus, Chapter four evaluates the issue of priority between the principles of equitable utilization and no significant harm in the Nile basin from justice point of view by using John Rawls' theory of justice as a standard.

# CHAPTER ONE

# THE NILE BASIN: GENERAL BACKGROUND

## 1.1. Geography and Hydrology

The Nile is one of the world's longest rivers flowing for about 6,825 kilometers from its remotest source in Burundi to its Mediterranean mouth over 35 degrees of latitude.[1] Although the Nile is a great river in terms of its length, it holds a relatively much lowlier position in terms of the volume of water it carries.[2] The average annual discharge of the Nile is only 84 billion cubic meters.[3] With its drainage basin area of nearly 3.1 million square kilometers, the Nile basin covers one-tenth of the African continent.[4] It traverses through a variety of climates and topographies, from well watered and mountainous highlands to the most barren deserts.[5] Excluding the Central African Republic,[6] which lies only to a lesser

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1 G. Shapland, *Rivers of Discord: International Water Disputes in the Middle East* (New York: St. Martin's Press, 1997) at 57. However, there are other estimates of the length of the Nile. For instance, Gleick mentions four other sources that provide different estimates of the length of the Nile- UNESCO & WFF (6,670 km), *The Water Encyclopedia* (6,650 km) and E.Czaya, *Rivers of the World* (6,484 km). According to Gleick, the reason for such variations is that determining a river's length is not an exact science and the figure usually varies depending on "the geographical scale used, the accuracy of the measurement technique, and the assumptions about what tributaries to include in each river." P. H. Gleick, ed., *Water in Crisis: A Guide to the World's Fresh Water Resources* (New York: Oxford University Press, 1993) at 150-51.

2 For instance, it carries only one thirty-fifth of the volume of the Amazon. See J. Waterbury, *Hydropolitics of the Nile Valley* (New York: Syracuse University Press, 1979) at 20.

3 This figure is the average for the years 1900 to 1959, measured at Aswan, Egypt. See Shapland, *supra* note 1.

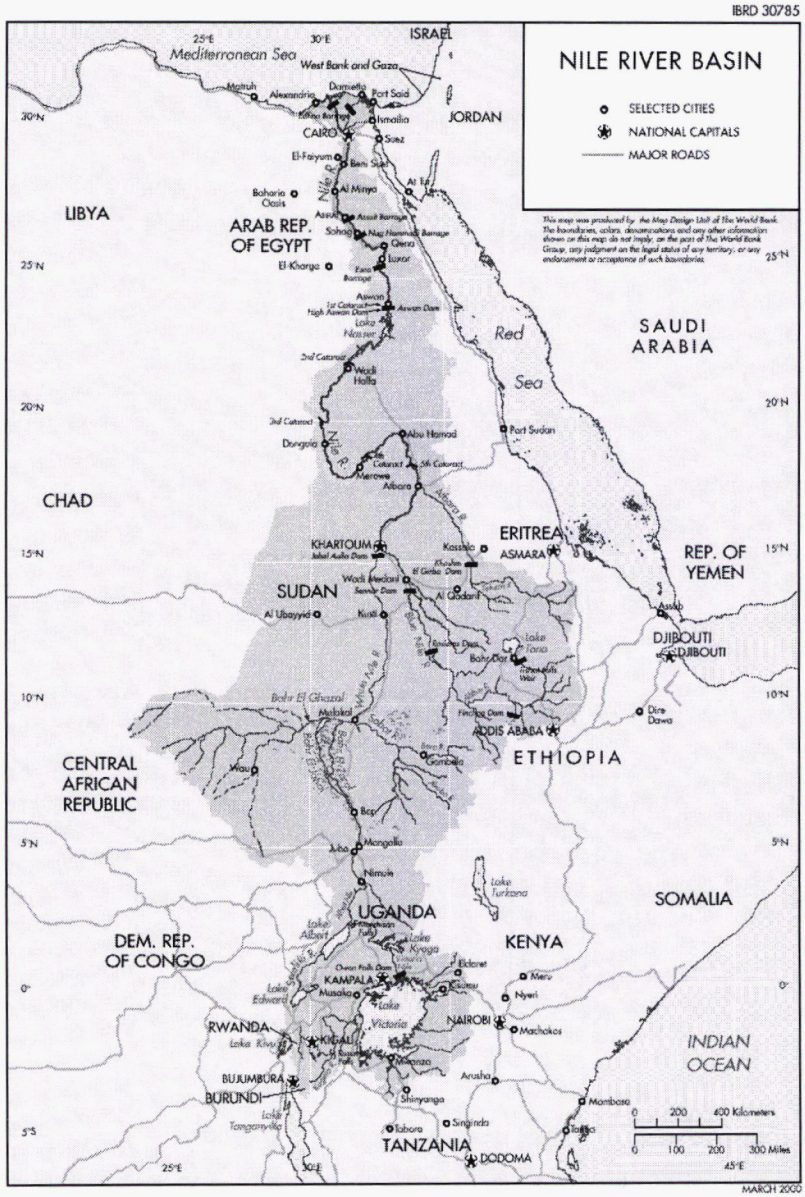
4 See Waterbury, *supra* note 2 at 14.

5 R. O. Collins, *The Waters of the Nile: Hydropolitics and the Jonglei Canal, 1900-1988* (New York: Oxford University Press, 1990) at 1.

6 The Bahr al-'Arab river, which contributes insignificant waters to the White Nile, rises on the watershed and frontier between the Central African Republic and the Sudan, but the former is not normally regarded as a Nile basin State. For the source of Bahr al-'Arab river, see *Ibid.*, at 14.

extent on the catchment, the Nile and its tributaries bring together ten countries: Burundi, Democratic Republic of Congo, Egypt, Eritrea, Ethiopia, Kenya, Rwanda, Sudan, Tanzania and Uganda.

Map of the Nile River Basin




Source: Nile Basin Initiative, at http//www.nilebasin.org

Although the use of the Nile for agriculture, particularly in Egypt, dates back several millennia[7] and the Nile has fascinated scholars of all creeds and races from different disciplines over many centuries,[8] the sources of the Nile eluded explorers until the recent past and their full discovery had to wait until the 20th Century.[9] As recently as the middle of the 19th Century, Sir Harry Johnston referred to the Nile quest as "the greatest geographical secret, after the discovery of America."[10] However, after Britain controlled Egypt in 1882, extensive studies were conducted on the Nile and now "the Nile Basin is one of the most studied natural resource systems in the world."[11]

Virtually the entire flow of the Nile is derived from rainfall on the Ethiopian highlands and the catchment areas of the equatorial lakes.[12] The White and the Blue Niles are the major tributaries of the Nile River. The White Nile has, as its principal source, Lake Victoria, the second largest lake in the world after Lake Superior.[13] Lake Victoria lies between Uganda, Kenya and Tanzania. Numerous rivers and streams feed Lake Victoria of which the Kagera river, which drains parts of Rwanda, Burundi, Tanzania and Uganda, is the major one

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7 Shapland, *supra* note 1 at 60 (states that "the use of the Nile for agriculture dates back some 7,000 years.")

8 T. Evans, "History of Nile flows"in P.P. Howell & J. A. Allan, eds., *The Nile: Sharing a Scarce Resource* (Cambridge: Cambridge University Press, 1994) 27 at 27.

9 For instance, it was only in 1937 that the remotest source of the White Nile, the headwaters of the Luvironzia river, was discovered. See Collins, *supra* note 5 at 4-5.

10 *Ibid.*, quoting Johnston (1905, p. vii).

11 J. A. Allan, "Nile Basin Water Management Strategies", in P.P. Howell & J. A. Allan, eds., *The Nile: Sharing a Scarce Resource* (Cambridge: Cambridge University Press, 1994) 313 at 313. According to Allan, some of the most comprehensive studies conducted when Britain had significant influence on most of the Nile basin states include: Macdonald 1921, McGregor 1945, Morrice and Allan 1958, Hurst 1933, Hurst et al 1946, Hurst 1952.

12 Waterbury, *supra* note 2 at 18.

13 The total surface area of Lake Victoria is 69,485 square kilometers and it lies 1,133 meters above see level. *Ibid.*, at 14-16.

contributing nearly one-third of its entire inflow.[14] Lake Victoria has only one drainage outlet at its northern shore and from this outlet flows the Nile, usually known here as the Victoria Nile.[15] It then passes along the western edge of Lake Kyoga and enters Lake Albert, which lies between Uganda and Democratic Republic of Congo. From Lake Albert to Nimule on the Uganda-Sudan border, the river is known as the Albert Nile.

Entering Sudan, the river assumes another name, the Bahr al-Jabal (meaning mountain river).[16] A little north of Juba, the capital of southern Sudan, the river enters the great swamps of the Nile known as the Sudd.[17] As the Bahr al-Jabal passes through the Sudd it loses about 50 per cent of its flow, approximately 14 billion cubic meters, through evaporation and seepage. It then reaches Lake No where it is joined by another tributary, the Bahr al-Ghazal, which receives its waters from Democratic Republic of Congo and western Sudan.[18] The Sobat river that rises in the Ethiopian Highlands is the last river to complete the formation of one of the two major branches of the Nile - the White Nile.[19] The Sobat river provides one-half of the total mean annual flow of the White Nile. After the Sobat, the White Nile receives no significant water and it flows almost due north to Khartoum and its confluence with the Blue Nile.

The Blue Nile flows from the highlands of Ethiopia, Lake Tana being its principal source.

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14 *Ibid.*

15 Collins, *supra* note 5 at 8.

16 *Ibid.*

17 According to Collins, the term Sudd, which is derived from the Arabic word *sadd* (barrier or obstacle), "is used to describe the permanent swamp of the Nile or, more loosely, to refer to the whole of the Nile flood-plain, including the seasonal wetlands as well as the permanent swamp." *Ibid.*, at 66. The permanent swamp is about 6,000 square kilometers in surface. Waterbury, *supra* note 2 at 16.

18 The Bahr al-Ghazal is a much smaller and shorter river than the Bahr al-Jabal and its contribution to the Nile waters is insignificant. See *Ibid.*, at 13.

19 *Ibid.*, at 15.

The surface area of Lake Tana is 3,100 square kilometers and it lies nearly 1,800 meters above sea level.[20] From Lake Tana, the Blue Nile, which is known as the Abbay in Ethiopia, flows through a deep gorge, picks up the flow of the Diddessa, the Bales, the Dinder and the Rahad rivers, and reaches Khartoum where it merges with the White Nile. The Blue Nile is by far the most important tributary, and provides about 59 per cent of the total mean annual discharge of the main Nile. Its pre-eminent position is further strengthened by its near monopoly of silt supply.[21] The Blue Nile has been taking, over millennia, rich alluvial soil and silts from Ethiopian plateau and depositing them along the banks of the main Nile and the Nile Delta, thereby converting the deserts of north Sudan and Egypt into rich agricultural areas. On the other hand, the waters coming from the equatorial lakes plateau carries little silt, as silts are generally deposited in the various Lakes and the Sudd swamp.[22]

From Khartoum the main Nile begins its more than 3,000 km journey to the Mediterranean Sea. Throughout this journey, the only additional source of water is the Atbara river that joins the main Nile some 320 km north of Khartoum.[23] The Atbara river, which also rises in the highlands of Ethiopia, accounts for about 13 percent of the total annual flow of the Nile.[24] After Atbara the Nile flows as a single river through the formidable eastern reaches of the Sahara desert nourishing the inhabitants along the way, all of whom are totally dependent on it. The fact that the Nile travels for such a long distance through a hostile environment without receiving any water distinguishes it from any other river in the world.

From this account we can see that there are enormous differences in the relative contribution

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20 Waterbury, *supra* note 2 at 17-18.

21 *Ibid.*, at 24.

22 *Ibid.*

23 Collins, *supra* note 5 at 23.

24 *Ibid.* A small portion of the Atbara river comes from Eritrea.

of each riparian state to the flow of the river. About 86 per cent of the Nile's flow originates in Ethiopia: the Blue Nile, the Sobat and the Atbara rivers contributing 59 per cent, 14 per cent and 13 per cent, respectively. At the other extreme is Egypt, which adds virtually no water to the Nile river. Mainly due to the enormous losses of water through evaporation and seepage in the Sudd swamps, the contribution of the countries in the equatorial lakes region is a relatively small 14 per cent.

In fact the Sudd swamps is one of the significant features of the Nile hydrology. The loss of large volume of water in the Sudd has prompted the development of engineering schemes aimed at minimizing such loses.[25] Among these schemes the most notable is the Jonglei Canal Project, which was designed to divert the flow of the Bahr al-Jabal around the wetlands.[26] Work on the Jonglei Canal began in 1978, but has been suspended since 1984 mainly because of the civil war in southern Sudan.[27] According to Waterbury, "if additional quantities of water are to be brought into the system, they will have to be found among the sources of the White Nile, heretofore the junior partner, as the Blue Nile's waters are already heavily committed for irrigation purposes."[28]

The seasonal variation in the discharge of the main Nile is also one of its principal hydrological features. Approximately four-fifths of its average annual flow occurs between August and October, when the Blue Nile is in flood, just after the monsoon season in the highlands of Ethiopia. When the Blue Nile is in flood it supplies about 90 per cent of the

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25 S. C. McCaffrey, *The Law of International Watercourses* (New York: Oxford University Press, 2001) at 234-35.

26 For a detailed discussion of the Jonglei Canal Project, see Collins, *supra* note 5 at chs. 7-9.

27 *Ibid.*, at 401.

28 Waterbury, *supra* note 2 at 23.

water in the main Nile but at other times it may account for only 20 per cent.[29] Even more dramatic is the flow of the Atbara river, which is dry for more than half of the year.[30] Unlike the rivers coming from the Ethiopian highlands, the White Nile exhibits less seasonal fluctuations in its annual flood mainly due to a relatively steady discharge from its principal sources, Lakes Victoria and Albert.[31] Apart from seasonal flow variation, the fluctuation of the Nile flow from year to year has been the preoccupying issue for the Nile users for the past six or more millennia.[32] In the last century alone, the flow of the Nile fluctuated from 120 billion cubic meters in 1916 to 42 billion cubic meters in 1984.[33]

## 1.2. Water Scarcity and Hydropolitics in the Nile Basin

The Nile is a vital resource upon which nearly 280 million people in ten countries rely for their fresh water supply.[34] Some of the Nile States are already highly dependent upon the Nile waters, whereas others want to become so dependent. Egypt is by far the most dependent upon the Nile waters. Essentially all of Egypt's water comes from the Nile river.[35]

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29 A. H. Garretson, "The Nile Basin," in A. H. Garretson, R. D. Hayton and C. J. Olmstead, eds., *The Law International Drainage Basins* (New York: Oceana Publications, Inc., 1967) 256 at 259.

30 *Ibid.*

31 *Ibid.*

32 Howell and Allan describes this fact as follows: "That the flow could vary from year to year as well as seasonally has been recorded for many thousands of years and the awareness of Egypt's cycles of seven lean years followed by years of plenty were part of the way of life of the peoples residing in the lower Nile valley before the filling of Lake Nasser/Nubia in the 1960s." P. P. Howell & J. A. Allan, eds., Introduction to *The Nile: Sharing a Scarce Resource* (Cambridge: Cambridge University Press, 1994) at 1.

33 Collins, *supra* note 5 at 402.

34 J. Brunnee & S. J. Toope, "The Changing Nile Basin Regime: Does Law Matter?" (2002) 43 *Harv. Int'l L. J.* 105 at 118.

35 M. de Villiers, *Water Wars: Is the World's Water Running Out?* (London: Weidenfeld and Nicolson, 1999) at 238 (stating that the Nile is critical to Egypt, which has no other water except a few rapidly diminishing aquifers under the desert.)

The old statement by the Greek historian Herodotus that Egypt is "the gift of the Nile"[36] is no less true today than in the distant past and it succinctly encapsulates Egypt's complete dependence on the Nile. After stating that Egypt gets essentially all of its waters from the Nile, Schwabach went on to assert that "perhaps nowhere in the world is reliance on freshwater resources originating outside the country so complete, or so glaringly evident."[37]

Although they are comparatively less dependent on the Nile than Egypt, the river also has profound effects on the other Nile basin States.[38] For instance, the importance of the Nile to Sudan is easily discernible from the fact that about seventy-seven percent of Sudan's entire water supply comes from the Nile.[39] In the case of Ethiopia, its portion of the Nile Basin covers nearly one-third of the total area of the country and accounts for 65 percent of the country's estimated annual water resources.[40] Besides, most of Ethiopia's heavy rain is limited to a few months of the year and falls over only a part of the country.[41] Thus, Ethiopia's aspiration to get out of the perennial droughts and famine that characterized the country for the last three decades can hardly be imagined without a significant use of the Nile waters. In general, the economy of most of the Nile States is dependent on agriculture which use, or could potentially use, the Nile waters. Moreover, in most of the Nile countries, water

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36 Brunnee & Toope, *supra* note 34 at footnote 98 citing Alan Moorehead, *The Blue Nile,* 3 (1962).

37 A. Schwabach, "The United Nations Convention on the Law of Non-navigational Uses of International Watercourses, Customary International Law, and the Interests of Developing Upper Riparians" (1998) 33 *Tex. Int'l L. J.* 257 at 263.

38 Brunnee & Toope, *supra* note 34 at 123.

39 *Ibid.* Citing P. H. Gleick, "Water and Conflict: Fresh Water Resources and International Security" (1993) 18 *Int'l Security* 79 at 83.

40 A. Jabessa, "Small Scale Irrigation Development as a Food Security Provision and Co-operation of the International Organisations in the Ethiopian Nile Sub-Basin" ( Paper presented to the VIII Nile 2002 Conference, Addis Ababa, June 2000) [unpublished].

41 O. Okidi, "History of The Nile and Lake Victoria Basins through treaties" in P.P. Howell & J. A. Allan, eds., *The Nile: Sharing a Scarce Resource* (Cambridge: Cambridge University Press, 1994) 321 at 321.

supply is on a collision with ever growing water demand. Burundi, Egypt, Ethiopia, Kenya, Rwanda, and Tanzania are already critically short of water and have already fallen into the category of water stressed countries.[42] Thus, although the Nile is associated with the very existence of Egypt, it is also critical to most of the other Nile countries. That is why Brunnee and Toope found the old saw that "Egypt is the Nile and the Nile is Egypt" misleading, and asserted instead that the Nile is more than Egypt.[43]

When we come to the actual utilization of the Nile waters, there are enormous differences among the Nile Basin countries. The pattern of Nile water utilization is in a sharp contrast with the pattern of the supply of its waters. Garretson observes that "[t]he Nile basin is perhaps the archetype of the usual historical pattern of international river basin development: early and significant development in the delta and lower basin and later - in this instance several thousand years later - development in the upper basin."[44] For a long time Egypt has substantially used the Nile waters, while Sudan has so far made moderate use of them.[45] The other Nile basin countries have yet to make a significant use of the Nile waters.

Given its complete dependence on the Nile waters, Egypt's need to control the Nile waters is obvious. The sense of vulnerability and insecurity has always preoccupied Egyptians throughout their long history. As a result, security and control of the Nile waters have always been at the center of Egyptian policy on the Nile. As put by Villiers, "current tensions between Egypt, Ethiopia, and Sudan are in one way a continuation of a two-thousand-year-

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42 Villiers, *supra* note 35 at 239. According to Falkenmark, "water stress" is when "annual renewable supplies approaching 2000 cubic meters per person per year." See Brunnee & Toope, *supra* note 34 at 119, footnote 79 citing M. Falkenmark, "Fresh Water- Time for a Modified Approach" 15 *AMBIO* 192, 194 (1986).

43 Brunnee & Toope, *ibid.*, at 123-24.

44 Garretson, *supra* note 29 at 264-65.

45 C. B. Bourne, "The Right to Utilize the Waters of International Rivers" in P. Wouters, ed., *International Water Law: Selected Writings of Professor Charles B. Bourne* (London: Kluwer Law International, 1997) 25 at 25.

old struggle over who will control the water."[46] History has recorded several attempts of Egyptian rulers to unify the Nile basin under their rule by conquering Sudan.[47] In some years, when the rains failed in Ethiopia and the Nile flows were extremely low, people in Egypt believed that human action was involved. More than once, the Sultans of Egypt sent ambassadors to Ethiopian Kings in order to plead with them not to obstruct the Nile flows.[48] The Scottish traveler, James Bruce, who visited Ethiopia in the 18th century recounted a letter from the King of Ethiopia to the Pasha of Egypt in 1704 threatening to divert the course of the Nile and starve Egyptians in response to the persecution of Copts in Egypt.[49] In the second half of the 19th century, with a view to controlling the sources of the Nile, the Egyptians tried on two occasions to conquer the northern parts of Ethiopia, each time without success.[50]

The modern history of the hydropolitics of the Nile basin is, to a significant degree, conditioned by the region's colonial history and the strategic concerns of its colonial powers.[51] As put by Brunnee and Toope, "[t]he colonial patterns of competition and quest for control were subsequently replicated by the newly independent states in the region...."[52] Of the colonial powers, Britain played the most significant role. According to Collins, while the opening of the Suez Canal in 1869 dramatically increased Britain's interest in Egypt, the financial collapse of Egypt in 1876 actually facilitated Britain's control of that country in

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46 Villiers, *supra* note 35 at 239.

47 Villiers, *supra* note 35 at 239.

48 *Ibid.*, at 239-40. See also Collins, *supra* note 5 at 3.

49 Villiers, *ibid.*, at 40, Collins, *ibid.*, at 4. See also S. Trimingham, *Islam in Ethiopia* (London: Oxford University Press, 1952) at 70-71.

50 D. Kinde, "Egypt and the Hydro-Politics of the Blue Nile River", Academic Forum Online at http://www.hsu.edu/faculty/afo/1999-00/kendie.htm [last visited on 15 January, 2003].

51 Brunnee & Toope, *supra* note 34 at 123.

52 *Ibid.*

1882.[53] After the British gained effective control of Egypt in 1882, they were quick to realize the importance of the Nile river for their continued existence in Egypt. The British were clear from the outset that, if they were to remain unchallenged in Egypt and thereby secure their strategic position at Suez, they must secure and defend the uninterrupted flow of the Nile waters to Egyptians.[54] To Herodotus's observation that Egypt is the gift of the Nile, the British added that he who controls the Nile controls Egypt.[55] The British were not alone in this line of thinking. The French, embittered by Britain's unilateral occupation of Egypt, launched the Fashoda expedition in 1898, aimed at compelling Britain to negotiate the evacuation of Egypt by controlling the Nile waters at Fashoda, in the southern Sudan.[56] However, the British, who were determined to defend the flow of the Nile to Egypt at any cost, defused France's challenge for control of the Nile at Fashoda by using the Anglo-Egyptian army under the command of General Kitchener.[57]

Great Britain made a series of efforts to ensure that no one would tamper with the Nile and succeeded in imposing a basin-wide regime favorable to Egypt. It achieved this either through gaining direct control of source areas or through obtaining, by treaty, the agreement of the countries controlling the sources of the Nile not to change the river's flow without British consent.[58] Not knowing that Ethiopia was the major source of the Nile waters and influenced by John Hanning Speke's 1862 discovery of Lake Victoria as the main source of the Nile, the initial focus of Britain and other colonial powers was directed on the Equatorial

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53 Collins, *supra* note 5 at 26-33.

54 *Ibid.*, at 105.

55 Kinde, *supra* note 50 at 2.

56 Collins, *supra* note 5 at 33-63.

57 *Ibid.*

58 J. W. Dellapenna, "The Nile as a Legal and Political Structure" in E. H P Brans et al, eds., *The Scarcity of Water: Emerging Legal and Policy Responses* (London: Kluwer Law International Ltd, 1997) 121 at 124; Brunnee & Toope, *supra* note 34 at 123-26.

Lakes region.[59] It was the quest for control of the headwaters of the Nile that dragged Britain into assuming colonial power over nearly the whole of the White Nile valley - Sudan, Uganda, Kenya and Tanzania.[60] As for the rest of the sources of the headwaters of the Nile which were not under their sovereign control, the British signed agreements with Italy, Ethiopia, the Independent State of Congo, and France - countries exercising control or influence on various sources of the Nile.[61] All of these treaties, which will be discussed in some detail below in section 1.3, provided that the Nile would not be tampered with, save with the consent of Britain.

After securing the unimpeded flow of the Nile through physical control of most of the Nile valley and through treaties, the British engaged in extending irrigation in Egypt and Sudan.[62] The extension of irrigation in Sudan, however, alarmed the Egyptians and led to the establishment of the Nile Commission charged with "examining and proposing the basis on which irrigation (in the Sudan) can be carried out with full consideration of the interests of Egypt and without detriment to her natural and historic rights."[63] The report of the commission provided the basis for and was annexed to the 1929 Nile Waters Agreement

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59 Collins, *supra* note 5 at 26-27.

60 R. O. Collins, "History, hydropolitics, and the Nile: Nile control: myth or reality?" in P.P. Howell & J. A. Allan, eds., *The Nile: Sharing a Scarce Resource* (Cambridge: Cambridge University Press, 1994) 109 at 111 [hereinafter Nile control]; Dellapenna, *supra* note 58.

61 Protocol between Great Britain and Italy, 15 Apr. 1891, E. Hertslet, *The Map of Africa by Treaty*, 3rd ed. (London: Frank Cass &Co., 1967) Vol. III at 949 [hereinafter, *The Map of Africa*] ; Agreement between Great Britain and Ethiopia, 15 May 1902, *The Map of Africa*, Vol. II at 431; Agreement between Great Britain and the Independent State of the Congo, 9 May 1906, *ibid.*, at 584-86; Agreement between Great Britain, France and Italy, 13 Dec. 1906, *ibid.*, at 440-44.

62 Such activities include the construction of the first Aswan Dam in Egypt and the Sennar Dam in Sudan. See Garretson, *supra* note 29 at 266-70.

63 *Ibid.*, at 270 quoting Survey of the Royal Institute of International Affairs (1925). See also McCaffrey, *supra* note 25 at 237 ( stating that the study of the Commission "was due in large measure to the 'Gezira cotton scheme', a project for the irrigation of the Gezira region of Sudan....")

between Britain and Egypt.[64] In the 1929 agreement, Egypt was confirmed in her enjoyment of overwhelming rights in the use of the Nile, since the British Government (on behalf of all its other colonies in the Nile basin) accepted the prior rights of Egypt and agreed not to construct any irrigation and power works on the Nile save with the prior agreement of the Egyptian Government.[65]

Although mainly concerned with increasing the amount of water reaching Egypt, throughout the period of its dominant role in the region, Britain also fostered the idea of developing the Nile treating the entire basin as a unit. One of the main schemes emanating from this idea was the 'century storage scheme', which proposed using the Equatorial lakes, Lake Tana and other reservoirs in regions of low evaporation within the basin to regulate and optimize the use of the river among the watercourse States .[66] It was on the basis of this idea that the Agreements on the Owen Falls Dam in Uganda (at the point where the White Nile leaves Lake Victoria) were signed between Britain and Egypt in the years 1949-1953.[67] Brunnee and Toope assert that although the British hegemony "is deeply problematic, it had the virtue of treating the entire Nile Basin as a unit, a feature that the modern 'ecosystem approach' to water management seeks to recreate, albeit for fundamentally different reasons."[68]

Immediately after the independence of Egypt in 1952 and the coming into power of the highly nationalistic Nasser, plans for the rational and optimal utilization of the Nile through storage of the waters in a number of reservoirs upstream were abandoned in favor of the

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64 Exchange of Notes Between the UK and Egypt in regard to the Use of the Waters of the River Nile for Irrigation Purposes, Cairo, 7 May 1929, 93 LNTS at 44 [hereinafter 1929 Exchange of Notes]. See generally, Garretson, *supra* note 29 at 264-74; Okidi, *supra* note 41 at 326-29.

65 1929 Exchange of Notes, *ibid.*

66 Shapland, *supra* note 1 at 61-62; Nile control, *supra* note 60 at 116-18; Okidi, *supra* note 41 at 330.

67 Shapland, *ibid.*; Okidi, *ibid.*

68 Brunnee & Toope, *supra* note 34 at 124.

construction, within Egyptian territory, of a single enormous Aswan High Dam.[69] Egypt's decision to construct the High Dam met with strong protest from Sudan, as the High Dam reservoir would flood parts of Sudan.[70] Moreover, after gaining its independence in 1956, Sudan strongly challenged the 1929 agreement and finally renounced it, arguing that it was not a party to it and that its terms are unfair.[71] As the Sudanese challenge had a negative impact on Egypt's search for international funding for the High Dam, Egypt opted for a negotiated settlement, which resulted in the 1959 Agreement between Egypt and Sudan for the Full Utilization of the Nile waters.[72] This agreement settled most outstanding disagreements between the two countries and work on the Aswan High Dam continued throughout the 1960s and was completed in 1970.[73]

The building of the technically less advantageous Aswan High Dam and the decision to divide the whole flow of the Nile with Sudan as per the 1959 agreement, without even consulting the other riparian countries, clearly demonstrate Egypt's determination to monopolize and dominate the use of the Nile waters. Britain's hegemony on the Nile has been replaced by Egyptian hegemony. Egypt's relative economic strength and political importance due to its prominent position in the Arab world, coupled with the continued instability and poor economic conditions that have prevailed in most of the upstream countries, have helped Egypt to maintain its hegemonic position on the Nile.

Due to the hydrology of the Nile, activities in the uppermost States on the White Nile

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69 Nile control, *supra* note 60 at 119; Shapland, *supra* note 1 at 62.

70 Dellapenna, *supra* note 58 at 125; Nile control, *ibid.*, at 120.

71 R. K. Batstone, "The Utilization of the Nile Waters" (1959) 8 *Int'l & Comp. Law Quarterly* 523 at 537; Okidi, *supra* note 41 at 329 citing Badr, G. M. "The Nile Waters Question: Background and Recent Developments" (1959) 15 *Revue Egyptienne de Droit International* 2.

72 Agreement between the United Arab Republic and the Republic of Sudan for the Full Utilization of the Nile Waters, Cairo, 8 Nov. 1959, 453 UNTS 51[ hereinafter 1959 Agreement].

73 *Ibid.*, art. 2; Dellapenna, *supra* note 58 at 126; Villiers, *supra* note 35 at 242-43.

(Burundi, D. R. of Congo, Kenya, Rwanda, Tanzania, and Uganda) do not significantly affect Egypt and Sudan.[74] Roughly half of the water coming from these countries is lost through evaporation in the Sudd swamps anyway. Moreover, some of these countries, with fairly evenly spread rainfall, have little interest in the Nile waters and are mainly interested in hydropower generation which, in itself, does not affect supply.[75] Most of these countries, as a result, see themselves mainly as brokers in the Nile basin.[76] Be this as it may, none of these countries has foresworn its claims in the basin, nor has Egypt become less enthusiastic about dominating the use of the Nile waters in these countries.

Ethiopia, and to a lesser extent Eritrea, are in a more structural conflict with Sudan and Egypt over the Nile waters than the countries in the equatorial lakes region. Any substantial abstraction of the Nile waters, specially for irrigation, by these countries would affect Sudan and Egypt. Indeed, Ethiopia poses the stronger and more immediate threat to the hegemonic aspirations of Egypt over the Nile, not only because more than 80 percent of the water comes from it, but also because it has a demonstrable need for the Nile waters and has been the most vocal and persistent in asserting claims on them.[77] While negotiations for the 1959 agreement were ongoing between Egypt and Sudan, Ethiopia in a diplomatic note circulated at Cairo, reasserted its right to make unilateral use of Nile waters. The note reads in part:

> The Imperial Ethiopian Government must...reassert and reserve now and for the future, the right to take all such measures in respect of its water resources

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74 C. M. Carroll, "Past and Future Legal Framework of the Nile River Basin" (1999) 12 *Geo. Int'l Envtl. L. Rev.* 269 at 279; Dellapenna, *Ibid.* at 127.

75 Into this category fall Burundi, Rwanda and D. R. of Congo. See generally J. Waterbury, *The Nile Basin: National Determinants of Collective Action* (New Haven: Yale University Press, 2002) at 5 [hereinafter, *Nile Basin*].

76 Waterbury observes that "The other riparians, with lower stakes in the outcome, seek a middle ground. They do not want to antagonize Egypt...At the same time, they resent Egypt's quasi-hegemony...The best role for them, one that Uganda has played with some skill...is to try to mediate between Ethiopia and Egypt." *Ibid.* at 80.

77 Brunnee & Toope, *supra* note 34 at 128.

> and in particular, as regards that portion of the same which is of the greatest importance to its welfare, namely, those waters providing so nearly the entirety of the volume of the Nile, whatever may be the measure of utilization of such waters sought by recipient states situated along the course of that river.[78]

In a manner that seemed to show its determination to use the Nile waters, Ethiopia in 1958 launched a major study of the water resources of the Blue Nile for irrigation and hydroelectric power. The Bureau of Reclamation of the U. S. Department of the Interior was commissioned to carry out this study.[79] The Bureau proposed four major dams on the Blue Nile and a total of 29 hydroelectric and irrigation projects.[80] If all these projects were to be implemented, they would require about 6 bcm of the Nile waters.[81] Studies suggest that the projects identified by the Bureau, if properly managed, would not substantially affect the water available to Egypt and Sudan.[82] The idea is that the water saved by storing water in Ethiopia where loss of water through evaporation is less (it is estimated to be 3 percent in Ethiopia, whereas it is over 12 percent in the Aswan reservoir) would offset much of the water that would be used by Ethiopia.[83] Even if Ethiopia's use results in some reduction in the Nile flow, Allan argues that "since Egypt has already adjusted to even greater hydrological difficulties the impact of Ethiopian water development should not be exaggerated."[84] It seems that the problem has more to do with the historically rooted mutual

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78 McCaffrey, *supra* note 25 at 244 quoting Aide-memoire of 23 Sept. 1957.

79 *Nile Basin*, *supra* note 75 at 69.

80 Collins, *supra* note 5 at 279; Villiers, *supra* note 35 at 244.

81 *Ibid.*

82 G. Guariso and D. whittington, "Implications of Ethiopian water development for Egypt and Sudan", (1987) 3 *Water Resources Development*, no. 2, quoted by Shapland, *supra* note 1 at 87; Collins, *supra* note 5 at 278-283.

83 Collins, *ibid.*, at 282

84 J. A. Allan, "Developing policies for harmonized Nile waters development and management," in P.P. Howell & J. A. Allan, eds., *The Nile: Sharing a Scarce Resource* (Cambridge: Cambridge University

distrust and paranoia between these countries. According to Collins, the idea of building dams and using Nile waters in Ethiopia, "no matter how remote, could not but rekindle ancient Egyptian fears of Ethiopian control of the life-giving waters - an historic fable, to be sure, but one that is still believed."[85]

Racked by internal strife and poverty for decades, Ethiopia could not implement the identified projects on its own. Moreover, the overthrow of the pro western Emperor, Haile Selasie, in 1974 by a group of junior military officers with radical Marxist ideology, who ruled the country for the next 17 years, kept Ethiopia away from western countries and their financial resources. In any case, Ethiopia managed to implement only one project and even that was not fully completed. In the meantime, however, Ethiopia continued reasserting its rights and announcing its plans for the Nile.[86]

For its part, Egypt continued to do everything at its disposal, from making threats of war to blocking international funding, to prevent Ethiopia from developing the Nile water resources. In 1978, the then president of Egypt, Sadat, warned: "Any action that would endanger the waters of the Blue Nile will be faced with a firm reaction on the part of Egypt, even if that action should lead to war."[87] In 1988, Egyptian Minister of State for Foreign Affairs, Boutros-Ghali, also opined that the next war in the Middle East would be over the Nile.[88] Egypt has also recently established a special paramilitary group to protect the Nile valley.[89]

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Press, 1994) 385 at 386.

85 Collins, *supra* note 5 at 279-80.

86 For instance, at the 1977 UN Water Conference at Mar Del Plata, Ethiopia reasserted its right, in the absence of agreements, to unilaterally use the Nile waters and announced that in the medium term its use might reach 4 bcm per year. See Shapland, *supra* note 1 at 78-79.

87 The Ethiopian Herald (Addis Ababa), May 21, 1978, quoted by Kendie, *supra* note 50 at 1.

88 J. Vidal, "Ready to Fight to the Last Drop" *Guardian Weekly* (20 August 1995) at 13.

89 H. Elver, *Peaceful Uses of International Rivers: The Euphrates and Tigris Rivers Dispute* (New York: Transnational Publishers, 2002) at 336.

Elver characterizes this action as provocative and the first in the world where "a country has established special military units explicitly designed to protect water resources."[90] Apart from making threats of war, Egypt has attempted to block funding to Ethiopia for projects on the Nile from the African Development Bank[91] and the World Bank.[92]

The central problem faced by Egypt, Sudan, Ethiopia and the other Nile countries is that there is not enough Nile water to complete the irrigation and other plans, which are on their collective drawing boards. Egypt has already been using about 60 bcm of the Nile waters annually, which is well over its 55.5 bcm share under the 1959 Agreement with Sudan.[93] To the surprise of all those who have been following the Nile issue, in 1997 Egypt announced another irrigation project known as the New Valley project, which would require over 5 bcm per year.[94] Sudan is currently using about 14 bcm and due to economic disarray and civil war it has been unable to use its full share under the 1959 Agreement, which is 18.5 bcm.[95] However, Sudan has abundant agricultural lands, which would use more than 25 bcm additional water, if they were to be fully developed.[96] Thus, Waterbury argues that even though the immediate structural conflict in the Nile basin involves Egypt and Ethiopia, "the long-term structural conflict involves a less easily reconciled contest between Egypt and the Sudan."[97]

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90 *Ibid.*

91 See Shapland, *supra* note 1 at 78.

92 *Nile Basin*, *supra* note 75 at 83.

93 *Ibid.*, at 132.

94 *Ibid.*, at 84.

95 Shapland, *supra* note 1 at 67.

96 *Nile Basin*, *supra* note 75 at 83.

97 *Ibid.*, at 148.

The Nile waters are already under stress and the high rate of population increase in the Nile countries (between 2.4 and 3.4 per cent) coupled with an increase in per capita water use will undoubtedly put additional pressure on the waters. The absence of cooperation and a preference for unilateralism at least on the part of Egypt has also exacerbated the problem by overriding measures that would optimize the utilization of the river for the benefit all Nile countries. Apart from concerns for water *per se*, there are a multitude of factors that make cooperation on the Nile very complex. Border disputes, political disagreements, mutual distrust, absence of economic connection, disparity in political and technical strength and absence of common ethnicity, culture and religion are some of the factors inhibiting cooperation.[98] It is no surprise, therefore, that until recently the history of the Nile Basin has been dominated by competition, confrontation and conflict over the use of the Nile waters.

The crux of the conflict is between maintaining and changing the status quo. Egypt, and to a lesser extent Sudan are the ardent defenders of the status quo. The upstream States, notably Ethiopia, are champions of a change in the Nile regime. Both camps heavily rely on international watercourses law principles to support their positions: the former rely on the principle of "no significant harm" and the latter rely on the principle of "equitable utilization." It has been asserted that the long unresolved controversy over the relationship of these central but apparently incompatible principles of international water law is one of the factors that has exacerbated competitive attitudes among the Nile countries allowing them to make self -interested arguments for a greater allocation of water.[99]

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98 L. M. Jacobs, "Sharing the Gifts of the Nile: Establishment of a Legal Regime for Nile Waters Management" (1993) 7 *Temp. Int'l & Comp. L. J.* 95 at 118-19; Brunnee and Toope, *supra* note 34 at 130-132.

99 Brunnee and Toope, *ibid.*, at 132; Dellapenna, *supra* note 58 at 131, stating that in opposing international funding to Ethiopia for projects on the Nile, "Egypt and Sudan invoked a strong version of the 'no harm' rule as expressed in the 1991 version of the draft Articles of the International Law Commission."

## 1.3. Agreements on the Nile

A number of treaties have been signed concerning the non-navigational uses of the Nile waters beginning in the late nineteenth century. Most of these treaties were signed during the colonial time, but a few of them were made in the post-independence period. Since the validity of the colonial time treaties has been contested, mainly on principles of state succession, it is important to make a distinction between these two groups of treaties when considering the status and effects of the Nile waters agreements.

### 1.3.1. Agreements from the Colonial Period

As noted earlier, ensuring unimpeded flow of the Nile into Egypt was the central colonial policy of Great Britain in the region. We also noted that one of the means employed to achieve this goal was the conclusion of agreements with other powers exercising control or influence over various Nile sources to prohibit them from interfering with the flow of the Nile.

The first such agreement was the 1891 Protocol between Great Britain and Italy for the demarcation of their spheres of influence in eastern Africa.[100] Italy's advance towards the sources of the Nile, in particular its claim to Kassala situated below the escarpment in the Nile basin, alarmed British officials and led them to officially warn Italy to stay away from the Nile.[101] Finally, the British required Italy to sign the Protocol, which stipulates, in Article III, that: "The Italian Government engages not to construct on the Atbara, in view of irrigation, any work which might sensibly modify its flow into the Nile."

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100 Protocol between Great Britain and Italy for the Demarcation of their respective Spheres of Influence in East Africa, from Ras Kasar to the Blue Nile, 15 April 1891, E. Hertslet, *The Map of Africa by Treaty*, 3rd ed. (London: Frank Cass & Co., 1967) Vol. III at 949.

101 Collins, *supra* note 5 at 37.

In 1902, Great Britain sent Colonel Harrington to Addis Ababa to negotiate border, Nile waters and other issues with Ethiopia. The agreement reached between the parties stipulates, in Article III, that:

> His Majesty the Emperor Menelek II, King of Kings of Ethiopia, engages himself towards the Government of His Britannic Majesty not to construct, or allow to be constructed, any work across the Blue Nile, Lake Tsana, or the Sobat which would arrest the flow of their waters into the Nile except in agreement with His Britannic Majesty's Government and the Government of the Sudan.[102]

Concerned about what might be done in the upper basin of the White Nile, Britain signed an agreement with the Independent State of the Congo (controlled by Belgium) in 1906, which provides, in its third article, that: "The Government of the Independent State of the Congo undertake not to construct, or allow to be constructed, any work on or near the Semliki or Isango River, which would diminish the volume of water entering Lake Albert, except in agreement with the Soudanese Government."[103] This agreement is a prime indicator of how far up the Nile Britain was prepared to go to control the flow of the Nile.

After Italy's attempt to control Ethiopia failed, Great Britain, France and Italy signed a tripartite agreement in 1906 with the view to harmonizing their interests in Ethiopia.[104] In this agreement the three parties consented to co-operate in maintaining the political and territorial status quo in Ethiopia. However, in the event of the status quo being disturbed, they agreed to co-operate in order to safeguard, among other things, "The interests of Great Britain and

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102 Treaties between Great Britain and Ethiopia, and between Great Britain, Italy, and Ethiopia, relative to the Frontiers between the Soudan, Ethiopia, and Eritrea, Addis Ababa, 15 May 1902, Hertslet, *supra* note 100, Vol. 2 at 431.

103 Agreement between Great Britain and the Independent State of the Congo, modifying the Agreement signed at Brussels, 12th May, 1894, London, 9 May 1906, Hertslet, *ibid.*, at 584-86.

104 Agreement between Great Britain, France, and Italy, London, 13 Dec. 1906, Hertslet, *ibid.*, translation at 440-44.

Egypt in the Nile Basin, more especially as regards the regulation of the waters of that river and its tributaries (due consideration being paid to local interests)...."[105]

In 1925, Britain was seeking Italy's assistance to get a concession from Ethiopia on Lake Tana. Italy needed Britain's support to obtain a concession from Ethiopia to build a railway from Eritrea to Italian Somaliland. To realize these interests they reached an agreement through an exchange of notes.[106] In this exchange the Italian Government recognized the prior hydraulic rights of Egypt and Sudan, and engaged itself not construct on the headwaters of the Blue or White Niles or tributaries, any work which might sensibly modify their flow into the main Nile.

In 1929, Egypt and Great Britain concluded an agreement through an exchange of notes which apportioned the Nile waters for the first time.[107] In this agreement, Britain represented all British-administered territories in the Nile basin: Sudan, Uganda, Kenya and Tanzania. The agreement allocated 48 bcm to Egypt and 4 bcm to Sudan. It further guarantees Egypt's interest as follows:

> Save with the previous agreement of the Egyptian Government, no irrigation or power works or measures are to be constructed or taken on the River Nile and its branches, or on the lakes from which it flows, so far as these are in the Sudan or in countries under British administration, which would, in such a manner as to entail any prejudice to the interests of Egypt, either reduce the quantity of the water arriving in Egypt, or modify the date of its arrival, or lower its level.[108]

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105 *Ibid.*, article IV.

106 Exchange of Notes Between the United Kingdom and Italy Respecting Concessions for a Barrage at Lake Tsana and a Railway Across Abyssinia from Eritrea to Italian Somaliland, Italy-U. K., Dec. 14-20, 1925, 121 Brit. & Foreign State Papers 805 (1929), quoted by Carroll, *supra* note 74 at 278.

107 1929 Exchange of Notes, *supra* note 64.

108 *Ibid.*, at para. 4(b).

The last of the colonial time Nile water agreements were those signed between Egypt and Great Britain (on behalf of Uganda) through exchanges of notes in the period from May 1949 to January 1953 concerning the construction of the Owen Falls Dam in Uganda.[109] These agreements had two objectives: to provide Egypt with more water by raising the water level of Lake Victoria and to produce hydro-electric power for Uganda. The agreements provide for an Egyptian resident engineer to be stationed at the Dam with the power to regulate the discharges through the Dam according to the water needs of Egypt, not of Uganda.[110]

It now remains to examine the issue of whether the colonial time Nile waters agreements are still in force or not. The analysis begins with the stances of the countries involved.

Ethiopia has not recognized any of the agreements signed by itself (the 1902 agreement with UK) or by other powers on its behalf. Ethiopia argues that the agreements signed on behalf of Ethiopia by Italy and Great Britain in 1891 and 1925, and by Italy, France and Great Britain in 1906 could not bind Ethiopia, since the parties did not have the right to conclude agreements on Ethiopia's behalf. Ethiopia was an independent state at the time of the signing of these agreements.[111] Ethiopia's reassertions of its right to unilaterally use the Nile waters in the 1957 diplomatic note and thereafter clearly indicate that it no longer considers its 1902

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109 Exchange of Notes between Egypt and Great Britain Constituting an Agreement Regarding the Construction of the Owen Falls Dam, 30-31 May 1949, 226 U.N.T.S. 274; Exchange of Notes between Egypt and Great Britain Regarding Cooperation in Meteorological and Hydrological Surveys in Certain Areas of the Nile Basin, 19 Jan.- 20 Mar. 1950, 226 U.N.T.S. 288; Exchange of Notes between Egypt and Great Britain Constituting an Agreement Regarding the Construction of the Owen Falls Dam, 5 Jan. 1953, 207 U.N.T.S. 278.

110 See 1949 Exchange of Notes, *ibid.*, at 276.

111 See Shapland, *supra* note 1 at 71, stating that "As for the 1925 agreement between Italy and Britain, Ethiopia (whose independent status was demonstrable by its membership of the League of Nations) contested Italy's right to sign on Ethiopia's behalf at the time." The same reasoning applies to the other two agreements.

agreement with Great Britain to be in force.[112]

Tanzania, Kenya and Uganda, for their part, repudiated the 1929 Nile Waters Agreement once they became independent in 1961, 1962, and 1963 respectively. Tanzania (known as Tanganyika until 1964) was the first to repudiate the 1929 Agreement invoking what became known as the Nyerere Doctrine of state succession.[113] Accordingly, in a note dated July 4th, 1962 and addressed to the Governments of Britain, Egypt and Sudan, Tanzania (then Tanganyika) declared that the 1929 Nile Waters Agreement lapsed, on the day of independence, as regards Tanzania.[114] Kenya and Uganda also adopted the Nyerere Doctrine of succession of treaties and are considered to have repudiated the 1929 Nile Waters Agreement.[115] However, Egypt has always maintained that the colonial time treaties are still in force. In a reply to Tanzania's note, Egypt stated that "pending further agreement, the 1929 Nile Waters Agreement...remains valid and applicable."[116] As recently as 2000, in a country paper presented on the VIII Nile 2002 Conference, Egypt reiterated that: "Riparian States

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112 Carroll, *supra* note 74 at 280; McCaffrey, *supra* note 25 at 244-45. As to Ethiopia's reasons for claiming the invalidity of the 1902 agreement, Caponera once observed that Ethiopia questions the agreement for the following reasons: (1) the agreement has never been ratified; (2) Ethiopia's natural rights in a certain share of the waters in its own territory are undeniable and unquestioned; (3) since Egypt and Sudan question the validity of their own water agreements, Ethiopia, which had not one single benefit from the agreement, had even greater reason for the claiming of its unfairness and invalidity; and (4) UK's recognition of the annexation of Ethiopia by Italy in 1935 is an act which invalidated all previous agreements between Ethiopia and UK. D.A. Caponera, "The Nile: Legal and Technical Aspects" (1959) Mimeo paper of August 1958, being an English translation of an Italian version il Bachino Internationale del Nilo Consideration Giurridishe in XIV *La Communite Internationale*, at 13-14, quoted by Okidi, *supra* note 41 at 324.

113 The Nyerere Doctrine posits that in the case of newly independent state, all the treaties of the predecessor state shall lapse at the expiry of a reasonable time unless otherwise agreed. See in general, L. Chen, *State Succession Relating Unequal Treaties* (Hamden: The Shoe String Press, 1974) at 22-23.

114 Okidi, *supra* note 41 at 328-29, quoting E. E. Seaton and S. T. Maliti, *Tanzania Treaty Practice* (Oxford: Oxford University Press, 1973) at 90-91

115 Okidi, *ibid.*, at 239; Collins, *supra* note 5 at 165.

116 *Okidi, ibid.*

should respect the existing treaties...."[117]

Since none of the upstream Nile countries have made a significant use of the Nile waters that would amount to a violation of the colonial time treaties, the issue of whether these agreements are still in force or not has not been tested. The unsettled or controversial state of the law of state succession, however, has enabled the Nile states to hold these opposing stances. A number of writers who have reviewed the colonial Nile waters agreements conclude that the agreements ceased to be in effect with the end of colonial rule in the region.[118]

The law of state succession is characterized by inconsistent state practice and lack of consensus among jurists.[119] Perhaps the most authoritative expression of the rules of state succession is the 1978 Vienna Convention on Succession of States in Respect of Treaties.[120] The Convention adopted the clean-slate doctrine for newly independent states as a general rule. Article 16 stipulates that a newly independent state shall not be bound *ipso jure* by any

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117 Country Paper of Egypt, "Comprehensive Water Resources Development of the Nile Basin: Priorities for the New Century" (Presented at the VIII Nile 2002 Conference, Addis Ababa, June 26-30, 2000) [unpublished] at 20.

118 Shapland, *supra* note 1 at 72 (stating that "The only agreement signed by colonial power which appears to remain in force is that concerning the Owen Falls Dam."); Carroll, *supra* note 74 at 282 (stating that "the colonial agreements are either invalid or their validity is in question."); Okidi, *Ibid.* at 345 (stating that "for the majority of the states within the drainage system there is no previously negotiated agreement which binds them). For an argument that the colonial Nile waters agreements are still in force, see S. Ahmed, "Principles and Precedents in international law governing the sharing of Nile Waters" in P.P. Howell & J. A. Allan, eds., *The Nile: Sharing a Scarce Resource* (Cambridge: Cambridge University Press, 1994) 351.

119 The International Law Commission, in its work on the subject, stated that "A close examination of State practice afforded no convincing evidence of any general doctrine...Nor is the matter made any easier by the fact that a number of different theories of succession are to be found in the writings of jurists." See Y. B. Int'l L. Comm'n, 1972 Vol. II at 226; See also I. Brownlie, *Principles of Public International Law*, 4th ed. (New York: Oxford University Press, 1990) at 655, stating in relation to the law of state succession that "it is perfectly possible to take the view that not many settled rules have emerged as yet."

120 Vienna Convention on Succession of States in Respect of Treaties, U.N. Doc. A/CONF.80/31.

of the treaties of the predecessor state. However, the Convention makes an exception to this rule by providing under article 12 that territorial regimes shall not be affected by a succession of states. Treaties establishing territorial regimes would *ipso jure* devolve upon a new state. Again the Convention makes an exception to article 12 by stipulating under article 13 that: "Nothing in the present Convention shall affect the principles of international law affirming the permanent sovereignty of every people and every State over its natural wealth and resources."[121] Thus, according to the Convention, territorial treaties would automatically devolve upon a new state if and only if they do not contravene the principle of permanent sovereignty over natural resources.

The issue of what types of treaties are considered as territorial treaties is not entirely clear. The International Law Commission, in its commentary on the draft articles, cited treaties dealing with the non-navigational uses of international watercourses as examples of territorial treaties.[122] The International Court of Justice held the same view in the *Gabcikovo-Nagymaros Project* case, despite Hungary's contention that its 1977 agreement with Czechoslovakia on the Danube river was simply a joint investment.[123] These authorities suggest that the colonial time Nile waters agreements likely fall into the category of territorial treaties.

In the *Gabcikovo-Nagymaros Project* case, the ICJ further held that Article 12 of the Vienna

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121 The legislative history of the Convention shows that Article 13 is intended to be an exception to the principle in Article 12 that territorial regimes shall not be affected by state succession. The idea enshrined in article 13 was proposed by the Argentinean delegation in the first session of the Vienna Conference on succession of states in respect of treaties with the view to limiting the undesired effects of article 12. After the first session, the Informal Consultations Group introduced the present text of article 13, which was subsequently adopted by the Committee of the Whole and the resumed Vienna Conference. See Official Records of the United Nations Conference on Succession of States in Respect of Treaties, Vol. I, Doc. A/CONF.80/16 at 129-51, Vol. III, Doc. A/CONF.80/16/Add.2 at 154, 155 [hereinafter Official Records].

122 Official Records, *ibid.*, at 27.

123 *Case concerning the Gabcikovo-Nagymaros Project* (Hungary v. Slovakia), 1997 ICJ Rep. 7 at para 123.

Convention, which deals with territorial treaties, reflects a rule of customary international law.[124] If this is correct, the rules stipulated in the Convention concerning territorial regimes, as rules of customary international law, are applicable to the Nile waters agreements. As noted earlier, under article 13, the Convention creates an exception to article 12. Thus if article 12 reflects customary international law, then presumably so does the exception provided for by article 13.

It follows then that the colonial time Nile agreements would not be affected by state succession provided they do not violate the principle of permanent sovereignty over natural resources. However, since all Nile waters agreements of the colonial period completely deny the right of upper riparian states to use the waters flowing from their territories, they are most likely in violation of the principle of permanent sovereignty over natural resources. Thus, the colonial time Nile agreements could not benefit from the rule that territorial treaties shall *ipso jure* devolve upon the successor state. That means that they are subject to the general rule of state succession for newly independent states which is the clean-slate doctrine. Hence, they ceased to have effect after state succession unless all the concerned states agreed to be bound by them. Only the Owen Falls Dam agreements can be regarded as surviving the change of sovereignty, since both states involved, Egypt and Uganda, have continued to act in accordance with the agreements and have never renounced them.[125]

### 1.3.2. Post-Colonial Agreements

The first and the most significant post-colonial agreement on the Nile waters is the 1959 Agreement between Egypt and Sudan for the Full Utilization of the Nile Waters.[126] Okidi observes that "to refer to 'full utilization' and 'full control of the river' when there were only

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124 *Ibid.*

125 Okidi, *supra* note 41 at 232.

126 1959 Agreement, *supra* note 72.

two states involved in the agreement rather than all of the basin states...seems anomalous."[127] It is as if the Nile starts in Sudan and ends in Egypt, the agreement allocated the whole flow of the Nile between the two countries. Of the 84 bcm,[128] the average annual flow of the Nile at Aswan, Egypt's share would be 55.5 bcm while that of Sudan would be 18.5 bcm.[129] The remaining 10 bcm was considered to be lost through evaporation at Aswan. The agreement further sought to increase the flow of the Nile by committing Sudan to carry out projects that minimize the loss of water in the Sudd wetlands with the resulting water savings to be apportioned equally between the two countries.[130] With a view to institutionalizing the cooperation between the parties, the agreement also provides for the establishment of the Permanent Joint Technical Committee.[131] Finally, the agreement stipulates that the two countries would take a unified stand should any one of the other riparian states makes a claim on the Nile waters.[132]

Although the 1959 Agreement was a success in terms of settling the serious confrontation between Egypt and Sudan, the fact that it was signed by only two of the then nine riparian states makes it inherently defective. Ethiopia and the East African states, the sources of the whole flow of the Nile waters, were neither consulted nor invited to join the negotiation of the 1959 Agreement.[133] While the negotiations of the 1959 Agreement were occurring, these countries made a point of reserving their rights to the Nile waters. As noted earlier, Ethiopia did so in its 1957 diplomatic note. In 1956, Great Britain also reserved a right to a share of

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127 Okidi, *supra* note 41 at 333.

128 1959 Agreement, *supra* note 72, art. II(3).

129 *Ibid.*, art. II(4).

130 *Ibid.*, art III.

131 *Ibid.*, art. IV(1)

132 *Ibid.*, art. V.

133 Okidi, *supra* note 41 at 333.

Nile waters for the territories that were under its control at the time: Kenya, Uganda, and Tanzania.[134] In any event, the 1959 Agreement did not have any legal effect on the other Nile states that were not parties to the agreement, since as McCaffrey puts it "the law of treaties would have precluded Egypt and Sudan from creating obligations on the part of any third state without its consent."[135]

Since 1959 no significant and concrete agreements have been signed on the utilization of the Nile waters apart from some technical and general frameworks. In 1967, an agreement for the hydrometeorological survey of Lakes Victoria, Kyoga and Albert (known as Hydromet) was signed between Egypt, Kenya, Sudan, Tanzania and Uganda, as well as United Nations Development Programs and the World Meteorological Organization.[136] Burundi, Rwanda, and Tanzania established the Organization for the Management of the Kagera River Basin in 1977 and Uganda also became a member in 1981.[137] Due to political instability and lack of resources, this Organization has failed to implement its objectives.[138]

In spite of article 5 of the 1959 Agreement, which requires them to present a unified front against other riparians, Sudan and Egypt undertook separate negotiations with Ethiopia in early 1990s. In 1991, Sudan and Ethiopia signed a Declaration of Peace and Friendship, in which they declared themselves to be governed by the principle of equitable utilization in

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134 McCaffrey, *supra* note 25 at 245.

135 *Ibid.*, at 244 citing the 1969 Vienna Convention on the Law of Treaties, art. 34, UN Doc. A/CONF.39/27, 8 ILM 679 (1969).

136 Agreement for the Hydrometeorological Survey of the Lakes Victoria, Kyoga, and Albert (Mobutu), 3 May 1967, Egypt-Kenya-Sudan-Tanzania-Uganda-UNDP-WMO, 751 U.N.T.S. 41.

137 Agreement for the Creation of an Organization for the Management and Development of the Kagera River Basin, 24 Aug. 1977, Burundi-Rwanda-Tanzania, 1089 U.N.T.S. 165; see generally Shapland, *supra* note 1 at 77; see also Okidi, *supra* note 41 at 336-38.

138 Shapland, *ibid.*

utilizing the Nile waters.[139] They established a joint technical committee to exchange data and explore areas of cooperation, and pledged to work towards the establishment of a Nile Basin Organization that would include all riparian countries. In 1993, Egypt and Ethiopia also signed a "Framework for General Cooperation" that included provisions dealing with the Nile.[140] The parties agreed that the details of the use of the Nile waters should be worked out by experts from both countries, "on the basis of the rules and principles of international law."[141] The agreement also provides for consultation and cooperation on mutually beneficial projects on the basis of international law, the application of recognized principles of international law and the avoidance of appreciable harm.

These agreements are too general to adequately address the problems of the utilization of the Nile waters. Dellapenna argues that the agreement between Egypt and Ethiopia is not clear on whether the avoidance of appreciable harm or the application of principles of international law should be regarded as dominant.[142] He concludes that the agreement "is ambiguous enough to do little to resolve future disagreements."[143] In any event, these agreements are intended to be provisional and designed to build confidence pending the conclusion of a detailed agreement on the use of the Nile waters.

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139 Declaration of Peace and Friendship between Ethiopia and Sudan, Khartoum, 23 Dec. 1991. See Dellapenna, *supra* note 58 at 132-33; Shapland, *supra* note 1 at 81; *Nile Basin*, *supra* note 75 at 82.

140 Framework for General Cooperation Between Ethiopia and the Arab Republic of Egypt, Cairo, 1 July 1993, available at http://www.dundee.ac.uk/law/water. See Dellapenna, *ibid.*; Shapland, *ibid.*; *Nile Basin*, *ibid.*

141 Shapland, *ibid.*

142 Dellapenna, *supra* note 58 at 133.

143 *Ibid.*

### 1.3.3. Conclusion

The single most important conclusion that can be drawn from this review of the existing legal regime of the Nile basin is that the regime is seriously deficient and incapable of solving the glaring problems facing the basin. The fact that the history of the Nile basin has been dominated by competition, conflict and confrontation supports this conclusion. The deficiencies of the legal regime take different forms. First, the existing legal regime is uncertain, as the status of the colonial time Nile waters agreements is not entirely clear. As noted earlier, there is no agreement among the Nile states as to the validity of these treaties and it has been shown that their validity is highly questionable. Second, the existing legal framework is profoundly inequitable, since it excludes the majority of the riparian states from making any significant use of the Nile waters that originate in their territories. The effectiveness of any legal regime depends, to a large extent, on the fairness of the regime. Cooperation is indispensable in utilizing a scarce water resource and the lack of fairness in the existing legal regime is one of the factors that has hindered and continues to hinder cooperation among the Nile basin states. Third, the existing legal framework is inadequate, as there is no agreement that includes all the riparian states. All the significant agreements on the Nile are bilateral. However, the optimal and sustainable utilization of the river requires the existence of a comprehensive agreement that ensures the coordinated and integrated development of the resource. Forth, the existing Nile legal regime is premised mainly on the concept of "historic rights", which is untenable in the context of international watercourses, since it denies their nature as shared resources.

For all these reasons, the existing legal regime is, to use the words of Okidi, "at best inadequate and, at worst irrelevant or even contrary to the present exigencies of development."[144] Thus, establishing a new comprehensive legal regime has become imperative to avoid conflicts over the use of the Nile waters as well as for the optimal and

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144 Okidi, *supra* note 41 at 322.

sustainable utilization of the resource. Recent developments in the Nile basin indicate that there is an emerging consensus among the Nile countries as to the need for a new legal regime.

## 1.4. Toward Establishing a New Comprehensive Legal Regime

Efforts to build a new legal regime in the Nile basin are directly related to attempts to establish a basin-wide cooperation. In the last three decades, various initiatives have been launched to establish cooperation on the Nile basin. Egypt has been the most enthusiastic about creating a basin-wide cooperation, but only in the sense of assisting other riparians to harness alternative sources to the waters of the Nile.[145] In the late 1970s, Egypt and Sudan attempted to create a Nile Basin Commission that included all riparians through Hydromet.[146] However, the White Nile states rebuffed this initiative for lack of incentive and for fear of making premature commitments that they would later regret.[147]

When Boutros Boutros-Ghali became Egypt's Minister of Foreign Affairs in 1979, he made Africa and the Nile basin the center of his diplomatic career.[148] Under his leadership, the Undugu Group was set up in 1983, embracing all Nile states except Ethiopia and Kenya.[149] Its objective was not limited to the Nile, but had a broad goal of fostering economic, social, cultural, and technical ties among the Nile riparians. Apart from serving as a forum for information sharing, it made little progress on the basic issues of the Nile waters.[150] The

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145 *Nile Basin*, *supra* note 75 at 78.

146 Shapland, *supra* note 1 at 75.

147 *Ibid.*

148 *Nile Basin*, *supra* note 75 at 79.

149 *Ibid.*

150 Brunnee and Toope, *supra* note 34 at 134.

initiative came to an end with Boutros-Ghali's election as the Secretary-General of the United Nations.[151]

In 1992, another institution with strong technical focus known as Technical Cooperation Committee for the Promotion of Development and Environmental Protection of the Nile Basin (Tecconile) was established with six member states.[152] Again Ethiopia and Kenya, together with Eritrea and Burundi, opted for observer status. Tecconile produced a Nile River Basin Action Plan, which was formally adopted by Council of Ministers for Water Affairs of all the Nile Basin states in 1995.[153] The Action Plan contains more than 20 projects with an estimated cost of $ 100 million. In the third ministerial meeting at Arusha, Tanzania in 1995, Ethiopia and Egypt adopted different strategies.[154] Ethiopia argued that action should be preceded by a framework for cooperation or a users' code. Egypt focused on the implementation of the Action plan. Ethiopia proposed the establishment of a panel of experts drawn from all Nile states, to develop the framework. This proposition was accepted by all parties including Egypt, albeit reluctantly, and the panel was set up in 1997.[155]

Tecconile was replaced by the Nile Basin Initiative (NBI) in 1999.[156] The primary objective of the NBI is "sustainable socio-economic development through equitable utilization of, and benefit from, the common Nile Basin water resources."[157] The Action Plan adopted under Tecconile was reviewed and has become the Strategic Action Program of the NBI. The

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151 *Nile Basin, supra* note 75 at 78.

152 *Ibid.*; Brunnee and Toope, *supra* note 34 at 134.

153 Brunnee and Toope, *ibid.*, at 135; See Tecconile, Nile River Basin Action Plan (1995).

154 *Nile Basin, supra* note 75 at 78-79.

155 *Ibid.*

156 See History of the Nile Basin Initiative at http://www.nilebasin.org/nbihistory.htm.

157 NBI, Nile Basin Initiative Program, http://www.nilebasin.org/nbiprocess.htm.

Strategic Action Program of the NBI comprises two complementary sub-programs, namely the Shared Vision Program and the Subsidiary Action Programs.[158] The former is expected to create an enabling environment for investments and action on the ground, while the latter is designed to actually carry out joint development projects at the sub-basin level.[159]

The Shared Vision Program, in turn, comprises five broad themes. One of these themes is the Cooperative Framework (the D3 project) which has been on going with the support of UNDP since the establishment of the panel of experts in 1997. The main objective of the Cooperative Framework is to agree upon a set of legal and institutional principles to guide future cooperation on the use and management of the Nile. In short its task is to establish a new legal regime for the utilization of the Nile waters. The panel of experts work on the legal and institutional principles for cooperative framework has been proceeding and agreements have already been reached on several principles both within the panel of experts and the Nile Council of Ministers (Nile-COM), the highest decision making body of the NBI.[160] However, disagreements remain on some of the important issues such as the relationship between the principles of equitable utilization and no significant harm, the principle of prior notification and the state of existing agreements (principally the 1959 Agreement) under the new cooperative framework.[161]

Thus, the principles of equitable utilization and no significant harm, heavily relied upon in the period of confrontation over the Nile waters, are once again dominating the debate in the

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158 *Ibid.*

159 *Ibid.*

160 I. Tamrat, "Development and Trends in International Water Law and Its Application in the Context of the Nile Basin" (Paper presented to the National Workshop on International Water Law and Conflict resolution, Nathreth, Ethiopia, 15-17 Aug. 2001) [unpublished] at 16-17.

161 M. Mohammed, "The Need for An Appropriate Legal and Institutional Framework in the Nile Basin" (Paper presented to the National Workshop on International Water Law and Conflict resolution, Nathreth, Ethiopia, 15-17 Aug. 2001) [unpublished] at 12; Brunnee and Toope, *supra* note 34 at 140.

move toward cooperation. The following parts of this work attempt to address the issue of what should be the relationship between the principles of equitable utilization and no significant harm in the new legal regime to be established in the Nile basin.

# CHAPTER TWO

# THEORETICAL FRAMEWORK: DISTRIBUTIVE JUSTICE AND THEORIES OF INTERNATIONAL WATER LAW

## 2.1. Introduction

The sharing of international watercourses involves, more than anything else, questions of distributive justice.[1] As such, the normative contents of the theories and rules dealing with the utilization of international watercourses need to be evaluated in terms of their effectiveness in addressing fairness or justice concerns. Indeed, considerations of justice or fairness have always been central in the normative evaluation of laws and social institutions. The law promotes justice or fairness not only because the effectiveness of any legal regime or its quality to command greater compliance depends, to a large extent, on the extent to which it is morally justified, but also because as moral beings "most people think it is *right* to act justly."[2] John Rawls emphasizes the cardinal importance of considerations of justice in any legal system stating that "[l]aws and institutions no matter how efficient and well-arranged must be reformed or abolished if they are unjust."[3]

As with any other legal system, considerations of justice or fairness hold pre-eminent

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1 It is difficult to find a universally agreed upon definition of the phrase 'distributive justice.' As put by Beauchamp, "[w]riters tend to speak indiscriminately of social justice, distributive justice, and individual justice, as if the meaning of such terms were unambiguous", T.L. Beauchamp, "Distributive Justice and the Difference Principle" in H.G. Blocker & E.H. Smith, eds., *John Rawls' Theory of Social Justice: An Introduction* (Athens: Ohio University Press, 1980) 132 at 133-34. Franck understands distributive justice as the substantive aspect of fairness or as 'participants' expectations of justifiable distribution of costs and benefits" of social cooperation. T.M. Franck, *Fairness in International Law and Institutions*, (New York: Oxford University Press, 1995) at 7 [hereinafter, *Fairness*].

2 *Ibid.*, Franck, *Fairness* at 8.

3 J. Rawls, *A Theory of Justice*, rev. ed. (Cambridge, Mass.: Harvard University Press, 1999) at 3 [hereinafter, *Theory of Justice*].

position in international law. Indeed, classical jurists formulated and developed international law by relying in the main on the moral precepts of the natural law theory. Vattel, for instance, after explaining that international custom represents one source of the Law of Nations, asserted that "[b]ut if there be anything unjust or unlawful in such custom it is of no force, and indeed every Nation is bound to abandon it, since there can be neither obligation nor authorization to violate the Law of Nature."[4] In relation to his discussion of treaties, he further stated that "[s]ince Nations are no less bound than individuals to respect justice, they should make their treaties equal, as far as possible."[5] Considerations of justice are no less important in contemporary international law. In *Tunisia v. Libya*, the ICJ stated that "[e]quity as a legal concept is a direct emanation of the idea of justice. The Court whose task is by definition to administer justice is bound to apply it."[6] These statements of the ICJ clearly demonstrate the importance of justice considerations in contemporary international law.

However, citing the great disparity of wealth among states as an example, some writers argue that international law has not been able to sufficiently address issues of distributive justice in practice. According to Trachtman, this failure is attributable mainly to the conservative nature of international law which results from concerns about the rule of law.[7] Be that as it may, the primary role of justice considerations in formulating and applying the part of

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4 E. De Vattel, *The Law of Nations or The Principles of Natural Law,* trans. C. G. Fenwick (New York: Oceana Publications, 1964) at 9.

5 *Ibid.*, at 165.

6 *Case Concerning Continental Shelf* (Tunisia v. Libya), 1982 I.C.J. 18.

7 J.P. Trachtman, "Recent Book on International Law: Review Essay: The Law and Economics of Global Justice" (2002) 96 *A.J.I.L.* 984 at 985, stating that: "International law might be viewed as a fundamentally conservative discipline, embedding the distributive status quo in its concerns for the rule of law and in its principles about the role of the state and how law is made." Franck also shares this view by stating that "[the] limited relevance of justice is demonstrable both theoretically and functionally or operationally. The *theoretical* reasons are derived from the priority which states still attach to certainty, predictability and order--as opposed to fairness." T.M. Franck, "Is Justice Relevant to the International Legal System?" (1989) 64 *Notre Dame L. Rev.* 945 at 945.

international law dealing with the allocation of natural resources is well established.[8] In fact, the history of the development of international water law has been dominated by issues of justice and fairness. As will be demonstrated, the challenge has always been how to balance the conflicting interests of upper and lower riparians. In other words, the central issue in international water law has been developing principles that would meet upper and lower riparians' expectations of proper distribution of benefits and burdens in the utilization of international watercourses. Thus, the normative validity of the theories and rules of international water law should be judged, primarily, by the degree to which they satisfy concerns of distributive justice. This, in turn, requires recourse to theories of distributive justice in search of standards.

Moral and political philosophers have advanced several theories of distributive justice. 'Strict egalitarian theory', 'libertarian or entitlement theory', 'Rawlsian theory or the difference principle' and 'utilitarian theory' are among the most popular theories of distributive justice.[9] The strict egalitarian theory holds that "every person should have the same level of material

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8 The various continental shelf cases decided by the ICJ and arbitral tribunals support this assertion. See, e.g., *North Sea Continental Shelf* Cases (F.R. Germany v. Denmark and Netherlands), 1969 I.C.J. Rep.4; *Case concerning the Delimitation of the Continental Shelf* (United Kingdom of Great Britain and Northern Ireland, and the French Republic), 1977 18 R. Int'l Arb. Awards 3; *Case Concerning the Continental Shelf* (Tunisia v. Libya), 1982 I.C.J. Rep. 18; *Case Concerning the Delimitation of the Maritime Boundary in the Gulf of Maine Area* (Can. v. U.S.), 1984 I.C.J. 246; *Continental Shelf* (Libya v. Malta), 1985 ICJ Rep. 13; *Case Concerning Maritime Delimitation and Territorial Questions* (Qatar v. Bahrain), 2001 I.C.J., available on the Court's web site, http:/www.icj.cij.org; *Case Concerning Land and Maritime Boundary* (Cameroon v. Nigeria: Equatorial Guinea intervening), 2002 I.C.J., available on the Court's web site, *ibid.* This assertion is also supported by the views of writers. For example, after reviewing the debate among international lawyers as to the proper role of equity in the context of resource allocation, Franck asserts that all the participants in the debate accept that the case for the importance of justice considerations in the international law of natural resource allocation has been made. Franck, *Fairness*, *supra* note 1 at 57.

9 Franck, *Fairness*, *supra* note 1 at 9. Franck identifies the first three as theories of distributive justice. But other writers also include utilitarian theory under theories of distributive justice. See, e.g., Beauchamp, *supra* note 1 at 135. For a good summary on the theories of distributive justice, see J. Lamont, "Distributive Justice", *The Stanford Encyclopedia of Philosophy (Fall 2002 Edition)*, Edward N. Zalta, ed., URL=<http://plato.stanford.edu/arcives/fall2002/entries/justice-distributive/>.

good and services."[10] In other words, this theory posits that "fairness consists entirely of equalizing outcomes."[11] This theory has been criticized for its negative impact on society's productivity and capacity to enlarge the sum of goods available for distribution. The basis of the critique is that everyone can be materially better off if the distribution of goods and services is not strictly equal.[12] As put by Franck, the strict egalitarian theory "has lost adherents not only in the world of economics but also among moral philosophers."[13] Thus, this theory has little potential to serve as a criterion of international distributive justice.

Entitlement theory, advanced by most libertarians, bases itself on the fundamental primacy of individual rights, in particular, broadly conceived rights to property.[14] According to Robert Nozick, the best known contemporary advocate of the entitlement or libertarian theory, a just society is one in which everyone is entitled to the holdings they possess. For him, a theory of distributive justice must begin with an acknowledgment that "a distribution is just if everyone is entitled to the holdings they possess under the distribution."[15] The entitlement theory has been criticized since it validates existing inequality and entitlements the acquisition of which is morally questionable.[16] This drawback of the theory is even more serious when seen in the light of the enormous injustices perpetrated throughout history in relation to acquisition of property, both within nations and between them.[17] In any event, as

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10 *Ibid.*, J. Lamont at 1.

11 Franck, *Fairness*, *supra* note 1 at 19.

12 Lamont, *supra* note 9 at 2.

13 Franck, *Fairness*, *supra* note 1 at 19.

14 F.J. Garcia, "Trade and Inequality: Economic Justice and the Developing world" (2000) 21 *Mich. J. Int'l L.* 975 at 1008.

15 R. Nozick, *Anarchy, State, and Utopia* (New York: Basic Books, 1974) at 151.

16 Franck, *Fairness*, *supra* note 1 at 20.

17 Lamont, *supra* note 9 at 10.

Nozick himself candidly accepts, the entitlement theory is fairly open and underdeveloped,[18] which undermine the appropriateness of the theory to serve as a standard for evaluating the fairness of the theories and rules of international water law.

In its simplest formulation, utilitarianism is a theory of justice which asserts that the morally right act, principle or policy is that which produces the greatest utility for the members of society.[19] Utility has been understood variously as happiness, pleasure or preference satisfaction.[20] Traditionally utilitarians have defined utility in terms of happiness.[21] However, defining utility in terms of preference satisfaction is more common among modern utilitarians.[22] The main criticism of utilitarianism is that it fails to give due regard to individual persons' moral worth or distinctness. As a result, basic rights or freedoms of an individual may be sacrificed to maximize aggregate or average utility.[23] As argued by Garcia, utilitarianism runs into trouble as a theory of international distributive justice, since its drawbacks as a general theory of justice resurface in its international application as well.[24]

The central idea of the 'general conception' of Rawls' theory of justice, which he refers to as 'justice as fairness', is that: "All social primary goods - liberty and opportunity, income

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18 Nozick, *supra* note 15 at xiv, stating that "[t]his book does not present a precise theory of the moral basis of individual rights...or a precise statement of the principles of the tripartite theory of distributive justice it presents."

19 W. Kymlicka, *Contemporary Political Philosophy: An Introduction*, (New York: Oxford University Press, 1990) at 9.

20 Lamont, *supra* note 9 at 5.

21 Kymlicka, *supra* note 19 at 12.

22 Garcia, *supra* note 14 at 1003-04.

23 H.L.A. Hart, "Between Utility and Rights" in Ryan, ed., *The Idea of Freedom* (Oxford: Oxford University Press, 1979) 77 at 78-79; Lamont, *supra* note 8 at 5.

24 Garcia, *supra* note 14, see note 125 and accompanying text at 1005. He also raises the issue of standing as the central problem for utilitarian theory of international distributive justice stating that: "When determining the utility effects of a given act, whose utility counts?"

and wealth, and the bases of self-respect - are to be distributed equally unless an unequal distribution of any or all of these goods is to the advantage of the least favoured."[25] Rawls breaks down this general conception into two specific principles of justice. The principle governing the distribution of economic resources, which Rawls calls the 'difference principle', posits that social and economic inequalities are to be arranged so that they are both to the greatest benefit of the least advantaged.[26] In other words, inequalities in the distribution of economic resources are allowed only if they are to the greatest benefit of the least advantaged.

Many contemporary philosophers and jurists agree that Rawls' theory of justice is the most consistent and sound theory of justice. Franck, for example, states that Rawls' theory of justice "comes closest to according with the moral sense of most states and most persons."[27] After describing Rawls' theory of justice as "a powerful, deep, subtle, wide-ranging, systematic work in political and moral philosophy", Robert Nozick asserts that writers on moral and justice issues "now must either work within Rawls' theory or explain why not."[28] Accordingly, a number of legal writers have worked within Rawls' theory of justice to address various issues of distributive justice both at the domestic and international level, with compelling results.[29] Thus, this work uses Rawlsian theory of distributive justice as a standard to evaluate the theories and principles of international water law from fairness or justice perspective. Before doing so, however, it is convenient to further describe the

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25 J. Rawls, *A Theory of Justice* (Cambridge, Mass.: Harvard University Press, 1971) at 303.

26 *Theory of Justice*, *supra* note 3 at 266.

27 Franck, *Fairness*, *supra* note 1 at 21-22.

28 Nozick, *supra* note 15 at 183.

29 See, e.g., F.I. Michelman, "Property, Utility, and Fairness: Comments on the Ethical Foundations of "Just Compensation" Law" (1967) 80 *Harvard Law Review* 1165; Garcia, *supra* note 14; F.J. Garcia, "Global Trade Issues in the New Millennium: Building a Just Trade Order for a New Millennium" (2001) 33 *Geo. Wash. Int'l L. Rev.* 1015 [hereinafter Garcia, "Global Trade"]; Garcia, *supra* note 14; Franck, *Fairness*, *supra* note 1.

fundamentals of Rawls' theory of justice and discuss the theories regarding the utilization of international watercourses.

## 2.2. Fundamentals of Rawls' Theory of Justice

Rawls' theory of justice is fundamentally based on the social contract doctrine propounded by early philosophers like Locke, Rousseau and Kant.[30] Based on contractarian theory, Rawls developed a conception of justice which he termed "justice as fairness." He argues that principles of justice "are principles that free and rational persons concerned to further their own interests would accept in an initial position of equality as defining the fundamental terms of their association."[31] Thus the basic idea of justice as fairness is that just social rules are those that would be mutually agreed to by persons under an initial situation which is characterized by fairness. Rawls termed this hypothetical initial situation the "original position."[32]

To insure that the principles which would be selected by the parties to the original position are just, Rawls describes the original position in detail. The first feature of the original position is what Rawls calls "the circumstances of justice."[33] The central idea is that the circumstances of the original position must be defined in a manner where principles of justice are possible and necessary. Rawls divides the circumstances of justice into two: objective and subjective. Under the objective circumstances, moderate scarcity is the important condition. That is to say, natural and other resources should not be too abundant to make principles of justice unnecessary, nor should they be too scarce to make any realistic distribution impossible. Thus moderate scarcity is a prerequisite for issues of justice to arise.

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30 *Theory of Justice*, *supra* note 3 at 10.

31 *Ibid.*

32 *Ibid.*, at 102.

33 *Ibid.*, at 109-12.

The subjective circumstance is expressed mainly in terms of conflicting claims or interests of parties. While the parties have roughly similar needs and interests that make cooperation possible, they nevertheless have different plans of life, and social, political, religious and philosophical views that lead to conflicting claims and interests. Thus Rawls concludes that "circumstances of justice obtain whenever persons put forward conflicting claims to the division of social advantages under conditions of moderate scarcity."[34]

The "veil of ignorance" is another essential feature of Rawls' original position. According to Rawls, the fairness of the original position can be ensured only by nullifying "the effects of specific contingencies which put men at odds and tempt them to exploit social and natural circumstances to their own advantage."[35] Thus the veil of ignorance requires parties to the original position to choose principles of justice without having knowledge of particular factors such as their wealth, intelligence, social status and so on. However, the veil of ignorance does not put limitations on general information or facts about human society. Rather the parties are presumed to have an understanding of general laws and theories of economics, human psychology, social organization, etc.[36]

The other important element of the original position is the rationality of the parties. According to Rawls, "a rational person is thought to have a coherent set of preferences between the options open to him. He ranks these options according to how well they further his purposes; he follows the plan which will satisfy more of his desires rather than less, and which has the greater chance of being successfully executed."[37]

Given the above description of the original position, Rawls argues that the parties in that

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34 *Ibid.*, at 110.

35 *Ibid.*, at 118.

36 *Ibid.*, at 122-23.

37 *Ibid.*, at 124.

position would select his two principles of justice among the alternatives available to them. His two principles read as follows:

> First Principle:
>
> Each person is to have an equal right to the most extensive total system of equal basic liberties compatible with a similar system of liberty for all.
>
> Second Principle:
>
> Social and economic inequalities are to be arranged so that they are both:
>
> (a) to the greatest benefit of the least advantaged, consistent with the just savings principle, and
>
> (b) attached to offices and positions open to all under conditions of fair equality of opportunity.[38]

Each of Rawls' two principles are intended to distribute different sets of primary social goods. The first principle, the principle of greatest equal liberty, distributes basic liberties such as freedom of speech, freedom to participate in the political process, freedom of conscience, etc. According to this principle, each person is to have an equal right to the most extensive total system composed of these basic liberties, compatible with everyone else having an equal right to the same total system.[39]

Part (a) of the second principle, otherwise known as the difference principle, distributes primary social goods such as wealth, income, power and authority. Since the distribution of natural resources falls into these sets of primary goods, this is the principle which will

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38 *Ibid.*, at 266.

39 A. Buchanan, "A Critical Introduction to Rawls' Theory of Justice" in H.G. Blocker & E.H. Smith, eds., *John Rawls' Theory of Social Justice: An Introduction* (Athens: Ohio University Press, 1980) 5 at 10.

concern us most. The difference principle asserts that social and economic inequalities are to be permitted only if they are to the greatest benefit of the least advantaged. Rawls argues that equal division is the benchmark for the distribution of all primary goods including wealth and income. However, he further adds that organizational requirements and economic efficiency must be taken into account and, social and economic inequalities should be allowed as long as such inequalities improve everyone's situation, including that of the least advantaged.[40] In other words, if "certain inequalities benefit everyone, by drawing out socially useful talents and energies, then they will be acceptable to everyone."[41] The social and economic inequalities allowed by the difference principle should also be consistent with the principle of fair equality of opportunity provided for in part (b) of Rawls' second principle. The basic idea is that the distribution of income and wealth should not be influenced by social and historical fortune, which are arbitrary from a moral point of view.

Rawls justifies the selection of his principles over other competing principles such as utilitarianism in the original position by employing the maximin rule for choice under uncertainty. The maximin rule of decision theory states that if an agent is confronted with a choice among various alternatives to which he cannot assign probabilities, he is to choose that alternative which has the best worst outcome.[42] In other words, the maximin rule tells the person making a choice under uncertainty to choose the safest alternative. Since the parties to Rawls' original position are exposed to information constraints imposed by the veil of ignorance, they are not able to make probability calculations on how the choice of this or that principle will affect them personally. As rational persons the parties in the original position will be considerably risk-averse. Thus they will employ the maximin rule and choose the safest alternative in the list. Rawls argues that his two principles represent the

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40 J. Rawls, "A Kantian Conception of Equality" in S. Freeman, ed., *John Rawls: Collected Papers* (Cambridge, Mass.: Harvard University Press, 1999) 254 at 262.

41 Kymlicka, *supra* note 19 at 53.

42 Buchanan, *supra* note 39 at 21.

safest alternative on the list and will be chosen by the parties to the original position.

Apart from the maximin rule of decision theory, Rawls employs other contractarian arguments to justify the selection of his principles by the parties in the original position. One such justification is the argument from "strains of commitment." Rawls asserts that "in the original position the parties are to favor those principles compliance with which should prove more tolerable, whatever their situation in society turns out to be. The notion of a contract implies that one cannot enter into an agreement that one will be unable to keep." Thus the parties in the original position must weigh with care the strains of commitment since the agreement reached in the original position is final and there is no second chance. Rawls refers to these psychological costs of compliance as "strains of commitment" and he argues that the strains of commitment attached to his principles are much less than those of competing principles.

Another contractarian argument put forward by Rawls in favor of his principles is the argument from stability. Rawls argues that the principle of justice which would be selected in the original position is the most stable one. According to him, "[a] conception of justice is stable when the public recognition of its realization by the social system tends to bring about the corresponding sense of justice."[43] Rawls concludes that the sense of justice corresponding to his principles is stronger than that of the other conceptions.

## 2.3. Theories Regarding Utilization of International Watercourses

The non-navigational uses of international watercourses have become subjects of interest in international law mainly since the late 19th century. Prior to that there were few problems in

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43 *Theory of Justice, supra* note 3 at 154.

the area that required rules for their regulation.[44] The expansion of non-navigational uses of watercourses following technological advancements led to the multiplication and complication of the problems surrounding such uses which, in turn, prompted the emergence and development of principles that govern the utilization of international watercourses. Historically, some four theories have been advanced, with varying degrees of acceptance: absolute territorial sovereignty, absolute territorial integrity, limited territorial sovereignty and community of interests.

Although there is almost no room within which some of these principles can operate under contemporary international law, it is worthwhile briefly discussing their basic ideas for the proper understanding of the issues involved in, and the theoretical basis of, international water law. In particular, the discussion shows that reconciling the differing concerns of upper and lower riparians has always been the central issue in international water law. The discussion also shows how the concept of sovereignty, which is the conceptual underpinning of most of the principles, is used to arrive at different, even entirely opposing, principles.

### 2.3.1. Absolute Territorial Sovereignty

Under the principle of absolute territorial sovereignty, states have unrestricted sovereignty over water within their territory and are free to use it in whatever manner and amount they wish without considering the impact of their use on other watercourse states.[45] This theory is widely known as the Harmon Doctrine, after a US Attorney-General, Judson Harmon, who

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44 C. B. Bourne, "International Law and Pollution of International Rivers and Lakes" in P. Wouters, ed., *International Water Law: Selected Writings of Professor Charles B. Bourne* (London: Kluwer Law International, 1997) 107 at 110.

45 P. Birnie & A. Boyle, *International Law & the Environment* (New York: Oxford University Press, 2002) 2nd ed., at 301; J. Lipper, "Equitable Utilization" in A. H. Garretson, R. D. Hayton and C. J. Olmstead, eds., *The Law of International Drainage Basins* (New York: Oceana Publications, Inc., 1967) 15 at 18; J. G. Lammers, *Pollution of International Watercourses* (The Hague: Martinus Nijhoff, 1984) at 557.

espoused the theory in a dispute between the US and Mexico over the Rio Grande River.[46] Apart from the United States, the Harmon Doctrine has been invoked by a few upstream states in diplomatic exchanges concerning disputes over international watercourses. In its dispute with Pakistan over the Indus River, India at one point asserted its full freedom to abstract as much water as it needed from the river.[47] Austria also embraced the Harmon Doctrine in discussions with Bavaria over the development of shared international watercourses.[48] McCaffrey also includes Chile and Ethiopia on the list of countries that took similar positions in the past.[49] However, these few states that adhered to the theory of absolute territorial sovereignty actually resolved or are trying to resolve their disputes by agreements which are based on other principles, usually the principle of equitable utilization.[50]

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46 In connection with Mexico's complaint that the diversions of Rio Grande water by farmers and ranchers in the US sharply reduced the flow of the river and thereby affected the communities living in the Mexican side of the river, Attorney General Harmon opined in 1895 that "...the rules, principles, and precedents of international law impose no liability or obligation upon the United States." See 21 Op. Atty. Gen., at 283 quoted by S. C. McCaffrey, *The Law of International Watercourses* (New York: Oxford University Press, 2001) at 115.

47 R.R. Baxter, "The Indus Basin" in A. H. Garretson, R. D. Hayton and C. J. Olmstead, eds., *The Law of International Drainage Basins* (New York: Oceana Publications, Inc., 1967) 443 at 453.

48 McCaffrey, *supra* note 46 at 119, quoting Austrian Statement of Principles Regarding Successive Rivers, reported in ECH Hydroelectric Study, at 51.

49 *Ibid.*, at 121-23.

50 The US settled its dispute with Mexico over the Rio Grande in the 1906 Convention concerning the Equitable Distribution of the Waters of the Rio Grande for Irrigation Purposes, 34 *Stat.* 2953, see Birnie and Boyle, *supra note* 45 footnote 32. India settled her water dispute with Pakistan in the 1960 Indus Water Treaty mainly on the basis of equitable utilization, Karachi, 19 Sept. 1960, 419 UNTS 126. Austria, in the same statement it invoked the theory of absolute sovereignty, "agreed to give notice of any plans for the development of successive watercourses and to consider objections concerning those plans, whether based on 'legal, technical or economic grounds'.", McCaffrey, *ibid.*, at 119. Chile's subsequent assertions and its agreement with Argentina concerning Hydrologic Basins in 1971 show that it is no longer adhering to the Harmon Doctrine, *ibid.*, at 121-22. Ethiopia is also currently engaged, together with the other Nile countries, in the process of forming a cooperative framework through the Nile Basin Initiative. Generally about state practice regarding the theory of absolute territorial sovereignty, see *ibid.*, at 114-23; C. B. Bourne, "The Right to Utilize the Waters of International Rivers" in P. Wouters, ed., *International Water Law: Selected Writings of Professor Charles B. Bourne* (London: Kluwer Law International, 1997) 25 at 37-39. The only agreement that come close to codifying the theory of absolute territorial sovereignty is the Boundary Waters Treaty

Like state practice, the views of publicists have never been kind to the theory of absolute territorial sovereignty. Virtually all modern commentators dismiss the theory and whatever scant support it managed to attract among publicists is limited to early writers.[51] International expert bodies which have conducted studies on international watercourses have not given any place to the theory in their statements of principles.[52] Apart from the inherent injustice of the theory which is self-evident, it is self-contradictory from a legal point of view, as the unlimited disposal of an international watercourse by one state would make the same right of another state impossible.[53] In view of all these drawbacks, McCaffrey's assertion that "on the basis of policy as well as practice...the 'Harmon Doctrine' of absolute territorial sovereignty should, once and for all, be laid to a richly deserved rest" is correct.[54]

### 2.3.2. Absolute Territorial Integrity

The theory of absolute territorial integrity, like the theory discussed above, bases itself on an extreme view of state sovereignty, albeit to advance an entirely opposite position. The theory of absolute territorial integrity posits that states have an absolute right to have an uninterrupted flow of a watercourse from the territory of another.[55] In other words, the theory

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between US and Canada. Article 2 of this treaty provides that each state has "exclusive jurisdiction and control over the use and diversion...of all waters on its own side of the line." However, the same Article puts limitation on the right to exclusive jurisdiction by granting equal access to remedies for individuals across the border. Moreover the prohibition of polluting uses in Article 4 also restricts the absoluteness of the right to exclusive jurisdiction. See, Boundary Waters Treaty, Great Britain and the United States, 11 January 1909, *reproduced* in Department of State, *Treaties and Other International Agreements of the United States of America 1776-1949*, Vol. 12, at 319.

51 Berber mentions only nine writers who, according to him, advance the theory of absolute territorial sovereignty. F. J. Berber, *Rivers in International Law* (London: Stevens and Sons, 1959) at 15-19.

52 Helsinki Rules, International Law Association, Report of the Fifty-Second Conference, Helsinki, 1966.

53 Lammers, *supra note* 45 at 557.

54 McCaffrey, *supra note* 46 at 111.

55 See *ibid.*, at 128; Bourne, *supra note* 44 at 111; Birnie and Boyle, *supra note* 45 at 302.

prohibits upstream states from doing anything that might affect the natural flow of the watercourse into the lowermost riparian. This theory suffers from the similar drawbacks of its theoretical opposite, the Harmon Doctrine, since both are based on the same untenable ground: an extreme view of sovereignty. As a result, neither state practice nor doctrine have been any more favorable to the theory of absolute territorial integrity than they have been to the theory of absolute territorial sovereignty. Although the theory has been invoked by a few states in disputes over international watercourses, it has never been used to resolve any international dispute over water.[56] As to the views of jurists, writing in 1967, Lipper states that "with the possible exception of Judge Lauterpacht, research discloses no modern authority who adopts the territorial integrity theory as a rule of international law."[57] Thus, as was suggested for the Harmon Doctrine, this theory should also, once and for all, be laid to a richly deserved rest.

### 2.3.3. Limited Territorial Sovereignty

The theoretical fallacy and unsoundness of the above extreme theories, coupled with their inability to solve practical controversies over the use of international watercourses, led to the search for a middle ground that balances the differing concerns of upper and lower riparians. This effort gave rise to the theory of limited territorial sovereignty, which strikes a golden mean between the extreme principles of absolute territorial sovereignty and absolute territorial integrity. What this principle essentially propounds is that a state's right to use the waters of international watercourses in its territory is not absolute, but is limited by the

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[56] Pakistan, Egypt and Bolivia are said to have invoked this extreme theory. See McCaffrey, *supra* note 46 at 130-33. However, Lipper asserts that "no case has been found in which the theory of territorial integrity has been applied by any tribunal in a dispute involving the rights of coriparian states in the uses of the waters of an international river. Nor is there evidence of a state having accepted a diplomatic settlement based upon this theory." Lipper, *supra* note 45 at 18.

[57] Lipper, *ibid.*, at 20.

recognition of similar rights of other watercourse states.[58] The theory of limited territorial sovereignty receives wide support both from state practice and literature and is generally regarded as the prevailing theory for the utilization of international watercourses.[59]

The theory of limited territorial sovereignty proceeds from two closely connected ideas about the concept of sovereignty or a state's power over its territory in general. The first idea is that a state's power over its territory, or its freedom to carry on or permit activities in its territory, is not absolute. A state has a corollary duty- a duty to respect the sovereignty of other states and refrain from using or allowing persons to use its territory for acts that cause injury to the latter- an idea commonly expressed by the maxim *sic utere tuo ut alienum non laedas*.[60] The second idea is that all states are considered as having equal rights in their relationships with one another: the concept of sovereign equality of states.[61] In the context of international watercourses, the first idea imposes on watercourse states an obligation not to cause harm to other watercourse states in their use of an international watercourse - the no harm principle.[62] Whereas the second idea entitles all co-riparians, within their territories, equal

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58 P. K. Wouters, "Allocation of the Non-Navigational Uses of International Watercourses: Efforts at Codification and the Experience of Canada and United States." (1992) 30 *Canadian Yearbook of International Law* 43 at 45 [hereinafter Wouters, "Allocation"].

59 For a detailed discussion of this theory and authorities supporting it, see H. A. Smith, *The Economic Uses of International Rivers*, (London: P. S. King & Son, 1931); Lipper, *supra* note 45 at 23-38; McCaffrey, *supra* note 46 at 137-149.

60 Schwebel states that "It is difficult to find dissent from the general proposition that a State may not use, or allow persons under its jurisdiction or control to use, its territory in such a way that harm is caused to the territory or interests of another State." S.M. Schwebel, "Third Report on the Law of the Non-navigational Uses of International Watercourses" (UN Doc. A/CN.4/348) in *Yearbook of the International Law Commission 1982*, vol. 2, part 1 (New York: UN, 1984) at 91 (UNDOC. A/CN 4/SER. A/1982/Add. 1). See also A. Tanzi and M. Arcari, *The United Nations Convention on the Law of International Watercourses* (The Hague: Kluwer Law International, 2001) at 14 and the authorities cited under footnote 61 supporting the idea that states should abstain from using their territory in a manner that causes harm to others.

61 The principle of sovereign equality of states is enshrined in Article 2(1) of the UN Charter. It reads as follows: "The Organization is based on the principle of the sovereign equality of all its Members."

62 S. Schwebel, *supra* note 60 at 92-94.

rights in the use of a shared watercourse - the principle of equitable utilization.[63] Thus, we find the principle of no harm and the principle of equitable utilization emerging in the theory of limited territorial sovereignty. These principles are the basic substantive rules under current international water law. The content, scope and application of these principles as well as their relationship with one another will be discussed in the following chapters.

### 2.3.4. Community of Interests

The community of interests theory, goes beyond the goal of balancing the conflicting independent uses of co-riparians, as is the case in the theory of limited territorial sovereignty and, advances the idea of the integrated development of an international watercourse as a unit.[64] As put by Lipper, this theory "stems from the practical consideration that the geography of a river often has little if any relationship to the political frontiers which divide it, and in order to make optimum use of its waters it is often necessary to develop an integrated program for the entire drainage basin."[65] Thus this theory calls for joint planning, development and management of international watercourses by co-riparians disregarding political boundaries.

The notion that an international watercourse is a common property which should be vested in the community of the riparian states at large is an old concept that can be traced back to

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63 The ILC, in the commentary to its draft articles on the law of the non-navigational uses of international watercourses, states that: "Indeed, the principle of the sovereign equality of States results in every watercourse State having rights to the use of the watercourse that are qualitatively equal to, and correlative with, those of other watercourse States." *Report of the International Law Commission on the Work of its Forty-Sixth Session*, U.N. Doc. A/49/10 (1994), reprinted in [1994] 2(2) Y.B. Int'l L. Comm'n at 98.

64 Lipper, *supra* note 45 at 38; G. Eckstein, "Application of International Water Law to Transboundary Groundwater Resources, and the Slovak-Hungarian Dispute over Gabcikovo-Nagymaros" (1995) 19 *Suffolk Transnat'l L. Rev.* 67 at 81.

65 Lipper, *ibid.*

antiquity. Roman Law regarded streams as common or public properties.[66] Ancient philosophers and early jurists of international law espoused the idea of community in the water relying mainly on natural law principles.[67] Grotius, in connection with things which belong to men in common, opined that: "... a river, viewed as a stream, is the property of the people through whose territory it flows...The same river, viewed as running water, has remained common property, so that any one may drink or draw water from it."[68] Berber cites a number of early official acts of governments which embraced the idea.[69] However, the express reference to the concept of community of interests has been rare in treaties and governmental statements of the twentieth-century.[70] This is due in part to the gradual displacement of the natural law school of thought by positivism and the resulting emphasis on the concept of sovereignty.[71]

The theory of community of interests has also been endorsed by international tribunals. The *Territorial Jurisdiction of the International commission of the River Oder* case of the Permanent Court of International Justice (PCIJ) involved the interpretation of a treaty dealing with navigation on the River Oder.[72] The Court held that "[the] community of interest in a

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66 McCaffrey, *supra* note 46 at 152, citing Institutes of Justinian, lib. II, titl. I, sections 2 and 5.

67 Berber lists in this group Plato, Virgil, Engelhardt and Vernesco. See Berber, *supra* note 51 at 22.

68 H. Grotius, *De Jure Belli ac Pacis Libri Tres*, trans. F. Kelsey (New York: Oceana Publications Inc., 1964) Vol. 2 at 196.

69 Berber, *supra* note 51 at 23-24.

70 McCaffrey, *supra* note 46 at 156.

71 For instance, according to Max Huber: "Joint ownership, as it seems to exist to some extent in private law, cannot however be relevant in the case of international law, as explained above, for it involves a restriction on the independence of states, and such a restriction may never be presumed, either in regard to state territory itself or with regard to the exercise of territorial sovereignty." As quoted in Berber, *supra* note 51 at 25. See also McCaffrey, *ibid.*

72 *Case Concerning the Territorial Jurisdiction of the International Commission of the River Oder*, 1929, Judgment no. 16, PCIJ Series A no. 23, at 5-46. Reproduced in M. O. Hudson, ed., *World Court Reports* (New York: Oceana, 1969) vol. 2, at 609.

navigable river becomes the basis of a common legal right, the essential features of which are the perfect equality of all riparian States in the use of the whole course of the river and the exclusion of any preferential privilege of any one riparian State in relation to the others."[73] A number of writers argue that this assertion of the Court is not limited only to navigational uses, but is also equally applicable to non-navigational uses, since the Court, as stated in its own words, reached the above assertion by applying "principles governing international fluvial law in general."[74] This argument, as well as the very idea of community of interests itself, is reaffirmed by the recent judgment of the International Court of Justice (ICJ) in the case concerning the *Gabcikovo-Nagymaros Project* (Hungary v. Slovakia).[75] After quoting the above passage from the decision of the PCIJ, the ICJ held that "[m]odern development of international law has strengthened this principle for non-navigational uses of international watercourses as well."[76]

The idea that the community of interests approach furnishes the best solution to address the problems in the use and management of international watercourses is becoming widely accepted in principle, if not in practice. The idea has long been advanced by scholars[77] and international organizations[78] with a view to tackling the two major problems facing international watercourses: water scarcity and degradation. The crux of this argument is well captured in the introduction to Chapter 18 of Agenda 21, which states that:

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73 *Ibid.*, at 27.

74 McCaffrey, *supra* note 46 at 151-52; Lammers, *supra* note 45 at 506-07; Lipper, *supra* note 45 at 29.

75 *Case concerning the Gabcikovo-Nagymaros Project* (Hungary v. Slovakia), 1997 ICJ 7.

76 *Ibid.*, at para. 85.

77 A. E. Utton, "International Water Quality Law" in L. A. Teclaff and A. E. Utton, eds., *International Environmental Law* (New York: Praeger Publishers, 1974) 154 at 182 (arguing that: "However, as admirable as equitable independent development may be, independent development is not likely to make the most productive use of the resource....Rather than development which is "separate but equal" we need development which is unified and optimal."); Lipper, *supra* note 45 at 38-39;

78 See for instance, United Nations, Department of Economic and Social Affairs, Integrated River Basin Development, Report of a Panel of Experts, U.N. Doc. E/3066/Rev.1 (rev. ed., 1970).

> the widespread scarcity, gradual destruction and aggravated pollution of freshwater resources in many world regions, along with the progressive encroachment of incompatible activities, demand integrated water resources planning and development.[79]

Thus in modern times, the community of interests theory is justified not so much on the principles of natural law, as was the case in ancient times, but rather by relying in the main on a consequential argument that the integrated development of an international watercourse results in a greater benefit to the co-riparians. Although the community of interests theory is regarded as the most efficient and advantageous for the optimal and sustainable utilization of international watercourses, states have been reluctant to accept it, at least in its fullest sense, as a normative rule of international water law.[80] This reluctance is in part attributable to the fact that most states are not yet ready to fully surrender their sovereign rights over natural resources passing through their territories.[81] Besides, the lack of consensus on the scope and legal implications of the theory partly explains such reluctance.

Be that as it may, some of the ideas underlying the theory have been reflected in modern state practice.[82] The 1997 UN Convention on the Law of Non-Navigational Uses of International Watercourses, while it stops short of mandating the establishment of joint

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79 Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992, U.N. Doc. A/CONF.151/26 (vol. II) (1992), at 167, para. 18.3.

80 Tanzi and Arcari, *supra* note 60 at 22.

81 The traditional reluctance of states to accept language that may suggest an internationalization of the natural resources passing through their territories was the main reason why the International Law Commission avoided the concept of "shared natural resources", a cognate concept to that of community of interests, which the commission had considered during earlier stages of the drafting process. *Ibid.* See also J. Brunnee and S.J. Toope, "Environmental Security and Freshwater Resources: A Case for International Ecosystem Law," (1994) 5 *Y.B. Int'l Envtl. L.* 41 at 59.

82 The proliferation of international institutions responsible for the coordination and management of the utilization of an international watercourse is a case in point. For the description of such international institutions, see Birnie and Boyle, *supra note* 45 at 304.

management, stipulates that watercourse states must enter into consultations concerning management, including possible creation of a joint management mechanism, at the request of any of the concerned states.[83] These and other similar developments, coupled with the ICJ's endorsement of the theory as mentioned above, indicate that there is a clear trend toward making the community of interests theory a normative rule of international water law.[84]

### 2.3.5. Conclusion

The discussion of the theories of international water law reveals the development of international water law from one extreme to another. The early stages of the development of international water law were dominated by absolute claims - the theories of absolute territorial sovereignty and integrity. The drawbacks of these absolute theories soon became evident and led to the theory of limited territorial sovereignty. Again, the recognition that the theory of limited territorial sovereignty, with its basic focus on setting a limitation to the activities of riparian states, is not an adequate conceptual framework prompted the emergence of the theory of community of interests. Under current international law the theory of limited territorial sovereignty furnishes the foundation of the substantive principles of the law of international watercourses - the principles of equitable utilization and no significant harm. However, the ideas enshrined in the theory of community of interests have also been exerting considerable influence in shaping and evolving the substantive principles beyond their original scope. Thus, the legal analysis of the substantive principles of

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83 U.N. Convention on the Law of the Non-Navigational Uses of International Watercourses, UN Doc. A/RES/51/869, 21 May 1997, Article 24. Moreover, the broad definition of the concept of 'international watercourse' contained in Article 2 and the emphasis given for cooperation as reflected both in the substantive and procedural rules stipulated in the Convention demonstrate the influence of the community of interests theory on the overall conceptual framework of the Convention.

84 Tanzi and Arcari also note the existence of such trends and suggest that the 1997 Watercourses Convention should be assessed by the extent to which its final text has been successful in managing these trends. Tanzi and Arcari, *supra* note 60 at 23.

international water law has to be approached within the conceptual framework of these two dominant theories of international water law. Before discussing the substantive principles, however, it is appropriate to evaluate these theories of international water law from fairness or justice perspective.

## 2.4. Rawls' Theory of Justice and Theories of International Water Law

This section evaluates the theories of international water law discussed in the preceding section from a fairness or justice point of view by using Rawls' theory of justice. Before doing so it is necessary to address the issue of the appropriateness of applying Rawlsian theory to issues of global justice in the face of Rawls' own reluctance to do so. In *A Theory of Justice*, Rawls limits the scope of application of his principles to the basic structure of society within nation-states. He suggests that he is concerned with "a special case of the problem of justice"[85]and derived and justified his two principles by taking the nation-state as the foundation of his contractarian approach. He adopts the assumption that nation-states are self-sufficient.[86] At first glance, these statements give the sense that Rawls' principles are not meant to apply to issues of global justice or relations between states. However, closer scrutiny suggests otherwise.

First, in *A Theory of Justice* Rawls does not categorically exclude the application of the concept of justice as fairness to international relations. Rather, he indicates that by making some suitable modifications, the contractarian theory can be extended to derive and justify principles of justice for relations between states.[87] In "The Law of Peoples" he actually

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85 *Theory of Justice, supra* note 3 at 7.

86 Rawls states that: "I shall be satisfied if it is possible to formulate a reasonable conception of justice for the basic structure of society conceived for the time being as a closed system isolated from other societies." *Ibid.*

87 *Ibid.*, at 331. In discussing conscientious refusal, Rawls indicates that it is possible "to relate the just political principles regulating the conduct of states to the contract doctrine and to explain the moral

undertakes such an extension, albeit for limited issues of international relations.[88]

Second, a number of Rawlsians question and criticize Rawls' reasons for not fully extending the conception of justice as fairness to its logical application for global justice.[89] In particular, they strongly disagree with Rawls' assumption of self-sufficiency of nation-states or, in other words, the absence of global community. They argue that there is interdependence among nations and a growing global sense of community.[90] On the issue of global redistribution of resources, Rawls' argues that the international original position would not result in a choice of the difference principle. His reason is that since different societies of people have different values, it is not appropriate to suppose that non-liberal societies will accept the difference principle or any other liberal principle of distributive justice in dealing with other peoples.[91] While some commentators challenge this reasoning by persuasively demonstrating the selection of the difference principle in an international original position,[92] Franck dismisses it stating that the difference principle "compels no nation to make a redistributive claim which would yield results contrary to that society's values."[93] It may also be argued that although the acceptance of principles of justice by all existing parties is important, their validity does not entirely rest on such acceptance, nor on their conformity with all existing

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basis of the law of nations from this point of view."

88 J. Rawls, "The Law of Peoples" in S. Freeman, ed., *John Rawls: Collected Papers* (Cambridge, Mass.: Harvard University Press, 1999) 529. In this work, Rawls applies his conception of justice as fairness at the international level focusing on basic political rights and liberties.

89 Garcia, *supra* note 14 at 1013, stating that "both rationales are open to question, and both are wrong."; Franck, "Fairness", *supra* note 1 at 19, asserting that "neither objection is convincing."

90 Franck, *ibid.*, stating that on this point "Rawls may simply be wrong."; Garcia, "Global Trade", *supra* note 29 at 1038, arguing that "Rawls' treatment of domestic societies as closed societies, if tenable in the early 1970s, is certainly not tenable today because of developments in international relations."

91 Rawls, *supra* note 88 at 558.

92 Garcia, *supra* note 14

93 Franck, *Fairness*, *supra* note 1 at 19.

societies' values. As put by Beitz, the primary function of social ideals or principles of justice is to describe a goal toward which efforts at political change should aim.[94] Thus, without being in conformity with existing societies' values, principles of justice may serve as a goal toward which changes in social values and structures should be made.

Both Rawls' rationales for refusing to apply the difference principle to issues of international distributive justice seem even weaker and more irrelevant as regards the utilization of international watercourses. Concerning the difference principle, Rawls' main reservation is about using it as a moral basis to establish a duty on developed nations to economically assist developing nations. The question of the use and management of international watercourses, which is an issue of sharing common resources, does not strictly fall into this category. Neither does the assumption of the absence of global community apply to international watercourses. International watercourses necessarily bring together two or more nations. The use or misuse of the water resource in one part of the system will impact on another part of the water system. As a result, states sharing international watercourses cannot avoid having a relationship or, in other words, constituting a community.[95] Therefore, there is no valid objection to the application of Rawls' theory of justice to issues of the uses of international watercourses.

It is also important to note that the allocation of the uses of international watercourses satisfies the preconditions for justice discourse, which Rawls calls the circumstances of justice. International watercourses are characterized by moderate scarcity as their waters are not too abundant to make principles of justice superfluous, nor are they too scarce to make cooperation and agreement impossible. As shown in the preceding part, conflicting claims

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94 C.R. Beitz, "Justice and International Relations" in H.G. Blocker & E.H. Smith, eds., *John Rawls' Theory of Social Justice: An Introduction* (Athens: Ohio University Press, 1980)211 at 230.

95 See, e.g., McCaffrey, *supra* note 46 at 167, stating that: "The interdependence created by [the] capacity of riparian states to affect each other through their uses of the watercourse may be conceptualized as giving rise to a form of 'community'."

and interests are also common in the sharing of international watercourses. Thus, principles of justice are both possible and necessary for the utilization of international watercourses. For all these reasons it is plausible to assume that theories and principles governing the utilization of international watercourses are appropriate subjects for the application of Rawls' theory of justice. Accordingly, following is an evaluation of the theories of international water law in the light of Rawlsian theory.

As noted earlier, the contractarian approach figures prominently in Rawls' theory of justice. In "The Law of Peoples", Rawls extends his conception of justice as fairness to limited moral issues of international relations by using the contractarian approach. Thus, one way of applying Rawls' theory of justice to the theories of international water law is by using Rawls' concept of the original position. To be more specific the question that shall be considered in this approach is this: which theory of international water law would be selected by the parties to a hypothetical Rawlsian international original position?

The other approach is to evaluate the theories of international water law by directly applying Rawls' principles of justice. As far as the distribution of international social and economic goods are concerned, Garcia argues that an international difference principle is the logical outcome of an international original position.[96] Thus, the second approach is to evaluate the extent to which each theory of international water law satisfies the requirements of the difference principle. This approach requires a clear picture of the nature and extent of the inequalities involved in each of the theories to be evaluated. This may be difficult for some of the theories, as they are too general. For instance, in the case of the theory of limited territorial sovereignty, an examination of the inequalities resulting from the application of the theory requires an analysis of the contents and relationship of the two specific principles that constitute the theory- a subject yet to be discussed. Therefore, in this section of the thesis only the first approach - Rawls' concept of the original position- will be used to evaluate the

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[96] Garcia, *supra* note 14 at 1022-23.

theories of international water law from a justice point of view.

The application of Rawls' contractarian approach to the theories of international water law requires the formulation of an international original position parallel to a domestic social contract. Following Rawls' characterization of the international original position,[97] we can suppose, for our purpose, that the parties to the original position are representatives of different nations. The parties are to choose theories that govern the utilization of international watercourses. They are rational in the sense that they are concerned to advance the interests of the nations they represent. Under a veil of ignorance, they know nothing about the particular circumstances of the nations they are representing: their population, alternative water sources, level of economic development, whether they are upstream or downstream, and so on.

In determining which one of the four theories of international water law discussed in the preceding section will be chosen by the parties in the original position, we have to apply the maximin rule for choice under uncertainty as Rawls did to justify the selection of his principles. Thus the main question the parties to the agreement would ask themselves is this: which theory has the best worst outcome? The high degree of risk involved in choosing either of the two extreme theories- absolute territorial sovereignty and absolute territorial integrity - is readily apparent. While the former gives absolute right to upstream states to use international watercourses, thereby completely disregarding the interest of lower riparians, the latter, by prohibiting upstream riparians from making any substantial use of the waters,

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97 In *A Theory of Justice*, Rawls describes the international original position as follows: "[O]ne may extend the interpretation of the original position and think of the parties as representatives of different nations who must choose together the fundamental principles to adjudicate conflicting claims among states. Following out the conception of the initial situation, I assume that these representatives are deprived of various kinds of information. While they know that they represent different nations each living under the normal circumstances of human life, they know nothing about the particular circumstances of their own society... This original position is fair between states; it nullifies the contingencies and biases of historical fate. Justice between states is determined by the principles that would be chosen in the original position so interpreted." *Theory of Justice*, *supra* note 3 at 331-32.

reserves the whole waters of international watercourses to lowermost riparians. Thus, while the former has a devastating effect to downstream riparians, the latter has the same effect for upstream riparians. Since the parties in the original position would not know whether the nations they are representing are downstream or upstream due to the veil of ignorance, they would not dare to run such a high risk by choosing either of these absolute theories. As these theories represent the least safest alternatives, the parties to the original position would avoid choosing them.

The strains of commitment associated with the absolute theories are another reason for the parties not to choose these theories. Rawls' argument from strains of commitment states that the parties in the original position are to choose those principles, compliance with which should prove more tolerable, whatever their situation in society turns out to be. If a party chooses the theory of absolute territorial sovereignty and if in actual circumstances finds itself as a downstream state, that party knows that it might not able to keep the agreement, as it is highly detrimental to its interests. The same applies to a party who find itself as an upstream state with regard to the theory of absolute territorial integrity. Thus, the argument from strains of commitment speaks against the selection of the absolute theories in the original position. Neither does Rawls' stability argument supports the selection of the absolute theories in the original position. Since these theories favor either downstream or upstream states, the sense of justice corresponding to them is very weak, which makes the theories less stable.

The more logical course of reasoning of the parties in the original position in adopting a theory of international water law would be as follows. As the parties in the original position are thought to be free and equal, it might be natural for them to start with an equal distribution of the waters of international watercourses. However, based on their general information about human society, they know that some states have more water demands due to large population, absence of alternative water sources, etc. They realize that strict equal distribution involves a risk to these states. Since the parties do not know the population size,

the extent of natural resources or other specifics of the nations they are representing, they will not risk adopting strict equal distribution. Rather they will agree on equitable distribution that takes into account these types of relevant factors. Again as the parties in the original position are thought to be rational, ensuring security would also be a priority and we can suppose that they would like to avoid harming one another. To avoid the risk of being harmed, we can suppose that the parties would agree on a principle that prohibits the use of an international watercourse in a manner that causes harm to the rights of another state. That means, the parties in the original position would in effect choose, at least initially, the theory of limited territorial sovereignty.[98]

As the theory of limited territorial sovereignty balances the interests of both upper and lower riparians by giving equal weight to their claims, it has the best worst outcome compared to the absolute theories. For the same reason, the strains of commitment attached to adopting the theory of limited territorial sovereignty are less serious than the absolute theories. Thus, the parties will not find it a problem to live with the outcome of the theory, whatever their situation turns out to be. Since this theory favors neither the upstream nor the downstream state, the sense of justice associated with it is also strong and hence more stable. Thus, it is plausible to assume that the parties in the original position would conclude that the theory of limited territorial sovereignty is the safest alternative compared to the absolute theories.

Based on their general knowledge and information, the parties to the original position know that water scarcity and degradation are the major problems in the utilization of international watercourses. As a result, we can assume that the parties would like to adopt a theory that promotes optimal and sustainable development of international watercourses, in addition to concerns of fair distribution. Again from their general knowledge, the parties know that optimal and sustainable utilization can fully be achieved only if an international watercourse

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98 As noted earlier, the principles of equitable utilization and no harm emerged from the theory of limited territorial sovereignty.

is developed as a unit through joint planning, development and management by all watercourse states. Thus, the parties may think that the theory of limited territorial sovereignty, with its main focus on fair allocation of international watercourses for independent use by each watercourse states, would not adequately address the above concerns. In this regard, the parties may find the theory of community of interests more suitable than the theory of limited territorial sovereignty.[99]

Both the theory of limited territorial sovereignty and community of interests have as their objective balancing and accommodating the interests of all watercourse states and the distribution of the benefits of an international watercourse accordingly. Thus, both theories work, more or less, in the same direction in terms of fairly distributing the benefits and burdens of an international watercourse. However, the theory of community of interests, by commanding the joint planning and development of an international watercourse as a unit, would arguably lead to more efficiency, and thereby makes more benefits available for distribution than the theory of limited territorial sovereignty. Thus, the theory of community of interests can be considered as having the best worst outcome of all the theories of international water law.

However, as much as the parties accept the theory of community of interests in an ideal world both in terms of fairness and efficiency, they will also realize that its practical implementation may prove difficult, if not impossible. From their general knowledge, the parties know that the concept of sovereignty is one of the pillars of international relations and states are usually reluctant to fully surrender their sovereignty over the natural resources

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[99] McCaffrey identifies the following three basic advantages of the community of interests theory over that of limited territorial sovereignty: "First, the expression conveys a more accurate conception of the relationships of states sharing the watercourse...A second advantage of the community-of-interests theory is that it expresses more accurately the normative consequences of the physical fact that a watercourse system is, after all, a unity...A third advantage of the notion of a community of interests is that it implies collective, or joint action. Whereas the doctrine of limited territorial sovereignty merely connotes unilateral restraint, the concept of a community of interests evokes shared governance, joint action." McCaffrey, *supra* note 46 at 168-69.

situated within their territory in favor of joint planning and development. Moreover, the implementation of the community of interests theory, in its fullest sense, requires a high degree of understanding and cooperation among the nations sharing an international watercourse. The parties to the original position think that, since building such understanding and cooperation requires time, the theory of community of interests may not work in all times and situations. Thus, it is safe to assume that although the theory of community of interests has the best worst outcome compared to the theory of limited territorial sovereignty, until conditions necessary for its full implementation exist, the parties would agree to be governed by the latter or a combination of the two.

## 2.5. Conclusion

Fairness or justice issues are important considerations in evaluating the normative validity of any legal theory or principle. This is even more so in the case of theories and principles dealing with the sharing of common resources such as international watercourses. One of the problems in this regard is determining what is fair or just. Our judgment of what is fair or just is usually influenced by our position. The ingenuity of Rawls' theory of justice lies mainly in its treatment of this problem. It requires us to investigate and pass judgment on fairness or justice issues from a neutral position without knowing our present position.

The legal analysis of the theories of international water law reveals that the absolute theories of territorial sovereignty and territorial integrity have no room to operate within current international law. Neither are they justified from a fairness or a justice point of view when evaluated in light of Rawls' theory of justice. The existing legal regime of international watercourses is founded on the theory of limited territorial sovereignty with some elements of the community of interests theory. As shown by the application of Rawls' theory of justice, these theories also come close to addressing issues of distributive justice. Thus, the analysis of the relationship between the principles of equitable utilization and no harm in the Nile legal regime will be informed by the conceptual frameworks advanced by the theories

of limited territorial sovereignty and community of interests.

# CHAPTER THREE

# EQUITABLE UTILIZATION AND NO SIGNIFICANT HARM UNDER INTERNATIONAL LAW: RELEVANCE AND APPLICATION TO THE NILE BASIN

The principles of equitable utilization and no harm are the basic substantive principles which determine the rights and obligations of watercourse states under contemporary international water law. The relationship between these principles has been one of the most controversial issues in the ongoing process to build a new legal framework in the Nile Basin. How the relationship between these principles is dealt with under international law is important in determining their relationship in the Nile legal framework. Thus this chapter will examine the relationship between these principles under current international law and the implication of that relationship for the Nile basin. Before doing so, however, it will be convenient to analyze each principle separately.

## 3.1. The Principle of Equitable Utilization

It is commonly held that the principle of equitable utilization has its roots in the judicial decisions of federal states concerning cases involving interstate water resources allocation disputes.[1] Notable among such federal states are the United States, Germany and Switzerland.[2] From this root, the principle of equitable utilization has grown as the basic

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1 L. Caflisch, "Regulation of the Uses of International Watercourses" in S. M. A. Salman and L. B. de Chazournes, eds., *International Watercourses: Enhancing Cooperation and Managing Conflict* (Washington D.C.: World Bank Publications, 1998) 3 at 13; S.M. Schwebel, "Third Report on the Law of the Non-navigational Uses of International Watercourses" (UN Doc. A/CN.4/348) in *Yearbook of the International Law Commission 1982*, vol. 2, part 1 (New York: UN, 1984) at 75 (UNDOC. A/CN 4/SER. A/1982/Add. 1); S. C. McCaffrey, *The Law of International Watercourses* (New York: Oxford University Press, 2001) at 324.

2 In particular, the US Supreme Court has played a significant role in elucidating the meaning and content of the principle. Caflisch, *ibid.*

substantive rule of international water law for the determination of the rights and obligations of watercourse states. The principle receives confirmation from virtually all the sources of international law.[3] It suffices to mention the conclusion the ILC reached, after a thorough study of the field, as to the status of the principle:

> A survey of all available evidence of the general practice of States, accepted as law, in respect of the non-navigational uses of international watercourses - including treaty provisions, positions taken by States in specific disputes, decisions of international courts and tribunals, statements of law prepared by intergovernmental and non-governmental bodies, the views of learned commentators and decisions of municipal courts in cognate cases - reveals that there is overwhelming support for the doctrine of equitable utilization as a general rule of law for the determination of the rights and obligations of States in this field.[4]

Unlike the no harm principle, which is a general principle of international law not confined to international watercourses, the principle of equitable utilization is specifically designed

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3 For a detailed survey of the relevant authorities (state practice, case law and views of publicists) supporting the principle of equitable utilization, see S.C. McCaffrey, "Second Report on the Law of the Non-navigational Uses of International Watercourses" (UN Doc. A/CN.4/399) in *Yearbook of the International Law Commission 1986*, vol. 2, part 1 (New York: UN, 1988) (UNDOC. A/CN 4/SER. A/1986/Add. 1); as for conventional law, see the U.N. Convention on the Law of the Non-Navigational Uses of International Watercourses, UN Doc. A/RES/51/869, 21 May 1997, Article 5, reprinted in D. Hunter, et al, eds., *International Environmental Law and Policy: Treaty Supplement* (New York: Foundation Press, 2002) at 246 [hereinafter The 1997 Convention]; for a recent case, see *Case concerning the Gabcikovo-Nagymaros Project* (Hungary v. Slovakia), 1997 ICJ Rep. 7 at paras 78, 85,147 and 150 [hereinafter, *Gabcikovo*]; for doctrinal support, see J. Lipper, "Equitable Utilization" in A. H. Garretson, R. D. Hayton and C. J. Olmstead, eds., *The Law of International Drainage Basins* (New York: Oceana Publications, Inc., 1967) 15; C.B. Bourne, "The Primacy of the Principle of Equitable Utilization in the 1997 Watercourse convention" (1997) 35 *Canadian Yearbook of International Law* 215 [hereinafter, Bourne, "Primacy"]; J. G. Lammers, *Pollution of International Watercourses* (The Hague: Martinus Nijhoff, 1984) at 361-71; P.K. Wouters, "An Assessment of Recent Developments in International Watercourse Law through the Prism of the Substantive Rules Governing Use Allocation" (1996) *36 Nat. Res. J.* 417 [hereinafter, Wouters, "An Assessment"].

4 "Report of the Commission to the General Assembly on the work of its forty-sixth Session" (UN Doc. A/49/10) in *Yearbook of the International Law Commission 1994*, vol. 2, part 2 (New York: UN, 1997) at 98 (UNDOC. A/CN 4/SER. A/1994/Add. 1) [hereinafter Yearbook 1994].

and developed to govern the non-navigational uses of international watercourses.[5] The principle was initially designed to govern issues of water quantity or allocation, but not water quality or environmental issues. McCaffrey substantiates this assertion by reminding us that in the decisions of the US Supreme Court, where the principle of equitable utilization has been developed in the greatest detail, it is normally referred to as the doctrine of equitable 'apportionment'.[6] The focus of the principle on issues of apportionment at its early stage is understandable as the intensification of environmental problems and the resulting increased environmental consciousness are relatively recent phenomenon. However, as a dynamic concept, the principle of equitable utilization has been developing and adjusting itself to address new concerns and reflect new values. Hence, as currently formulated, it governs both allocation of the utilizations of international watercourses and the protection of the environment of those watercourses. This is clearly demonstrated in the recent and perhaps the most authoritative formulation of the principle, Article 5(1) of the Watercourse Convention which reads as follows:

> Watercourse States shall in their respective territories utilize an international watercourse in an equitable and reasonable manner. In particular, an international watercourse shall be used and developed by watercourse States with a view to attaining optimal and sustainable utilization thereof and benefits therefrom, taking into account the interests of the watercourse States concerned, consistent with adequate protection of the watercourse.

Thus, sustainable utilization is an important goal that should be pursued in the application of the doctrine of equitable utilization. This makes it clear that sustainable utilization, which includes environmental protection, is envisaged as a value inherent in the principle of equitable utilization. The last phrase 'consistent with adequate protection of the watercourse'

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5 Caflisch, *supra* note 1; P. K. Wouters, "Allocation of the Non-Navigational Uses of International Watercourses: Efforts at Codification and the Experience of Canada and United States." (1992) 30 *Canadian Yearbook of International Law* 43 at 45-46 [hereinafter Wouters, "Allocation"].

6 McCaffrey, *supra* note 1 at 325.

is also very important in making it clear that the focus is not on the protection of territorial interests of states, but on the protection of the watercourse in and of itself. This comes close to advancing the concept of ecosystem approach[7] for the management of international watercourses, albeit in a narrow sense.

As mentioned earlier, the principle of equitable utilization is premised principally on the concept of sovereign equality of states - one of the pillars of international relations. In applying the principle of equitable apportionment in *Kansas v. Colorado,* the US Supreme Court asserted that "[o]ne cardinal rule, underlying all the relations of the States to each other, is that of equality of right. Each State stands on the same level with all the rest."[8] These statements of the Court as to the cardinal importance of the notion of equality of right among states are no less valid at the international level. In the international arena, the idea of equality of right is commonly expressed by the principle of sovereign equality of states and is embodied, as one of the fundamental principles of international relations, in article 2(1) of the UN Charter.[9] The idea of equality of right among riparians as the conceptual basis for the principle of equitable utilization is also reiterated by the International Law Commission (ILC) in its commentary to the Draft Articles on the Non-navigational Uses of International Watercourses[10] and upheld by the ICJ in the *Gabcikovo-Nagymaros* case.[11]

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7 For a discussion of the concept of ecosystem approach and its application to the management of international watercourses, see, J. Brunnee and S.J. Toope, "Environmental Security and Freshwater Resources: A Case for International Ecosystem Law" (1994) 5 *Y.B. Int'l Envtl. L.* 44

8 *Kansas v. Colorado*, 206 US 46, at 97 (1907), cited in McCaffrey, *supra* note 1 at 330.

9 Article 2(1) of the UN Charter reads as: "The Organization is based on the principle of the sovereign equality of all its Members."

10 Yearbook 1994, *supra* note 4.

11 In establishing equitable utilization as the basic principle of international watercourse law, the ICJ quoted a passage from the decision of its predecessor, the PCIJ, concerning the River Oder case in which the idea of equality of rights among co-riparians was expressly upheld in the context of navigational uses, *Gabcikovo, supra* note 3 at para 85.

Equality of right, however, does not mean that the uses and benefits of the watercourse will be divided equally. Rather, it means that each watercourse state is entitled to equitably and reasonably use and benefit from the watercourse. This leads to a basic question- what is an equitable and reasonable use? What are the yardsticks to determine equitable and reasonable use? If the principle of equitable utilization is theoretically sound and coherent, its practical application is a very complex matter. As put by Lipper, the assertion that each watercourse state has the right of equitable utilization "opens the door to a most complex and difficult problem - the extent to which each coriparian state may share in the utilization of the waters."[12] There are no clear and concise mechanical formulas capable of application to all international watercourses which, when all the data are inserted, will result in an exact determination of each co-riparian's entitlement to a reasonable and equitable use. The concrete application of the equitable utilization principle requires the evaluation of all relevant factors of any specific case, as the relevant factors and their significance considerably vary from one watercourse to another and from case to case.

The inability of the principle of equitable utilization to provide any conclusive *a priori* determination of the exact extent of each watercourse state's rights and obligations led some to deny it the status of a positive rule or principle of international law on account of its legal indeterminancy.[13] It is correct that the normative contents of the principle of equitable utilization are not precise. However, without going into the theoretical issues of what is a positive rule or principle of law and what degree of determinacy is required for a rule or

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12 Lipper, *supra* note 3 at 41.

13 For instance, Dr. A. Weiss-Tessbach, representing the Austrian Branch River Committee of the International Law Association, stated with regard to the Helsinki Rules that "the definition given as to what is an equitable utilization (Article IV to VIII of the rule) is so vague that it cannot be called a rule of law." See ILA, Report of the Fifty-second Conference held at Helsinki (1966) 477 at 462 [hereinafter Helsinki Rules]. At the time of approving the 1992 Helsinki Convention on the Protection and Use of Transboundary Watercourses and International Lakes in 1998, France, in its self-explanatory declaration, downgraded the principle of equitable utilization from a principle of customary law to a mere guideline that illustrates a principle of co-operation. See A. Tanzi and M. Arcari, *The United Nations Convention on the Law of International Watercourses* (The Hague: Kluwer Law International, 2001) at 97, note 7 and accompanying text.

principle to be regarded as such, the above criticism of the principle of equitable utilization seems a bit exaggerated in the light of the numerous cases in which the principle was applied by the US Supreme Court[14] and the several continental shelf delimitation cases wherein the ICJ developed and applied a cognate doctrine: 'equitable principles- equitable result'.[15]

Efforts have been made to clarify the normative content of the principle of equitable utilization. This is sought, on the one hand by clearly articulating the goals or ends to which the application of the principle must yield and, on the other hand by enumerating the relevant factors that must be taken into account in applying the principle. Concerning the former, Tanzi and Arcari assert that the articulation of the goals of equitable utilization is "instrumental to the improvement of the overall profile of the equitable utilization principle, especially as a positive rule of international law."[16] The idea is that the clearer the ends of a principle, the higher the degree of its determinacy. In this regard, the ILA suggested that providing "the maximum benefit to each basin State from the uses of the waters with the minimum detriment to each"[17] as the goal of equitable utilization. The 1997 Convention also provides under article 5(1) that optimal and sustainable utilization are the objectives of equitable utilization. Although the objective of optimal and sustainable utilization hardly seem sufficiently precise themselves, they indicate the results expected of equitable utilization. As for the relevant factors to be considered in determining equitable and

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14 See, e.g., Kansas v. Colorado, 206 U.S. 46 (1907); Connecticut v. Massachusetts, 282 U.S. 660 (1931); New Jersey V. New York, 283 U.S. 336 (1931); Washington v. Oregon, 297 U.S. 517 (1936); Colorado v. Kansas, 320 U.S. 383 (1943). See also W. L. Griffin, "The Use of the Waters of International Drainage Basins under Customary International Law" (1959) 53 *AJIL* 50. Of course the absence of a comparable judicial organ with compulsory jurisdiction in international law may seem to make this analogy inappropriate. However, the existence or absence of compulsory dispute settlement mechanism is a matter external to the issue of the normative content of a principle.

15 See, e.g. North Sea Continental Shelf Cases (F.R. Germany v. Denmark and Netherlands), 1969 I.C.J. Rep. 4; Case Concerning Continental Shelf (Tunisia v. Libya), 1982 I.C.J. Rep. 18. For a comparison of the equitable criteria in maritime delimitation and in the utilization of international watercourses, see Tanzi and Arcari, *supra* note 13 at 98-99.

16 Tanzi and Arcari, *ibid.*

17 Helsinki Rules, *supra* note 13 at 487.

reasonable use, article 6(1) of the 1997 Convention sets forth the following indicative list of factors:

(a) Geographic, hydrographic, hydrological, climatic, ecological and other factors of a natural character;

(b) The social and economic needs of the watercourse States concerned;

(c) The population dependent on the watercourse in each watercourse State;

(d) The effects of the use or uses of the watercourses in one watercourse State on other watercourse States;

(e) Existing and potential uses of the watercourse;

(f) Conservation, protection, development and economy of use of the water resources of the watercourse and the costs of measures taken to that effect;

(g) The availability of alternatives, of comparable value, to a particular planned or existing use.

No priority is assigned to any of these factors and all relevant factors are to be considered together and weighted based on the unique situation of each case. As much as the articulation of goals and the specification of relevant factors can help to indicate the contents of equitable utilization, they do not solve the problem of the practical application of the principle. How can a watercourse state determine whether its actual or potential use is equitable and reasonable vis-a-vis the other watercourse states? To do this it has to make a factor analysis, but much of the information about the relevant factors for such determination cannot be obtained alone. Rather it must be gathered from and provided by the other co-riparians. Hence, cooperation among co-riparians is imperative for the implementation of equitable utilization. That is why the ILC introduced the concept of equitable participation to accompany the principle of equitable utilization. This too is incorporated in article 5(2) of

the 1997 Convention:

> Watercourse States shall participate in the use, development and protection of an international watercourse in an equitable and reasonable manner. Such participation includes both the right to utilize the watercourse and the duty to co-operate in the protection and development thereof, as provided in the present Convention.

According to the ILC, the element of cooperation is an integral part of equitable utilization, and notes in its commentary that "the principle of equitable participation flows from, and is bound up with, the rule of equitable utilization."[18] The equitable participation aspect of the principle of equitable utilization was also emphasized by the ICJ in the *Gabcikovo-Nagymaros Project* case. The Court indicated that the joint regime to be re-established by the parties should be in accordance with Article 5, paragraph 2, of the 1997 Convention.[19]

According to McCaffrey, equitable utilization is not a static state of affairs which intends to allocate the watercourse among the co-riparians once and for all.[20] What is equitable today may not be so tomorrow. Thus, equitable utilization, as put by McCaffrey, "must be arrived at through an ongoing comparison of the situations and uses of the states concerned."[21] Viewed from this angle, he concludes, equitable utilization is best understood as a process which contains not only substantive rules that define the rights and obligations of watercourse states but also a procedural means to implement them.[22]

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18 Yearbook 1994, *supra* note 4 at 97.

19 *Gabcikovo*, *supra* note 3 at para 147.

20 McCaffrey, *supra* note 1 at 342.

21 *Ibid.*

22 *Ibid.*, at 343. Castro also argues that the ICJ has similar understanding of the principle of equitable utilization. In commenting on the *Gabcikovo-Nagymaros* case, he states that: "The Court viewed the equitable use rule as more than a static substantive principle...it viewed the rule as requiring a process

## 3.2. The No Significant Harm Principle

The private law concept that owners may not use their property in a manner that injures others, otherwise known as the maxim *sic utere tuo ut alienum non leads*, is widely considered as the origin of the no harm principle.[23] Applied in international law, the *sic utere tuo* principle imposes a general restriction on a state's sovereignty not to use its territory to injure others. It is regarded by a number of writers as a general principle of law recognized by nations which has also become part of the corpus of international law.[24] But some doubt the practical utility, even the very existence of the principle mainly due to the vagueness of the contents of the obligations which it imposes.[25] Consider, for instance, the frequently cited statement of the ICJ from the *Corfu Channel* case that "every State's obligation not to allow knowingly its territory to be used for acts contrary to the rights of other State's."[26] This statement, which is regarded as an expression of the *sic utere tuo* maxim, is of little help in ascertaining the precise obligations of a state in using its territory, since the formulation provides no indication of what the 'rights of other States' might be. This drawback of the

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for equitable participation, subject to criteria for cooperation that are as much substantive as procedural and organizational." P.C.de Castro, "The Judgement in the *Case concerning the Gabcikovo-Nagymaros Project*: Positive Signs for the Evolution of International Water Law" (1997) 8 *Yearbook of International Environmental Law* 21 at 27.

23 Schwebel, *supra* note 1 at 92-98;

24 See e.g., Caflisch *supra* note 1 at 12, stating that the *sic utere tuo* principle "appears to be a 'general principle of law recognized by civilized nations' which, by now, has also entered the realm of customary law."; A. P. Lester, "River Pollution in International Law" (1963) 57 *AJIL* 828 at 832 [hereinafter Lester, "River Pollution"], sating that "*sic utere tuo* appears to be recognized in the literature as a principle of international river law."; R. M. M'gonigle, "'Developing Sustainability' and the Emerging Norms of International Environmental Law: The Case of Land-Based Marine Pollution Control" (1990) 28 *Can. Y. B. Int'l L.* 169 at 179, asserting that "[t]he *sic utere tuo* principle is accepted as a principle of international law."

25 E.g. Lammers states that "there exists considerable uncertainty about the origin, legal nature, content, feasibility of application or even the very existence of the principle." Lammers, *supra* note 3 at 570; C. B. Bourne, "The International Law Commission's Draft Articles on the Law of International Watercourses: Principles and Planned Measures" (1992) 3 *Colo. J. Int'l Envtl. L. & Pol'y* 65 at 84-85 [hereinafter Bourne, "Draft Articles"].

26 *Corfu Channel Case* (Alb. v. U.K.), 1949 I.C.J. Rep. 4 at 22.

maxim is well captured in the following observation:

> It is repeatedly said in nuisance cases that the rule is sic utere tuo ut alienum non laedas, but the maxim is unhelpful and misleading. If it means that no man is ever allowed to use his property so as to injure another, it is palpably false. If it means that a man in using his property may injure his neighbour, but not if he does so unlawfully, it is not worth stating, as it leaves unanswered the critical question of when the interference becomes unlawful.[27]

The principles of abuse of rights and good neighbourliness, which are closely connected with the *sic utere tuo* principle, are also considered as the doctrinal bases of the no harm rule.[28] As put by Nollkaemper, it is rather artificial to draw boundaries between these three principles, since all "are based on similar considerations and in most cases their application will lead to the same result."[29] At the international level, all these principles emphasize the existence of limitations on a state's discretion over the use of its territory. However, there is not much more to be read in the principles as to the nature and contents of the obligations they impose. Tanzi observes that "[a]s much as these concepts can help to mould and interpret the rule under consideration *(the no harm rule)* vis-a-vis the special circumstances of a particular case, ...they cannot *per se* indicate the contents of its duties and correlative

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27 Winfield and Jolowicz, quoted in Lammers, *supra* note 3 at 571.

28 Schwebel, *supra* note 1 at 92-98; McCaffrey, *supra* note 1 at 349-53.

29 A. Nollkaemper, *The Legal Regime for Transboundary Water Pollution: Between Discretion and Constraint*, (Dordecht: Martinus Nijhoff Publishers, 1993) at 30. The principle of abuse of rights is considered to refer to a state exercising a right "in a way which impedes the enjoyment by other States their own rights." A. Kiss, "Abuse of Rights", in 7 *Encyclopedia of Public International Law* 1 (R. Bernhardt ed., 1984), quoted in Tanzi and Arcari, *supra* note 13 at 143. The principle of good neighbourliness is understood as implying that a state is duty bound to pay due regard to the possibility of adverse consequences in other states of activities in its own territory. McCaffrey, *Ibid.* From these descriptions of the abuse of rights and good neighbourliness principles, it is easy to observe their similarity with the principle of *sic utere tuo.*

rights."[30]

Be that as it may, the no harm rule, founded on the above three concepts, has developed to govern a range of relations among states in international law. In particular, it has become one of the cornerstones of international environmental law.[31] It is no surprise, therefore, to observe that in the context of international watercourses, the virtue of the no harm rule is often emphasized on account of its utility in the field of transboundary water pollution.[32] This is not to say, however, that the no harm principle has no relevance to the allocation aspect of international watercourses. Indeed, as it is formulated in the 1997 Convention, it applies to both aspects of the law of international watercourses.[33] Article 7 of the Convention, which contains the no harm principle, is placed under Part II titled as 'General Principles'. The first paragraph reads as follows:

> Watercourse States shall, in utilising an international watercourse in their territories, take all appropriate measures to prevent the causing of significant harm to other watercourse States.

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30 Tanzi and Arcari, *ibid.*, bracket added.

31 The Trial Smelter arbitration is regarded as the classic case espousing this rule, see 3 U.N.R.I.A.A. 1905 (1941). The rule is also incorporated in a number of international environmental instruments. E.g., Stockholm Declaration of the United Nations Conference on the Human Environment, Principle 21, 11 I.L.M. 1416 (1972); Principle 2 of the Rio Declaration on Environment and Development, U.N. Doc.A/CONF.151/26, reprinted in 31 I.L.M. 874 (1992); UN Framework Convention on Climate Change, New York, 9 May 1992, 1771 U.N.T.S 107, 7th preambular para.; Convention on Biological Diversity, 5 June 1992, 1760 U.N.T.S. 79, Article 3. The ICJ also affirmed the customary law status of the rule. See Legality of the Threat or Use of Nuclear Weapons, 1996 ICJ Rep. 226.

32 Caflisch *supra* note 1 at 12, stating that regarding the environmental protection aspect of the law of international waterways, "the no harm rule is and remains fully valid." For similar view point see, Nollkaemper, *supra* note 29 at 66-69; A.E. Utton, "Which Rule Should Prevail in International Water Disputes: That of Reasonableness or that of No Harm?" (1996) 36 *Nat. Res. J.* 635.

33 The 1997 Convention, as was the case for the ILC draft articles, makes no separate regime for allocation and protection of international watercourses. Rather, it adopts a holistic approach which subjects both aspects to the same regime.

As with any legal regime, international water law does not intend to proscribe all harms that may result in the utilization of international watercourses. Indeed, the no harm rule is not as strict as it may appear to be at first blush. There are several factors which mitigate the strict application of the principle. As a result, the extent to which the no harm principle affords protection against harm is not always clear and requires analyzing issues such as: the meaning of the term harm in the context of non-navigational uses of international watercourses, the cause and effect relationship that exists between the activity and the harm, the threshold that triggers the no harm principle, and the standard of responsibility for causing harm.

### 3.2.1. The Meaning of Harm

In its draft articles on the Prevention of Transboundary Harm from Hazardous Activities, the ILC defines the term harm as "harm caused to persons, property or the environment."[34] Similarly, with regard to international watercourses, the ILC explains the phrase 'appreciable harm' stating that "there must be a real impairment of use, i.e. a detrimental impact of some consequence upon, for example, public health, industry, property, agriculture or the environment."[35] One issue as to the meaning of harm, in the context of international watercourses, is whether an upper riparian state is considered as harmed if its right to utilize an international watercourse is constrained in favour of a downstream state's excessive use of the watercourse. This issue is seldom raised in international water law by writers or otherwise. The reason for this might be the prevailing assumption that harm refers only to factual damage or impairment.

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34 Report of the International Law Commission on the Work of its Fifty-third Session, UN Doc. A/56/10, 2001, article 2(b).

35 "Report of the Commission to the General Assembly on the work of its forty-third Session" (UN Doc. A/43/10) in *Yearbook of the International Law Commission 1988*, vol. 2, part 2 (New York: UN, 1990) at 36 (UNDOC. A/CN 4/SER. A/1988/Add. 1) [hereinafter Yearbook 1988].

In *Nebraska v. Wyoming*, however, the US Supreme Court listed, among the relevant factors in determining an equitable apportionment, "the damage to upstream areas as compared to the benefits to downstream areas if a limitation is imposed on the former."[36] McCaffrey holds that this is a recognition that an upstream state may be harmed if its use is limited in favour of a state downstream.[37] Thus he concludes that in the context of international watercourses, harm "may be legal rather than factual in nature, as where new uses in a downstream state have no factual impact on an upstream state but may so alter the equitable balance of uses that they in effect constrain the scope of subsequent new uses the upstream state can make."[38] If harm is understood in this way, the impression that the no harm principle favours only downstream states would have been minimized. However, in the light of the visible opposing reactions in practice to the no harm principle by upper and down stream states - reservation at best and aversion at worst on the part of the former and reliance on the part of the latter - it is difficult to assert that this is a widely accepted interpretation of harm.

### 3.2.2. Causation in the Context of International Watercourses

The issue of what kind of cause and effect relationship should exist between the activity and the harm is also important in understanding the type of harm that falls within the rule. More specifically, should there be a physical link that connects the activity and the harm? For instance, state A, without affecting the use of a watercourse by state B, causes harm to the economy of B by producing and exporting hydroelectric power to neighboring countries, an activity in which B has been engaged for a long time. Does the no harm rule address such

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36 Nebraska v. Wyoming, 325 US 589 (1945) at 618.

37 McCaffrey, *supra* note 1 at 327.

38 *Ibid.*, at 349. Lammers also shares this interpretation of harm. He states that the principle of no harm "not only applies when a new water use in the State of origin causes substantial harm to existing uses and interests of the victim State, but also when a new water use in the victim State is substantially hampered in its development by a prior existing water use in the State of origin." Lammers, *supra* note 3 at 363.

kinds of harms (in which there is no physical link between the activity and the harm)? The work of the ILC on prevention of transboundary harm from hazardous activities may shed light on this issue. In this work the ILC limits the scope of transboundary harm to those which are caused by 'physical consequences' of activities.[39] It excludes "transboundary harm which may be caused by State policies in monetary, socio-economic or other fields."[40] In view of the similarities of the issues, it is plausible to assume that, in the context of international watercourses also, the harm envisaged to be protected is that which is caused by the physical consequences of activities and transmitted via international watercourses. Thus, there must be a physical link that connects the activity and the harm. Moreover, the harm should be transmitted by or sustained in relation to an international watercourse.

Another issue related to causation is whether a harm should be connected with the use of an international watercourse. For instance, deforestation or unsound grazing practices in one riparian state, which are not directly related to use of a watercourse, may result in increased siltation or flooding in another riparian state, thereby causing harm to the latter. Here we have a physical link between the activity and the harm, and the harm is transmitted by an international watercourse. As formulated in Article 7(1) of the 1997 Convention, the no harm rule obliges states to prevent only the causing of harm to others through the use of international watercourses. Thus, in the context of international water law, the no harm principle does not apply to harms which are not caused in the course of utilizing an international watercourse. McCaffrey suggests this formulation is unduly narrow and inconsistent with state practice.[41]

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39 Report, *supra* note 34.

40 *Ibid.*

41 McCaffrey, *supra* note 1 at 349.

### 3.2.3. Threshold to Trigger the No Harm Principle

The no harm rule requires states to overlook small or insignificant harms. This is theoretically justified based on the principle of good neighbourliness, which is one of conceptual underpinnings of the no harm rule.[42] Being a good neighbour means not only refraining from causing significant harm to neighbouring states, but also tolerating a certain level of harm caused by those states. Thus, the terms "appreciable" or "significant" are usually used in defining the threshold at which the no harm principle operates. The selection of which term to use to describe the threshold gave rise to lengthy debate in the ILC. The issue is which term describes more objectively the threshold. However, the fact is that whatever adjective is used to describe the threshold, its application inevitably involves subjectivity and "would provide little guidance for the assessment *in concreto* of the exact nature and extent of the harm to be avoided."[43]

Initially the ILC preferred the term appreciable, arguing that "among the various possibilities, it provides the most factual and objective standard."[44] However, in its final version of the draft articles, the ILC used the term "significant," which is also adopted in the 1997 Convention. Despite the change of the terminology, the explanation of the threshold has remained the same, which substantiates the observation that the change is merely cosmetic. The harm must be "capable of being established by objective evidence."[45] For a harm to be "significant" it should not be minor, nor should it be raised to the level of substantial.[46] The

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42 Schwebel, *supra* note 1 at 95 (stating that: While the related principles of sic utere tuo and abus de droit stress the restrictive aspect of the property owner's use rights, the good neighbourship doctrine makes plain that the neighbour is also under a duty to tolerate inconsequential, or minor "interferences").

43 Tanzi and Arcari, *supra* note 13 at 147.

44 Yearbook 1988, *supra* note 35 at 36.

45 *Ibid.*

46 Yearbook 1994, *supra* note 4 at 94.

fact that "significant" harm is caused does not necessarily imply that the activity causing it is unlawful, nor does it automatically entail the responsibility of the harming state. This depends on another element that mitigates the strict application of the no harm rule: the due diligence nature of the obligation. Thus, as noted by McCaffrey, "the function of the threshold is to trigger discussions...over such matters as whether and to what extent harm has occurred, and if so, whether it is reasonable for the complaining state to insist on being free from the harm."[47]

### 3.2.4. Standard of Responsibility

The obligation of a watercourse state not to cause significant harm is one of conduct, not of result.[48] A use of an international watercourse that causes significant harm to other riparian states is not *per se* unlawful, and hence will not automatically entail responsibility of the source state. The no harm principle does not intend "to guarantee that in utilizing an international watercourse significant harm would not occur."[49] In the discussions of the ILC concerning pollution of international watercourses some members advanced a strict liability regime as opposed to an obligation of diligence.[50] However, the then special rapporteur argued that "there was little, if any, evidence of State practice which recognized strict liability for water pollution damage."[51] Conversely, there is ample support in international law for an obligation of due diligence as the standard basis for the protection of the

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47 McCaffrey, *supra* note 1 at 367.

48 Yearbook 1994, *supra* note 4 at 103; Nollkaemper, *supra* note 29 at 40; Lammers, *supra* note 3 at 348.

49 Yearbook 1994, *ibid.*

50 Yearbook 1988, *supra* note 35 at 29.

51 *Ibid.*

environment in general and international watercourses in particular.[52] The ILC, in its final draft articles, explicitly provided for an obligation of due diligence. The 1997 Convention also followed suit by using the expression 'shall take all appropriate measures'. The 1997 Convention does not set out specific criteria for the assessment of due diligence. It is asserted that from the very flexible nature of the concept, it is impossible to adopt a uniform standard applicable to all states and cases indiscriminately.[53] Instead, the conduct of a state causing a harm must, in each particular case, be judged in light of the circumstances, such as the financial and technical capabilities of the state concerned.[54]

## 3.3. The Relationship Between the Principles of Equitable Utilization and No Significant Harm

Both in the legal literature and in the codification processes concerning the non-navigational uses of international watercourses, no single issue has given rise to a deeper and fiercer controversy than that of the relationship between the principles of equitable utilization and no harm. The issue is not so much whether both principles should have a place among the normative rules governing the uses of international watercourses. As shown in the preceding discussions and attested to by a number of writers, both principles enjoy wide support from various sources of international law and they could well be regarded as having entered the realm of customary international law.[55] However, a conflict between these principles may

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52 See, for example, Article 2 of the UN/ECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes, Helsinki, 17 March 1992, 31 ILM 1312; Article 194 of the UN Convention on the Law of the Sea, 10 Dec. 1982, 1833 U.N.T.S. 3; Article 2 of the Vienna Convention for the Protection of the Ozone Layer, 22 March 1995, 1513 U.N.T.S.293. Lammers, *supra* note 25 at 348-56; see in general the authorities cited in the ILC's commentary to Article 7 of the 1994 draft articles, Yearbook 1994, *supra* note 4 at 104-05.

53 Tanzi and Arcari, *supra* note 13 at 154;

54 Nollkaemper, *supra* note 29 at 41; McCaffrey, *supra* note 1 at 373-74.

55 On the customary law status of the principle of equitable utilization, see the authorities cited *supra* note 3. On customary law status of the no harm rule, see, *inter alia*, Caflisch, *supra* note 1 at 12; Lammers, *supra* note 3 at 561-77, McCaffrey, *supra* note 1 at 379-80.

sometimes occur and the main controversy has been which principle should prevail in such situations.

Some writers assert that the conflict between the principles of equitable utilization and no harm is more apparent than real, and hence the question of priority between these principles is not worth talking about.[56] Two arguments are put forward to support this assertion. The first and perhaps the stronger reasoning is that in so far as the obligation under the no harm principle is one of due diligence, which necessarily involves 'reasonableness' and 'equity', its application would lead in the same direction as that of equitable utilization.[57] But others find this line of reasoning implausible. Handl dismisses it stating that "the scope and nature of the parameters bearing on "reasonableness" under each rule are significantly different."[58] Bourne also finds the assertion that the application of the due diligence standard will in practice convert the no harm rule into an equitable utilization highly dubious.[59] Another

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56 See, for example, P. Birnie & A. Boyle, *International Law & the Environment* (New York: Oxford University Press, 2002) 2nd ed., at 307-08, arguing that "the apparent conflict between these principles is unreal and often based on a misunderstanding of the obligation to prevent harm in international law."; Tanzi and Arcari, *supra* note 13 at 175, stating that "approaching this issue from the existence of a conflict between these two principles is not correct."

57 McCaffrey, S.C., "Fourth Report on the Law of the Non-navigational Uses of International Watercourses" (UN Doc. A/CN.4/412) in *Yearbook of the International Law Commission 1988*, vol. 2, part 1 (New York: UN, 1992) at 241 (UNDOC. A/CN 4/SER. A/1988/Add. 1) [hereinafter McCaffrey, Forth Report]. Birnie and Boyle assert that if the obligation not to cause harm is one of due diligence, "then there is no real need to determine whether equitable utilization takes precedence or not. A state which fails to do its best to control avoidable harm to other states cannot easily maintain that it is acting equitably or reasonably, whichever principle prevails.", *ibid.* Tanzi and Arcari seem also to share this view when they state, with regard to article 7 of 1997 Convention, that it "pursues the same 'equitable' balance by avoiding, in paragraph 1, laying down an obligation of result, and by stressing that harm may be caused by a diligent, possibly equitable, use, leaving the parties involved to agree on how to balance the equities, distribute the benefits and/or redress the harm, 'having due regard for the provisions of Article 5 and 6'.", Tanzi and Arcari, *supra* note 13 at 178.

58 G. Handl, "The International Law Commission's Draft Articles on the Law of International Watercourses (General Principles and Planed Measures): Progressive or Retrogressive Development of International Law?" (1992) 3 *Colo. J. Int'l Envtl. L. & Pol'y* 123 at 130.

59 Bourne, *supra* note 25 at 82.

problem with the assertion that the same result would be achieved by applying both principles is that it makes one of the principles superfluous.

The second argument advanced by way of supporting the absence of real conflict between equitable utilization and no harm principles is that a use which causes a significant harm to others, particularly in the case of environmental harm, is inherently inequitable or unreasonable.[60] This irrebuttable presumption that any significant environmental harm is *per se* inequitable is criticized as an extreme and unwarranted concern for the environment, which by itself is unreasonable.[61] Moreover, there is little support in state practice for the view that polluting uses of international watercourses are *per se* impermissible.[62] In its commentary to article 7, the ILC did acknowledge that in certain circumstances equitable utilization of an international watercourse may result in significant harm to other co-riparians.[63] It further states that in such instances the guiding principle is equitable utilization.[64] These statements are, in a way, recognitions of the existence of real conflict between the two principles. Even those who assert that the conflict between the two principles is not real are sometimes caught engaged in the priority debate.[65] Thus, assuming that there is a real conflict between the principles of equitable utilization and no significant harm, the next part of the chapter analyzes how the relationship between these principles has been dealt with in doctrine, codifications of international water law, and case law.

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60 McCaffrey, Forth Report, *supra* note 57 at 241.

61 Bourne, *supra* note 25 at 81.

62 Birnie and Boyle, *supra* note 56 at 306.

63 Yearbook 1994, *supra* note 4 at 103.

64 *Ibid.*

65 For instance, Birnie and Boyle, after asserting that the conflict between the two principles is not real, go on to criticize according priority to equitable utilization stressing, among other things, the weakness of the principle as a basis for comprehensive environmental protection of international watercourses. Birnie and Boyle, *supra* note 56 at 308-10.

### 3.3.1. Doctrine

The relationship between the principles of equitable utilization and no significant harm has been a subject of great interest and heated controversy among writers, ever since the incorporation of the two principles in the early work of the ILC in the field. Each alternative - giving precedence to the principle of equitable utilization or making the no harm rule the governing principle - has its adherents among scholars, and it is convenient to analyze the stances of writers in the light of the arguments advanced in favour of and against the primacy of each principle.

McCaffrey, the special rapporteur for the longer period during the ILC's work in the area, put forward three arguments in support of the primacy of the no harm rule - 1) it affords a better protection to a weaker state, 2) it is simple to apply, and 3) it is preferable in cases of pollution and other environmental harm.[66] These propositions, for the most part, capture the arguments of all the writers who advance the primacy of the no harm rule.

McCaffrey's first argument posits that giving precedence to the no harm rule closes the door to the stronger state to justify a use that causes a harm to a weaker state on the ground that it is "equitable." Thus it "affords a measure of protection to the weaker state that has suffered harm."[67] This argument is rarely relied upon by the supporters of the primacy of the no harm principle. According to Kibaroglu, the argument is based on a fundamentally flawed assumption that upstream states are 'stronger' and in an advantageous position compared to downstream states.[68] Similarly, Wouters observes that "the weaker state in terms of the no

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66 S.C. McCaffrey, "The Law of International Watercourses: Some Recent Developments and Unanswered Questions," (1989) 17 *Denver J. Int'l L. and Pol.* 505 at 510 [hereinafter McCaffrey, "Recent Developments"].

67 *Ibid.*

68 A. Kibaroglu, *Building a Regime for the Waters of the Euphrates-Tigris River Basin*, (The Hague: Kluwer Law International, 2002) at 147.

harm rule is often, in economic reality, the stronger state - the state that first developed the watercourse."[69] The idea is that with regard to international watercourses, the countries which are mainly exposed to harm are downstream states which, in the normal course of events, are the main users of international watercourses and usually the stronger. For this reason and basing her observation on a study of Canada-United States experience, Wouters concludes that the "protection of the weaker state" argument is simply wrong.[70]

The second policy argument for the primacy of the no harm principle relates to its alleged greater specificity. According to McCaffrey, it is far simpler to determine whether the 'no harm' rule has been breached than is the case with the obligation of equitable utilization.[71] He further states that: "primacy of the 'no harm' principle means that the fundamental rights and obligations of states with regard to their uses of an international watercourse are more definite than they would be if governed in the first instance by the more flexible (and consequently less clear) rule of equitable utilization."[72] Sharing the same view, Nollkaemper asserts that the greater specificity of the principle of no-appreciable harm can result in a better protection of the interests of downstream states.[73] This author argues that, particularly in the absence of compulsory third-party settlement, the more specific rule of no harm should be preferred over the flexible principle of equitable utilization.[74]

The opponents of the primacy of the no harm principle challenge the 'simple to apply'

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69 P. K. Wouters, "Allocation of the Non-Navigational Uses of International Watercourses: Efforts at Codification and the Experience of Canada and United States." (1992) 30 *Canadian Yearbook of International Law* 43 at 82 [hereinafter Wouters, "Allocation"].

70 *Ibid.*

71 McCaffrey, "Recent Developments" *supra* note 66.

72 *Ibid.*

73 Nollkaemper, *supra* note 29 at 68.

74 *Ibid.*

argument on various grounds. On the one hand, it is argued that the criterion for a breach of the no harm rule is similarly imprecise. The no harm rule is not as specific as it appears to be at first glance. The threshold of "significant" and the "due diligence" standard, both of which are ambiguous concepts, make the determination of a breach of the no harm rule difficult.[75] On the other hand, the greater specificity and the narrow scope of the no harm rule are considered as its main drawbacks.[76] Stressing that negotiation is the preferred mode of resolving international water disputes rather than litigation, Benvenisti asserts that "[a] vague standard would prompt riparians to seek a negotiated agreement rather than litigate toward an unpredictable result...whereas clearer rules would prevent many riparians - clear winners or clear losers - from entering the negotiation room."[77] Thus, he commended the ILC for finally adopting a formula which gives priority to the equitable utilization standard over the no appreciable harm rule. Even McCaffrey, who praised the no harm rule for its greater specificity, in his later work, criticized the principle for the same quality stating that adjustments of conflicting uses of an international watercourse is a complex affair that is unlikely to be accomplished satisfactorily through the simple expedient of the no-harm rule.[78]

The most persuasive argument in favour of the primacy of the no harm rule is built on environmental concerns.[79] From an environmental protection perspective, two main points are commonly raised as weaknesses of equitable utilization. The very flexibility of the principle, it is argued, makes it unsuitable for adequate protection of the environment, as it

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75 Wouters, "Allocation," *supra* note 69 at 83.

76 Lammers, *supra* note 3 at 368, commenting that the application of only one test with a rather concrete content may, under certain circumstances, lead to inequitable results. See also, E. Benvenisti, "Collective Action in the Utilization of Shared Freshwater: The Challenges of International Water Resources Law," (1996) 90 *A.J.I.L.* 384 at 401-05; Wouters, *ibid.*

77 Benvenisti, *ibid.*, at 403.

78 S.C. McCaffrey, "The International Law Commission Adopts Draft Articles on International Watercourses," (1995) 89 *A.J.I.L.* 399 at 400-01.

79 Brunnee and Toope, *supra* note 7 at 62; S.C. McCaffrey, "An Assessment of the Work of the International Law Commission," (1996) 36 *Nat. Res. J.* 298 at 308.

does not permit the determination of predictable and enforceable thresholds.[80] It is further maintained that equitable utilization gives insufficient weight to environmental considerations among a broad range of other relevant factors.[81] It is argued, this is even the more so if one takes into account the fact that environmental factors are less capable of being expressed in monetary terms than other factors, which would put the former in a less favorable position in the equitable utilization calculus.[82] Thus, equitable utilization is criticized for tending to justify significant environmental damage.

A number of writers distinguish between water apportionment issues and cases involving environmental concerns. They propose that whereas the principle of equitable utilization should be given precedence in the former, the no harm rule should prevail in the latter.[83] This approach, however, seems to get little support in international law, at least as reflected in the codification works of different bodies.[84] An holistic approach, which stresses the

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80 Brunnee and Toope, *ibid.*; Birnie and Boyle, *supra* note 56 at 310.

81 Birnie and Boyle, *ibid.*, at 308; Nollkaemper, *supra* note 29 at 67; G. Handl, "National Uses of Transboundary Air Resources: The International Entitlement Issue Reconsidered," (1986) 26 *Nat. Res. J.* 405 at 417.

82 Handl, *ibid.*, stating that : "In a legal system which, as a general rule, permits the trade-off of social/economic interests of one state against infliction of significant environmental harm in another, the risk of a miscalculation is thus considerable." See also, S.E. Gaines, "Taking Responsibility for Transboundary Environmental Effects," (1991) 14 *Hastings Int'l & Comp. L. Rev.* 701 at 803-04; Nollkaemper, *ibid.*

83 Utton, *supra* note 32 at 638-39, after stating that equitable utilization developed out of water quantity allocation whereas the no harm rule has its origins in environmental protection, he suggests that 'the confusion caused by the apparent conflict between these two contending approaches could have been reduced if the principle of equitable utilization had been used for water quantity matters and the "due diligence to avoid significant harm" rule had been used in water quality matters.' For similar view point, see, Handl, *supra* note 58 at 131-33; J.G. Lammers, "Commentary on Papers Presented by Charles Bourne and Alberto Szekely," (1992) *Colo. J. Int'l Envtl. L. & Pol'y* 103 at 107-09.

84 The Helsinki Rules, *supra* note 13 at 484-532; UN/ECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes, Helsinki, 17 March 1992, 31 ILM 1312; U.N. Convention on the Law of the Non-Navigational Uses of International Watercourses, UN Doc. A/RES/51/869, 21 May 1997. Although they contain specific provisions dealing with environmental protection, all these instruments subject both allocation and protection aspects of international watercourses to the same general principles.

indivisibility of water quantity and water quality issues, is generally preferred.[85]

Even from the environmental point of view, some writers question the soundness of giving primacy to the no harm rule.[86] Benvenisti finds the no harm rule problematic from an environmental point of view, since, according to him, the rule implies that riparians are entitled to maintain current levels of water use, even if their use is polluting.[87] For him, the principle of equitable utilization, which takes sustainability into account, is more suited to the various functions of the law in the area.[88] Since equitable utilization is more suitable for fostering cooperation among watercourse states, Wouters asserts that it offers broader opportunities for protecting the environment than the no harm rule.[89] Moreover, Krishna notes the criticism that the primacy of the no harm rule encourages a "race to the river", which may lead to an unsustainable development of international watercourses.[90]

The strongest arguments against the no harm rule are related to its application in water apportionment conflicts. Lammers points out that the application of the no harm rule may

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85 McCaffrey, *supra* note 1 at 325. For a detailed discussion of this issue, see Tanzi and Arcari, *supra* note 13, chapter 1 sec. 2.

86 Wouters, "Allocation," *supra* note 69 at 85; Benvenisti, *supra* note 76 at 404-05.

87 Benvenisti, *ibid.*

88 *Ibid.*

89 Wouters, "Allocation," *supra* note 69 at 85; Brunnee and Toope, *supra* note 7 at 63, state that "[while], from an environmental protection and security perspective, giving priority to the transboundary harm rule is preferable, the cooperative aspect inherent in the equitable use principle brings an equally important element of balance to environmental relations amongst states."

90 For instance, the World Bank's policy for projects on international watercourses, which adopts the no harm rule, has been criticized on the ground that it encourages a rush to develop, see R. Krishna, "The Evolution and Context of the Bank Policy for Projects on International Waterways," in S. M. A. Salman and L. B. de Chazournes, eds., *International Watercourses: Enhancing Cooperation and Managing Conflict* (Washington D.C.: World Bank Publications, 1998) 31 at 36-37. See also, S.C. McCaffrey, "Water, Politics, and International Law," in P.H. Gleick, ed., *Water in Crises* (Oxford: OUP, 1993) 92 at 99 [hereinafter McCaffrey, "Water"].

in some circumstances lead to inequitable results.[91] According to Bourne, "[a] law that sanctions unreasonable and inequitable results is, one would think, jurisprudentially and morally weak."[92] Caflisch maintains that in the allocation of international watercourses, the no harm rule is of little utility today, as most international watercourses are at present fully exploited or even over-used.[93] In his opinion, "the issue is no longer one of not causing harm - in situations of full or over-use, every new or increased activity is harmful for existing utilizations - but one of apportioning resources among competing uses and users."[94] Thus, he concludes that "the negative no-harm rule had to be superseded by a positive rule which would make it possible to effect such an apportionment."[95] The proponents of the no harm rule respond to these criticisms by stressing its importance for the protection of the environment of international watercourses or by falling back to the argument that since the obligation is one of due diligence it does not impede the reasonable and equitable development of a watercourse.[96]

Apart from policy considerations, writers support their stances on the issue of priority between the principles of equitable utilization and no harm by referring to state practice,

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91 Lammers, *supra* note 3 at 364; Dellapenna explains the inequity that may result from the application of the no harm rule as follows: "The asserted absolute primacy of the rule of no appreciable harm also ignores the reality of water usage. Logically, the no appreciable harm principle prohibits any meaningful use by an upper-riparian state, turning the principle into merely a variant form of the absolute integrity claim...Furthermore, as the state seeking to initiate a new use would generally be cast in terns of the one creating the 'injury,' absolute integrity favours more highly developed states at the expense of their less developed neighbors, particularly as lower basin states tend to develop earlier and faster than upper basin states. Such a situation is hardly conducive to achieving the developmental equity proclaimed under various United Nations banners," J.W. Dellapenna, "Treaties as Instruments for Managing Internationally-shared Water Resources: Restricted Sovereignty vs. Community of property," (1994) 26 *Case W. Res. J. Int'l L.* 27 at 40-41.

92 Bourne, "Primacy", *supra* note 3 at 220.

93 Caflisch, *supra* note 1 at 12.

94 *Ibid.*

95 *Ibid.*

96 See for instance, Birnie and Boyle, *supra* note 56 at 308.

decisions of tribunals and other sources of international law. The majority of writers conclude that equitable utilization enjoys wider support than the no harm rule as the governing rule in the field.[97] Thus, whether on policy grounds or degree of acceptance in international law, the balance of opinion among writers favours the primacy of equitable utilization.

### 3.3.2. Codification Efforts

With the intensification of the utilization of international watercourses for uses other than navigation in the twentieth century, controversies among riparian states have emerged in most regions of the world. The resolution of these controversies has been highly complicated by the absence of settled principles or rules. Appreciating this difficulty, international organizations began to study, codify and develop rules and principles that govern the utilization of international watercourses. In this regard, the studies conducted and the sets of draft rules prepared by the Institute of International Law (IDI), the International Law Association (ILA) and the International Law Commission are notable. The drafts prepared by these organizations are important sources for the applicable international principles and rules. This is especially so in areas where, as in the case at hand, proving the applicable customary rules is difficult due to the existence of peculiar features in each case of state practice. To use McCaffrey's words "while they are not conclusive evidence of norms of customary international law, the drafts are highly authoritative."[98] Apart from the draft rules put forward by these organizations, the set of codified rules that will likely have the most

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97 Among others, see, Lipper, *supra* note 3; Lammers, *supra* note 3; Wouters, "An Assessment" *supra* note 3; McCaffrey, *supra* note 1 at 346, who after reviewing the relevant case law in his recent work, concludes that "equitable utilization, not the prohibition of harm, has generally been considered the guiding principle in both domestic and international case law."; Bourne, "Draft Articles," *supra* note 25, after reassessing the authorities mentioned by the ILC in support of the no harm rule, he held that either they are incorrectly interpreted or insufficient to reflect the customary law status of the principle. For contrary argument, see Nollkaemper, *supra* note 29.

98 McCaffrey, "Water," *supra* note 90 at 98.

profound effect in the area is the 1997 UN Convention on the Law of the Non-Navigational Uses of International Watercourses, which largely adopts the work of the ILC. The following section examines how the relationship between the principles of equitable utilization and no harm is addressed in each of these codifications.

### 3.3.2.1. The Institute of International Law (IDI)

The Institute of International Law (Institut de droit International) is an international non-official organization composed of members with high academic prestige. The IDI has adopted three resolutions concerning the utilization of international watercourses for purposes other than navigation.[99] The Institute's 1961 Salzburg Resolution on the Use of International Non-Maritime Waters declares that each state has a right to use international watercourses within its territory, subject to limitations imposed on account of similar rights of other watercourse states.[100] In a way this is a restatement of the concept of equality of rights among co-riparians. The Resolution further provides under article 3 that: "If the States are in disagreement over the scope of their rights of utilization, settlement will take place on the basis of equity, taking particular account of their respective needs, as well as of other pertinent circumstances." This article thus affirms the principle of equitable utilization. Article 4 prohibits uses that seriously affect other states unless they are in accordance with

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99 IDI, 1911 Madrid Resolution on International Regulations regarding the Use of International Watercourses, English trans. in "Report of the Secretary-General on the Legal Problems relating to the Utilization and use of International Rivers and documents of the twenty-sixth session of the Commission prepared by the Secretariat" (UN Doc. A/5409) in *Yearbook of the International Law Commission 1974*, vol. 2, part 2 (New York: UN, 1976) at 200 (UNDOC. A/CN 4/SER. A/1974/Add. 1); IDI, 1961 Salzburg Resolution on the Use of International Non-Maritime Waters English trans. in *Ibid.*, at 202. [hereinafter, Salzburg Resolution]; IDI, 1979 Athens Resolution on the Pollution of Rivers and Lakes and International Law [hereinafter, Athens Resolution]. Only the contents of Salzburg and Athens Resolutions will be briefly discussed here, as the Madrid Resolution is superseded by them.

100 Article 2 of the Salzburg Resolution reads as: "Every State has the right to utilize waters which traverse or border its territory, subject to the limits imposed by international law and, in particular, those resulting from the provisions which follows. This right is limited by the right of utilization of other States interested in the same watercourse or hydrographic basin." Salzburg Resolution, *Ibid.*

article three and accompanied by compensation. The 1979 Athens Resolution of the Institute specifically deals with pollution issues. It declares that states must ensure that activities within their jurisdictions "cause no pollution in the waters of international rivers and lakes beyond their boundaries."[101] From these two Resolutions, the approach adopted by the IDI makes equity or equitable utilization prevail in the utilization of international watercourses, except in cases of pollution where the IDI favours the no harm rule.

### 3.3.2.2. International Law Association (ILA)

Like the IDI, the International Law Association is an international non-governmental organization. The ILA began its work on the legal aspects of the uses of international fresh water resources in 1954, and has continued to this day.[102] Its early work culminated in the famous Helsinki Rules on the Uses of the Waters of International Rivers.[103] The ILA has strongly and consistently championed the principle of equitable utilization as demonstrated in the Helsinki Rules and its subsequent work. Article IV of the Helsinki Rules states that: "Each basin state is entitled, within its territory, to a reasonable and equitable share in the beneficial uses of the waters of an international drainage basin." The Rules did not present the no harm rule as an independent principle in itself, but simply as one factor in determining equitable utilization. The commentary to the Rules uses an example suggesting that an existing use may lawfully be interfered with in order to achieve an equitable result.[104] Even in the context of pollution, the Rules indicate that the obligation not to cause substantial injury to other states is expected to be "consistent with the principle of equitable

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101 Athens Resolution, *supra* note 99, article II.

102 C.B. Bourne, "The International Law Association's Contribution to International Water Resources Law" (1996) 36 *Nat. Res. J.* 155 at 213.

103 The Helsinki Rules, *supra* note 13 at 477.

104 *Ibid.*, at 489-91.

utilization."[105] The ILA's Montreal Rules on Water Pollution in an International Drainage Basin adopted in 1982[106] maintains this position and the commentary explicitly states that "[t]he principle of equitable utilization remains dominant in the law governing water resources shared by two or more states."[107]

### 3.3.2.3. International Law Commission (ILC)

The International Law Commission is a UN body entrusted with the codification and progressive development of international law by the UN General Assembly. In 1970, the General Assembly recommended that the ILC "take up the study of the law of the non-navigational uses of international watercourses with a view to its progressive development and codification."[108] The ILC completed its work on the field in 1994 by producing a final set of draft articles.[109] On the issue of the relationship between the principles of equitable utilization and no harm, the ILC had been swinging from one position to the other before it adopted what appears to be a delicate compromise.

Schwebel, the second special rapporteur and the first to attempt to formulate the substantive principles in the ILC, gave precedence to the principle of equitable utilization over the no harm rule in his proposed draft articles.[110] Evensen, the third special rapporteur, took the

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105 *Ibid.*, art. X at 496.

106 ILA, *Report of the Sixtieth Conference*, Montreal, 1982 at 531.

107 *Ibid.*, at 536.

108 See U.N. G.A. Res. No. 2669 (xxv), 1970.

109 Yearbook 1994, *supra* note 4 at 88.

110 This is evident from paragraph 1 of his draft article 8, which runs as follows: "The right of a system State to use the water of an international watercourse system is limited by the duty not to cause appreciable harm to the interests of another system State, except as may be allowable under a determination for equitable participation for the international watercourse system involved." See Schwebel, *supra* note 1 at 103.

opposite position and advanced the primacy of the no harm rule in his draft articles.[111] McCaffrey, the successor to Evenson as special rapporteur, was confronted with two sets of draft articles that addressed the relationship between the two substantive principles in opposite manner and a commission divided along the positions of Schwebel and Evensen. Initially, McCaffrey supported the primacy of the principle of equitable utilization, but abandoned that position at a later stage, especially when he came to pollution.[112] In the 1991 draft articles adopted on first reading by the Commission, absolute primacy was accorded to the no harm principle. Article 7 of the draft articles laid down a flat prohibition of uses causing appreciable harm by simply stating that "Watercourse States shall utilize an international watercourse in such a way as not to cause appreciable harm to other watercourse States."[113]

In the light of substantial comments from governments and commentators on the 1991 draft articles, the ILC revised the relationship between the principles of equitable utilization and no harm under the guidance of the last special rapporteur, Robert Rosenstock. The 1994 final draft articles of the Commission introduced two important changes. First, it made it clear that the obligation not to cause significant harm is one of conduct, not of result. Accordingly, the relevant provision, article 7(1), reads as: "Watercourse States shall exercise due diligence to utilize an international watercourse in such a way as not to cause significant harm to other

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111 Evensen's draft article 9, which carries the no harm rule, reads as follows: "A Watercourse State shall refrain from and prevent (within its jurisdiction) uses or activities with regard to an international watercourse that may cause appreciable harm to the rights or interests of other watercourse States, unless otherwise provided for in a watercourse agreement or other arrangement." Evensen, J., "Second Report on the Law of the Non-navigational Uses of International Watercourses" (UN Doc. A/CN.4/381) in *Yearbook of the International Law Commission 1984*, vol. 2, part 1 (New York: UN, 1984) at 110 (UNDOC. A/CN 4/SER. A/1984/Add. 1).

112 Bourne, "Draft Articles", *supra* note 25 at 80.

113 "Report of the Commission to the General Assembly on the work of its forty-third Session" (UN Doc. A/46/10) in *Yearbook of the International Law Commission 1991*, vol. 2, part 2 (New York: UN, 1991) at 67 (UNDOC. A/CN 4/SER. A/1991/Add. 1).

watercourse States."[114] The second change was to add a second paragraph in article 7 to address the relationship between the principles of equitable utilization and no harm. It runs as follows:

> 2. Where, despite the exercise of due diligence, significant harm is caused to another watercourse State, the State whose use causes the harm shall, in the absence of agreement to such use, consult with the State suffering the harm over:
>
> (a) the extent to which such use is equitable and reasonable taking into account the factors listed in article 6;
>
> (b) the question of ad hoc adjustments to its utilization, designed to eliminate or mitigate any such harm caused and, where appropriate, the question of compensation.[115]

The reference to the principle of equitable utilization where significant harm has occurred, despite the exercise of due diligence, seems to suggest that the prevailing principle is equitable utilization. This assertion is further strengthened by the Commission's statement in its commentary which explains that "in certain circumstances 'equitable and reasonable utilization' of an international watercourse may still involve significant harm to another watercourse State. Generally, in such instances, the principle of equitable and reasonable utilization remains the guiding criterion in balancing the interests at stake."[116] Thus, from this statement one can conclude that the ILC categorically affirmed the primacy of equitable utilization.

However, the various statements in the commentary in relation to the meaning of 'due

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114 Yearbook 1994, *supra* note 4 at 102.

115 *Ibid.*

116 *Ibid.*, at 103.

diligence' throw doubt on the above assertion. The Commission states that "the due diligence...sets the threshold for lawful State activity."[117] Then it explains the concept of due diligence first by quoting two definitions adopted in the *Alabama* case "a diligence proportioned to the magnitude of the subject and to the dignity and strength of the power which is to exercise it"; and "such care as governments ordinarily employ in their domestic concerns."[118] From the first definition, which is arguably also true of the second, the test for the existence of due diligence is whether a state that caused the harm has taken all appropriate measures or has done its level best to avoid the harm. Whether the state causing the harm has taken all appropriate measures is, in turn, to be assessed by taking into account the proportionality of the efforts to the magnitude of the harm and the capacity of the state causing the harm.

But, another statement of the Commission asserts that "[a] watercourse State can be deemed to have violated its due diligence obligation only if it knew or ought to have known that the particular use of an international watercourse would cause significant harm to other watercourse State."[119] This statement appears to set forth a different test for the ascertainment of due diligence from those stated above. According to this test, proportionality of efforts with the magnitude of the harm or the capacity of the state causing the harm, factors important in the criteria adopted from the *Alabama* case, are as such irrelevant in ascertaining due diligence. What matters to determine a breach of due diligence is whether a state knew or should have known that its use would cause harm. These two different standards of due diligence may lead to different results as to the lawfulness of a state's use.

To illustrate the issue using Bourne's example, suppose that a use is within the right of a state under the principle of equitable utilization and is implemented with all due care but

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117 *Ibid.*

118 *Ibid.*

119 *Ibid.*, at 104.

with the knowledge that it will cause significant harm to another watercourse state.[120] Would this be a breach of the due diligence obligation, and hence unlawful? On the basis of the definitions adopted from the *Alabama* case, it would not seem to be a case of breach of due diligence, since the state has taken all reasonable measures to avoid the harm and since knowledge as to the likely occurrence of harm to others as a result of the use is not a factor in determining due diligence. On the other hand, based on the latter test (whether a state knew or ought to have known), the use would seem to be unlawful, since the state *knew* that despite its best efforts harm would occur. If this latter test is followed, according to Wouters, "the due-diligence-not-to-cause-significant-harm rule is, in effect, an obligation not to cause significant harm and remains the governing rule of the entire Draft."[121] This is the more so in light of Caflisch's observation that since most international watercourse are at present fully exploited or even over-used, it must be known that every new use will cause harm to existing uses.[122] However, other commentators, relying on the explicit and implicit acknowledgments made both under article 7(2) and in the commentary that significant harm may be caused without engaging the responsibility of the harming state, argue that the governing principle in the ILC's final draft is equitable utilization.[123]

### 3.3.2.4. The 1997 UN Convention on the Non-Navigational Uses of International Watercourses

Negotiations for the Convention on the Law of the Non-Navigational Uses of International Watercourses were based on the final draft articles of the International Law Commission. The negotiations took place within the Sixth (Legal) Committee of the General Assembly,

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120 Bourne, "Primacy", *supra* note 4 at 223.

121 Wouters, "An Assessment" *supra* note 4 at 423.

122 Caflisch *supra* note 1 at 12.

123 Bourne, "Primacy",*supra* note 4 at 224, stating that "the ILC in its 1994 Draft Articles ultimately sustained the priority of the principle of equitable utilization over the no significant harm rule."

which was convened as a 'Working Group of the Whole'.[124] The Working Group convened twice to complete the elaboration of the draft Convention.[125] It adopted the Draft Convention by a vote of 42 to 3, with 19 abstentions.[126] Finally, the General Assembly considered the Draft Convention submitted by the Working Group and adopted it on 21 May 1997 with a vote of 103 for and 3 against, with 27 abstentions.[127]

One of the three most controversial issues was the relationship between the principles of equitable utilization (article 5 and 6) and no harm (article 7).[128] Article 7 was the focal point of the negotiations. Apart from some drafting changes of a mostly cosmetic nature, the Convention made no significant change to the 1994 ILC's version. One of the changes was to replace the expression 'shall exercise due diligence' with 'shall take all appropriate measures' in article 7(1). Accordingly, article 7(1) of the Convention reads as: "Watercourse States shall, in utilizing an international watercourse in their territories, take all appropriate measures to prevent the causing of significant harm to other watercourse States."[129] As both expressions emphasize that the obligation is one of conduct, not of result, the change does not seem to make significant difference. However, in light of the controversial statements in the ILC's commentary as to what constitutes due diligence, the shift to a less abstract expression clarifies the provision. Thus, a state would only be responsible for not having

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124 J.R. Crook and S.C. McCaffrey, "The United Nations Starts Work on a Watercourses Convention" (1997) 91 *AJIL* 546 at 547.

125 The first session was from October 7 to 25, 1996, while the second session was conducted from 24 March to 7 April 1997. See Kibaroglu, *supra* note 68 at 140.

126 U.N. Doc. A/C.6/51/SR.62/Add.1 (1997) at 2.

127 U.N. Doc. A/RES/51/229 (1997). The three countries that voted against are Burundi, China and Turkey. As to the Nile countries: Kenya and Sudan voted in favor. Burundi voted against. Egypt, Ethiopia, Rwanda, and Tanzania abstained.

128 The other two main sources of controversy were the relationship of the convention with existing or future agreements relating to a specific watercourse and the question of the settlement of disputes. See Kibaroglu, *supra* note 68 at 141.

129 The 1997 Convention, *supra* note 3, art. 7(1).

taken all the appropriate measures to prevent the causing of significant harm.

Some drafting changes have also been introduced to paragraph two of article 7, which directly addresses the relationship between the principle of equitable utilization and no harm rule. Article 7(2) of the Convention reads as follows:

> Where significant harm nevertheless is caused to another watercourse State, the States whose use causes such harm shall, in the absence of agreement to such use, take all appropriate measures having due regard for the provisions of Articles 5 and 6, in consultation with the affected State, to eliminate or mitigate such harm and, where appropriate, to discuss the question of compensation.[130]

Overall, the content of article 7 of the Convention is not significantly different from the ILC's version and represents, as is the case in the latter, an attempt to maintain an abstract balance between the no harm and equitable utilization rules. Article 7(1) makes clear that a state contemplating a use must take all appropriate measures to prevent significant harm. It must act without malice and negligence. Failure to take all appropriate measures and thereby causing significant harm which otherwise would have been avoided entails a state's responsibility. According to Bourne, this proposition is not disputed.[131] However, where, despite taking all appropriate measures, significant harm results, article 7(2) then imposes on the harm-causing state another obligation of due diligence (to take all appropriate measures) to eliminate or mitigate the harm in consultation with the affected state. But article 7(2) also provides that, in adopting these appropriate measures, due regard must be had to the provisions of Articles 5 and 6, returning the issue back to be ultimately judged by the principle of equitable utilization.

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130 *Ibid.*, art 7(2).

131 Bourne, "Primacy", *supra* note 3 at 225.

From the wording of Article 7 and the Working Group's statement of understanding, McCaffrey draws the following conclusions:

> (a) the harming state must endeavour, in the way required by paragraph 2, to eliminate the harm and, to the extent that the harm is not thereby eliminated, to mitigate it; (b) causing harm is not per se wrongful; (c) the harming and the harmed state must, in resolving the situation, be guided by the provisions of Articles 5 and 6--i.e. by the need to ensure that, overall, each state's utilization is equitable and reasonable vis-a-vis the other's; and (d) the overall resolution may require the payment of compensation to the harmed state despite the non-wrongfulness of the harming state's conduct.[132]

In general, the effort made to create an abstract balance between the principle of equitable utilization and no harm principle has blurred the issue of priority between the two principles in the Convention. It is difficult to provide a definite answer to the question of which of the two principles takes precedence over the other in the Convention. Be that as it may, as asserted by a number of writers, on balance the Convention favors the primacy of the principle of equitable utilization.[133]

### 3.3.3. International Case Law

Conflicts among states over the use of international watercourses have so far mostly been solved by negotiation, and hence there is limited case law in the area.[134] Writing in 1963, Lester observed that international cases in this area are "too few in number, and too closely tied to the unique characteristics of the particular river dispute to provide elaborate norms

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132 McCaffrey, *supra* note 1 at 310.

133 Bourne, "Primacy", *supra* note 3 at 230, McCaffrey, *supra* note 1 at 308; Kibaroglu, *supra* note 68 at 141.

134 A. Kiss, "Legal Procedures Applicable to Interstate Conflicts on Water Scarcity: The Gabcikovo Case," in E. H P Brans et al, eds., *The Scarcity of Water: Emerging Legal and Policy Responses* (London: Kluwer Law International Ltd, 1997) 59 at 63.

of international river law."[135] Nonetheless, several decisions of international courts or tribunals are referred to or relied upon to ascertain rules or principles of international water law. The most frequently cited cases include: the *River Oder* case,[136] the *Diversion of Water from the Meuse* case,[137] the *Corfu Channel* case,[138] the *Gabcikovo-Nagymaros Project* case,[139] the *Lake Lanoux* arbitration [140]and the *Trail Smelter* arbitration. [141]None of these cases, however, directly addressed the issue of the relationship between the principles of equitable utilization and no harm.

Neither the *Trail Smelter* arbitration nor the *Corfu Channel* case deals with international watercourses. They are referred to here merely to demonstrate the existence of the no harm rule in international law. Thus, they are of little help or relevance to the issue at hand. The *Diversion of Water from the Meuse* case is also of little significance, since the Court restricted its holding to the narrow terms of the 1863 treaty between the parties.[142] Thus, commentators agree that the "decision does not yield any important general principles of international law."[143]

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135 Lester, "River Pollution", *supra* note 24 at 840

136 *Case concerning the Territorial Jurisdiction of the International commission of the River Oder*, Judgment no. 16, 10 Sept. 1929, PCIJ Series A no. 23, at 5-46. Reproduced in M. O. Hudson, ed., World Court Reports (New York: Oceana, 1969) vol. 2, at 609 [hereinafter River Oder].

137 *Case concerning the Diversion of Water from the Meuse*, PCIJ, 1937, Series A/B, no.70.

138 *Corfu Channel* Case (Alb. v. U.K.), 1949 I.C.J. 4 (Apr. 9), at 22.

139 *Gabcikovo*, *supra* note 3.

140 *Lake Lanoux Arbitration* (France v. Spain), award of 16 Nov. 1957, 12 RIAA p.281

141 *The Trail Smelter Arbitration* (Can. v. U.S.), 3 RIAA 1938 (Mar. 11, 1941)

142 The court declared that: "The points at issue must all be determined solely by the interpretation and application of [the 1863] Treaty." See, *Case concerning the Diversion of Water from the Meuse*, *supra* note 137.

143 Lester, "Pollution", in A. H. Garretson, R. D. Hayton and C. J. Olmstead, eds., *The Law International Drainage Basins* (New York: Oceana Publications, Inc., 1967) 89 at 100. See also Lammers, *supra* note 3 at 504.

The *Lake Lanoux* arbitration between France and Spain was concerned with the question of water diversion by France from Lake Lanoux for purposes of generating electricity. According to France's envisaged project, an amount of water equal to that diverted from Lake Lanoux was ultimately to be returned into the basin, and thence to Spain. Lammers argues that the tribunal's "statements concerning the substantive law of international watercourses did not go beyond noting the generally recognized necessity to take the interests of other riparian States into consideration and to reconcile conflicting interests...through mutual concessions."[144] Moreover, as harm was not involved in the case, its relevance to the issue of priority between the principles of equitable utilization and no harm is minimal.

In the *River Oder* case, the PCIJ was called upon to decide whether the jurisdiction of the International Commission of the Oder under the Treaty of Versailles extended to certain tributaries of that river. The Court held that the jurisdiction of the Commission extended to the contested tributaries of the Oder.[145] Although the case revolved around navigation, the Court resorted to "international fluvial law in general" to decide the case, and in the course of doing so referred to "a community of interest of riparian States", "the perfect equality of all riparian States" and "the exclusion of any preferential privilege of any one riparian State in relation to the other." While these assertions of the Court are important in explaining the conceptual underpinnings of international water law, due to their generality they furnish little help to the subject of our present inquiry.

The *Gabcikovo-Nagymaros Project* case (Hungary v. Slovakia) is the most important case in the field of international water law. It involved several complex issues which directly related to the non-navigational uses of international watercourses. Moreover, as the most recent decision, it best reflects the current development of the law in the field. In short the

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144 Lammers, *ibid.*, at 517.

145 River Oder, *supra* note 136.

*Gabcikovo-Nagymaros* case "marks a milestone in the evolution of international water law."[146]

The case involved the rights and obligations of the parties under a treaty signed between Hungary and Czechoslovakia in 1977 for the construction of a system of locks in the Danube River (the Gabcikovo-Nagymaros Project), and instruments related thereto.[147] The disagreement started when the Hungarian government suspended, and subsequently abandoned, the project in 1988, alleging grave environmental risks.[148] This abandonment of the project by Hungary led Czechoslovakia to design and put into operation an alternative project wholly in its territory called Variant C. The operation of Variant C resulted in the diversion of most of the Danube flow (80 to 90 per cent). In May 1992, Hungary unilaterally terminated the 1977 treaty. Slovakia became an independent state on 1 January 1993 and assumed succession to the rights and obligations of Czechoslovakia to the Gabcikovo-Nagymaros Project. Failing to resolve their dispute through other means, Hungary and Slovakia, agreed to bring the case to the International Court of Justice.

The Court found both parties to be in violation of their obligations under the 1977 treaty and agreements attached thereto - Hungary for abandoning work on the project and Slovakia for putting into operation Variant C. The Court also held that Hungary's unilateral termination of the 1977 treaty was without effect. Although the dispute and the ensuing judgement were basically concerned with the determination of treaty rights and obligations, the Court, in interpreting and applying the treaty, significantly relied, *inter alia*, upon the law of international watercourses. The references made to the law of international watercourses

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146 C.B. Bourne, "The *Case Concerning the Gabcikovo-Nagymaros Project*: An Important Milestone in International Water Law", (1997) 8 *Yearbook of International Environmental Law* 6 at 11 [hereinafter, Bourne, "An Important Milestone"].

147 Treaty concerning the Construction and Operation of the Gabcikovo-Nagymaros System of Locks, 16 Sept. 1977, 32 ILM 1247 (1993); *Gabcikovo, supra* note 3 at para. 15.

148 *Gabcikovo, ibid.*, at para. 22.

throw light on the Court's perception of the substantive principles in the area, and by implication on their relationship.

In the course of considering Hungary's argument that its suspension and abandonment of the work on the project was justified by a "state of ecological necessity", the Court emphasized and affirmed the customary law status of "the general obligation of states to ensure that activities within their jurisdiction or control respect the environment of other States."[149] Nevertheless, the Court did not accept Hungary's argument, stating that "the perils invoked by Hungary...were not sufficiently established...nor were they 'imminent'; and that Hungary had available to it at that time means of responding to these perceived perils other than the suspension and abandonment of works."[150]

In addressing the issue of the legality of Variant C, in particular Slovakia's argument that Variant C was essentially no more than what Hungary had already agreed to, the Court stated that:

> [I]t was only in the context of a joint operation and a sharing of its benefits that Hungary had given its consent. The suspension and withdrawal of that consent constituted a violation of Hungary's legal obligations... but that cannot mean that Hungary forfeited its *basic right to an equitable and reasonable sharing of the resources of an international watercourse.*[151]

Similarly, in considering Slovakia's argument that "Variant C could be presented as a justified countermeasure to Hungary's illegal acts," the court quoted the following passage from the decision of the PCIJ in *River Oder* case:

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149 In doing so the Court quoted a passage from its advisory opinion on the *Legality of the Threat or Use of Nuclear Weapons*. *Ibid.*, para. 53.

150 *Ibid.*, para. 57.

151 *Ibid.*, para. 78, emphasis added.

> "[the] community of interest in a navigable river becomes the basis of a common legal right, the essential features of which are the perfect equality of all riparian States in the user of the whole course of the river and the exclusion of any preferential privilege of any one riparian State in relation to others"[152]

Then, the Court continued:

> Modern development of international law has strengthened this principle for non-navigational uses of international watercourses as well, as evidenced by the adoption of the Convention of 21 May 1997 on the Law of the Non-Navigational Uses of International Watercourses...Czechoslovakia, by unilaterally assuming control of a shared resource, and thereby depriving Hungary of its *right to an equitable and reasonable share* of the natural resources of the Danube...failed to respect the proportionality which is required by international law.[153]

In determining what the future conduct of the parties should be, the Court instructed the parties to enter into negotiation with the view to re-establishing the joint regime in a way that takes into account the objectives of the 1997 treaty, as well as the norms of international environmental law and the principles of the law of international watercourses.[154] Becoming more specific on the principles of the law of international watercourses, the Court opined that:

> Re-establishment of the joint regime will also reflect in an optimal way the concept of common utilization of shared water resources for the achievement of the several objectives mentioned in the Treaty, in accordance with Article 5, paragraph 2, of the Convention on the Law of the Non-Navigational Uses of International Watercourses, according to which:

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152 *Ibid.*, para. 85.

153 *Ibid.*, emphasis added.

154 *Ibid.*, para. 141.

> 'Watercourse States shall participate in the use, development and protection of an international watercourse in an equitable and reasonable manner. Such participation includes both the right to utilize the watercourse and the duty to cooperate in the protection and development thereof, as provided in the present Convention.'[155]

Concerning the legal consequences of the internationally wrongful acts committed by the parties, more specifically on the issue of reparation, the Court held that:

> Reparation must, "as far as possible", wipe out all the consequences of the illegal act. In this case, the consequences of the wrongful acts of both Parties will be wiped out "as far as possible" if they resume their co-operation in the utilization of the shared water resources of the Danube, and if the multi-purpose programme, in the form of a co-ordinated single unit, for the use, development and protection of the watercourse is implemented in an *equitable and reasonable* manner.[156]

These statements, if they do not conclusively prove, at least, strongly suggest that in the ICJ's perception, equitable utilization is the dominant principle of international watercourses law. In establishing the wrongfulness of Variant C, the Court resorted to the principle of equitable utilization. Given the fact that the operation of Variant C resulted in the diversion of 80-90 per cent of the Danube waters and in the light of Hungary's strong reliance on the no harm principle, the Court could have also easily expressed Slovakia's breach in terms of causing significant harm to Hungary. However, the Court preferred to express Slovakia's breach of an international obligation in terms of violating Hungary's basic "right to an equitable and reasonable share" of the Danube. Indeed, apart from noting the general obligation of states to respect the environment of other states, the ICJ did not *per se* apply

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155 *Ibid.*, para.148.

156 *Ibid.*, para. 150, emphasis added.

the no harm rule in its decision.[157] According to McCaffrey, this indicates that "the Court sees little utility in the no-harm doctrine as a mechanism for resolving complex problems of allocation of the uses and benefits of internationally shared freshwater resources."[158]

It is also worth noting that after the Court instructed the parties to re-establish the joint regime that takes into account, among other things, principles of the law of international watercourses, it specifically mentioned only article 5(2) of the 1997 Convention, which is an aspect of the principle of equitable utilization. Finally, the Court espoused the centrality of equitable utilization by asserting that the wrongful acts of both Parties will be wiped out if they resume their co-operation and if the project is implemented in an equitable and reasonable manner. From this assertion, it is fairly clear that the Court did not pay any attention to the argument of some writers that the principle of equitable utilization is not well suited to environmental concerns. This case revolved around environmental concerns. The Court did stress the great significance of environmental protection, including prevention of environmental harm. It also emphasized the need to reconcile economic development with protection of the environment as expressed in the concept of sustainable development. In the final analysis, however, the Court's conclusion appears to be that, in the context of international watercourses, all these concerns will be addressed and sustainable development will be achieved if the utilization of such resources are governed by the principles of

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157 McCaffrey, *supra* note 1 at 356.

158 *Ibid.* Bourne also asserts that the absence of reference to Articles 20 and 21 of the 1997 Convention which deal with issues of significant harm to environment in the Court's decision gives "no credibility to the notion of the existence of a 'no significant harm' rule that qualifies the principle of equitable utilization.", Bourne, "An Important Milestone", *supra* note 146 at 10. Stec and Eckstein, while finding the absence of a more extensive treatment and application of the no harm principle in the Court's decision surprising, draw a different conclusion. They do not find the absence of such a treatment in the Court's decision as suggesting the primacy of the principle of equitable utilization, for they state that the existence of "such an analysis might have been useful...for providing much needed clarification of the relationship between the principles of equitable and reasonable use and of no significant harm-a relationship that continues to be a source of much debate.", S. Stec and G.E. Eckstein, "Of Solemn Oaths and Obligations: The Environmental Impact of the ICJ's Decision in the *Case Concerning the Gabcikovo-Nagymaros Project*" (1997) 8 *Yearbook of International Environmental Law* 41 at 45-46.

equitable utilization and cooperation.

While accepting the Court's formulation of the principle of equitable utilization in the broader context of sustainable development, commentators disagree whether this understanding of the principle represents an innovative approach. Bourne argues that the ICJ understood and applied the principle of equitable utilization "in the form in which it was elaborated by the ILA and in which it is now embodied in the convention."[159] Thus, he did not think that the court added any new element to the principle. Boyle on the other hand considers the Court's formulation of equitable utilization in the broader context of sustainable development as "the most radical re-writing of the law relating to international watercourses since the *River Oder* case."[160]

In general, *Gabcikovo-Nagymaros* case is the most relevant and important case law regarding the law of international watercourses. From the above discussion and as observed by a number of commentators,[161] it is reasonable to conclude that the decision of the ICJ in the *Gabcikovo-Nagymaros* case strongly endorsed equitable utilization as the dominant principle governing the non-navigational uses of international watercourses.

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159 Bourne, *ibid.*, at 16

160 A.E. Boyle, "The *Gabcikovo-Nagymaros* Case: New Law in Old Bottles" (1997) 8 *Yearbook of International Environmental Law* 13 at 17. de Castro also shares this view stating that: "Especially in light of the fact that, in the International Law Commission's draft Articles on the Law of the Non-Navigational Uses of International Watercourses (let alone, in the International Law Association's 1966 Helsinki Rules), environmental considerations were not attributed adequate weight within the principle of equitable utilization, it is significant that the ICJ lent support to those calling for more environmentally appropriate water law." de Castro, *supra* note 22 at 23.

161 See, e.g., Bourne, "An Important Milestone", *supra* note 146 at 6-12; McCaffrey, *supra* note 1 at 186-197. For an argument that the Court's decision does not help to clarify the relationship between the principles of equitable utilization and no harm, see, Stec and Eckstein, *supra* note 158. See also, Boyle, *ibid.*, at 16, stating that in the decision of the Court there was not "any mention of the sterile and misconceived debate over the relationship between Articles 5 and 7 of the ILC Draft Watercourses Convention."

### 3.3.4. Conclusion

This review of some of the important sources of international water law reveals the sensitivity and complexity of the question of the priority to be accorded between the principles of equitable utilization and no harm. The ILC's vacillation from one position to the other illustrates the complexity of the issue. While it is not possible to give a definite answer to the question of priority between the two principles, the sources reviewed above strongly suggest that equitable utilization is the governing principle of the law of international watercourses. The balance of opinion among jurists, as reflected both in individual writings and the works of learned associations, notably the ILA, favours the primacy of equitable utilization. The 1997 Convention, by implicitly acknowledging that significant harm may be caused without entailing the responsibility of the harming state, strongly suggests the subordination of the no harm rule to the principle of equitable utilization. The *Gabcikovo-Nagymaros Project* case, the only ICJ case involving a dispute over an international watercourse, also endorsed equitable utilization as the governing principle in the field.

The *Gabcikovo-Nagymaros* is also important because, going beyond equitable utilization, it endorsed the powerful idea of 'community of interest'. As noted earlier, the theory of community of interests is regarded as the ideal theory to effectively address the complex problems of utilizing international watercourses. Based on geographical and other physical features or realities of international watercourses, this theory essentially propounds the joint planning, development and management of an international watercourse considering it as an integrated whole. By avoiding parallel developments and easing the problems associated with the question of sovereignty in selecting appropriate sites for projects, the application of the theory leads to optimal utilization of water resources. The management of an international watercourse as an integrated whole also affords the best opportunity to adequately protect the environment of the watercourse.

The *Gabcikovo-Nagymaros* case, by asserting that the community of interests principle is reflected in the 1997 Convention and by specifically making reference to the article dealing with equitable utilization (article 5), established a link between the two principles. Birnie and Boyle aptly express the relationship between these principles stating that the principle of equitable utilization naturally leads to the principle of community of interests.[162] As noted earlier, the theory of limited territorial sovereignty largely informs current international water law, but with community of interests quickly gaining ground. As Sievers puts it, "[t]o the extent that limited territorial sovereignty is gradually giving way to community of interests, the current name for the shifting middle ground between the two is equitable utilization."[163] Whereas, the no harm rule, with its narrow scope of preventing harm, is less conducive for establishing and fostering the cooperation that may lead to community of interests. Thus, if the proposition that the community of interests is the ideal principle for governing the utilization of international watercourses is correct, and the *Gabcikovo-Nagymaros* case suggests it is, then the primacy of equitable utilization is also justified as a vehicle for arriving at this ideal solution.

## 3.4. The Relevance and Application of the Law of International Watercourses to the Nile Basin

Before assessing the relevance and the extent of application of general international water law to the Nile basin, it is convenient first to look into the value or role of international watercourses law in the regulation of any given international watercourse. Three major roles can be ascertained. Where a utilization of an international watercourse is subject to specific agreements between the watercourse states, international water law may be of value in

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162 Birnie and Boyle, *supra* note 56 at 304, asserting that "the principle of equitable utilization leads naturally to the fourth theory on which the allocation of water resources has been based, that of common management."

163 E.W. Sievers, "Transboundary Jurisdiction and Watercourse Law: China, Kazakhstan, and the Irtysh" (2002) 37 *Tex. Int'l L. J.* 1 at 17.

interpreting these agreements when the need arises. The *Gabcikovo-Nagymaros* decision is a case in point. There the ICJ applied the law of international watercourses in determining the rights and obligations of the parties under a special water agreement. In this regard, Hayton also observes that: "The important point is that any international drainage basin treaty is not something standing alone, but is supported by, limited by and tested against a set of general international law standards."[164]

Where the utilization of an international watercourse is not regulated by any specific agreement, then the law of international watercourses will have a wider role. It guides the conduct of watercourse states in utilizing a watercourse and it will be resorted to when disputes arise. It "empowers international actors by legitimating their claims and limits the claims they are permitted to make."[165] However, leaving the utilization of an international watercourse to be governed wholly by customary international water law is not the more effective way of managing an international watercourse. As Dellapenna puts it, "customary international law has proven unable by itself to solve the problems that arise in the management of transboundary water resources"[166] mainly due to the absence of effective enforcement mechanisms.

The other role of general international water law is to provide a foundation for negotiating regional or specific watercourse agreements. The negotiation and conclusion of such agreements are not carried out in a legal vacuum. In the words of Tanzi and Arcari, "generally, negotiations aimed at the conclusion of watercourse agreements are started and

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164 R.D. Hayton, "The Formation of the Customary Rules of the Drainage Basin Law", in A. H. Garretson, R. D. Hayton and C. J. Olmstead, eds., *The Law International Drainage Basins* (New York: Oceana Publications, Inc., 1967) 834 at 836.

165 Dellapenna, *supra* note 91 at 35.

166 *Ibid.*, at 35-36.

carried out taking into account the general principles in the field as terms of reference."[167] This function of general international law is what interests us most, as the subject of this study is a new legal regime to be established in the Nile basin. History has shown that special watercourse agreements are highly influenced by general principles of international water law.[168] The potential of the 1997 Watercourses Convention to serve as a model and to provide authoritative guideline for the conclusion of special watercourse agreements has been underlined.[169] Indeed, the Convention has already started playing such role.[170] Thus, it is apparent that general international water law, particularly as reflected in the 1997 Convention, will have a profound influence on the new legal regime currently being negotiated among the Nile states.

As noted earlier, the 1997 Convention makes equitable utilization the dominant principle, albeit not in absolute terms, for the non-navigational uses of international watercourses. This assertion is enhanced by the decision of the ICJ in the *Gabcikovo-Nagymaros* case. If the 1997 Convention serves as an authoritative guideline for the conclusion of special watercourse agreements, then it follows that priority should be given to the principle of equitable utilization over the no harm rule in the new legal regime to be established in the

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167 Tanzi and Arcari, *supra* note 13 at 26.

168 For instance, a number of watercourse agreements were highly influenced by ILC's draft articles. Such agreements which express reference to the basic principles of international water law as drafted by the ILC include: Protocol on Shared Watercourse Systems in the Southern African Development Community Region, Johannesburg, 28 August 1995, available at http://www.dundee.ac.uk/law/water; Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin, 5 April 1995, 34 ILM 864 (1995); Treaty on Sharing of the Ganges Waters at Farakka, 12 December 1996, India-Bangl., 36 ILM 519 (1996); Treaty Concerning the Integrated Development of the Mahakali River, 12 February 1996, India-Nepal, 36 ILM 531 (1996).

169 The fact that the ILC draft articles, on which the Convention was based, had influenced a number of special watercourse agreements corroborate this assertion. See McCaffrey, *supra* note 1 at 317; Tanzi and Arcari, *supra* note 13 at 306.

170 See e.g. the Revised Protocol on Shared Watercourses in the Southern African Development Community (SADC), Windhoek, 7 August 2000, available at http://www.dundee.ac.uk/law/water. This Protocol closely follows the 1997 Convention in many respects.

Nile basin. However, the 1997 Convention is intended to serve as a framework or guideline and not as a rigid template applicable as is.[171] As the geographic, economic, political, etc situations in each watercourse significantly vary, adjustments are needed to accommodate the peculiar features of each international watercourse. It remains, then, to investigate whether the peculiar features of the Nile basin strengthen or negate the *prima facie* assertion that, based on international water law, particularly the 1997 Convention, equitable utilization should be the governing principle in the Nile basin.

The Nile legal regime, as with any legal regime, should fundamentally be informed by the problem it intends to address. As put by Smith, "rules which govern conduct are worked out to meet the proved needs of mankind."[172] Thus, the nature of the problem in the use and management of the Nile basin is the most important factor that should determine the content of the legal regime to be established. As discussed in chapter one, the basic problem facing the Nile states is the inability of the limited flow of the Nile to satisfy their water demands. In other words, the main issue is that of proper allocation of a scarce shared water resource. There are no significant transboundary environmental problems in the Nile basin. For instance, in terms of levels of salinity and pollution, the water of the Nile basin is mostly of high quality.[173] Of course, an increase in upstream water development, particularly irrigation, would necessarily result in changes in water quality. However, in light of the existing high quality of the Nile waters and the modest amount of withdrawal being contemplated by

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171 See e.g., S.C. McCaffrey, "An Assessment of the Work of the International Law Commission" (1996) 36 *Nat. Res. J.* 297 at 302, stating, in relation to the ILC's draft, that it "is intended to serve as a framework instrument, setting forth principles and rules that have general applicability and that may be applied and adjusted in agreements between states sharing international watercourses."

172 H. A. Smith, *The Economic Uses of International Rivers*, (London: P. S. King & Son, 1931) at 144.

173 According to Shapland, this is "partly because very little use is made of the Nile upstream of Sudan, and partly because, in the areas where Nile water is used for irrigation, the soils are of types that either do not seriously reduce the quality of the water as it passes through them, or do not permit return flows." G. Shapland, *Rivers of Discord: International Water Disputes in the Middle East* (New York: St. Martin's Press, 1997) at 68.

upstream states,[174] the chances that the level of pollution may become unacceptable are not very great.

The relationship between the principles of equitable utilization and the no harm rule in the Nile basin should be appreciated in this light. In international water law, the no harm rule is essentially justified on the ground that it affords better protection in cases of pollution and other environmental harms. Similarly, critics of equitable utilization as the prevailing principle are concerned principally with its use in the field of pollution. However, as noted earlier, the *Gabcikovo-Nagymaros* case appears to undermine this criticism. At any rate, the fact that transboundary environmental concerns are not pressing in the Nile basin deprives the no harm principle of its major source of support. Thus, the nature of the problem in the Nile basin speaks against making the no harm principle dominant in the Nile legal framework.

The fact that the Nile is an over-used watercourse is also an important factor. It is not merely over-used, but over-used disproportionately, as more than 99 per cent of its waters are used by only two of the ten riparians. Generally, the primacy of the no harm rule has never been strongly advanced in the context of water apportionment. This is the more so where the international watercourse in question is fully exploited or over-used.[175] In such cases, giving primacy to the no harm will lead to outright inequitable results. And, as is suggested above, the law should not sanction such inequitable results.[176] Thus, the fact that the Nile waters are over-used disproportionately makes the no harm rule a bad rule for the Nile legal regime, especially as a governing principle.

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174 For instance, in the case of Ethiopia, if all the projects on the Nile identified by the U.S. Bureau of Reclamation were to be implemented, they would require only 6 bcm of the Nile waters. R. O. Collins, *The Waters of the Nile: Hydropolitics and the Jonglei Canal, 1900-1988* (New York: Oxford University Press, 1990) at 279.

175 Caflisch, *supra* note 1 at 12.

176 Bourne, "Primacy", *supra* note 3.

One of the important features of the Nile is that it traverses through a variety of climates and topographies, from well watered and mountainous highlands to the most barren deserts. These factors are highly relevant to optimal utilization of the Nile waters. The efficiency of water utilization projects (irrigation, hydro-electric power, etc.) depends, among other things, on climatic and topographic factors. To give a simple example, it is six times more expensive, in terms of water cost, to grow wheat in Sudan than in Ethiopia.[177] Hydro-electric power generation potential and efficiency varies along the course of the Nile. Climatic factors are also important in selecting sites for constructing reservoirs.

Addressing water scarcity, the major problem in the Nile basin, requires optimizing the use of the resource taking into account these factors. Conservation measures and minimization of water losses are of paramount importance. In particular, water loss through evaporation from reservoirs should be given utmost attention, as it is one of the acute problems of the basin in terms of ensuring optimal utilization. About 10 bcm or 12 per cent of the Nile water is lost through evaporation from Aswan Dam in Egypt, whereas, evaporation loss in upstream states would be significantly lower, about 3 per cent. All major studies conducted on the Nile suggest the idea of developing the Nile by treating the entire basin as a unit. They propose, in particular, using the Equatorial Lakes, Lake Tana and other reservoirs in regions of low evaporation within the basin to optimize the use of the river. In general, due to the existence of dramatic variations in terms of climate and topography in the Nile basin, optimal utilization cannot be envisaged without the integrated development of the basin as a unit. This leads to the paramount importance of creating and maintaining cooperation among the Nile states over the use of the Nile waters. Thus, the success of the legal regime to be established in the Nile basin is to be measured by its ability to foster cooperation.

The above analysis leads to the question of which alternative - giving primacy to equitable

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177 T.El Khazin, Nile Waters Management and Links to Conflict Management and Food Security in the Horn of Africa, Report of Roundtable Discussion, Ottawa, 3 July 2001 at 9.

utilization or making no harm the governing principle - has the greater potential to bring about cooperation among the Nile states. It is rightly asserted that the application of the no harm principle usually leads to what political scientists refer to a "zero sum game" and thereby is ill suited to creating cooperation.[178] Whereas the principle of equitable utilization, with its tendency to balance the interests of all watercourse states, has greater potential to foster cooperation. Giving precedence to the no harm principle in the Nile basin practically amounts to endorsing the existing legal regime, which has long been regarded as inequitable and inefficient. It completely rules out cooperation as there is no incentive for upstream countries to cooperate.

To sum up, special watercourse agreements are normally negotiated and concluded within the framework of general international water law. Most of the recent special water agreements have closely followed either the ILC draft articles or the 1997 Convention. There is no plausible reason for thinking that the Nile will be an exception. The 1997 Convention and other sources of international water law dispose of the question of priority between the principles of equitable utilization and no harm in favour of the former. Thus, it is *prima facie* asserted that in line with international water law equitable utilization should be the dominant principle in the Nile legal regime. However, since international water law leaves space for adjustments to accommodate peculiar features of each watercourse, the relevant features of the Nile are analyzed. This analysis, far from suggesting the reversal of the *prima facie* assertion, reveals that there is no alternative in the Nile basin other than making equitable utilization the governing principle.

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178 Wouters, "Allocation," *supra* note 69 at 85.

# CHAPTER FOUR

## DISTRIBUTIVE JUSTICE IN THE NILE BASIN AND THE RELATIONSHIP BETWEEN THE PRINCIPLES OF EQUITABLE UTILIZATION AND NO HARM

The relationship between the principles of equitable utilization and no harm, or, more specifically, the question of which principle should prevail, raises important moral or fairness issues. If precedence is given to the no harm principle, it will have the effect of preventing some watercourse states from using any of the water or using their equitable share of the water. On the other hand, if the principle of equitable utilization is given supremacy, some watercourse states may be left without a remedy for some significant harms caused to them by other watercourse states. McCaffrey illustrates this moral dilemma by using the following hypothetical fact situation:

> Suppose, for example, that--as is often the case--upstream State A has not significantly developed its water resources because of its mountainous terrain. The topography of the downstream states on the watercourse, B and C, is flatter, and they have used the watercourse extensively for irrigation for centuries, if not millennia. State A now wishes to develop its water resources for hydroelectric and agricultural purposes. States B and C cry foul, on the ground that this would significantly harm their established uses. How should the positions of State A, on the one hand, and States B and C on the other, neither of which seems unreasonable on its face, be reconciled?[1]

As demonstrated in the preceding chapter, although the balance of authority favors the principle of equitable utilization over that of no harm, current international law has yet to unequivocally resolve the issue of priority between the two principles. Thus, one approach

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[1] S.C. McCaffrey, "An Overview of the U.N. Convention on the Law of the Non-Navigational Uses of International Watercourses" (2000) 20 *J. Land Res. & Envtl. L.* 57 at 62.

to resolve this controversy is to critically investigate the extent to which giving precedence to equitable utilization or to no harm addresses concerns of fairness or distributive justice. This is even more important in the Nile basin, since the issue of fairness has always been at the forefront in the Nile discourse.

One of the fundamental features of the status quo in the Nile basin is the enormous differences among the Nile Basin countries in terms of using the Nile waters. McCaffrey's illustration quoted above would aptly describe the situation in the Nile basin if Ethiopia, Sudan and Egypt were substituted for the States A, B and C, respectively. While Egypt and Sudan are using more than 99 percent of the Nile waters, the other riparians have not made any significant use of the waters. Thus, one of the main grounds for the upper riparian Nile states to challenge the existing Nile legal regime and the status quo in general is the issue of distributive justice. They claim that the status quo in the Nile basin is inequitable. For instance, in one of the Nile 2002 Conference series, Ethiopia stated in its country paper that "the inequitable state of affairs currently prevailing within the Nile basin should be rectified to urgently address and respect the equitable rights of use of the Nile waters by all co-basin countries."[2]

For their part, Egypt and Sudan try to justify the fairness of the status quo based on the reliance created by their historical use of the Nile waters and the absence of other alternative water resources. Asked about the allegations by some Nile basin countries that Egypt desires to draw more than its fair share from the Nile, Mahmoud Abu Zied, Egypt's minister of public works and water resources, in 1999 replied that: "Historically only Egypt and the Sudan got shares in the water. The other Nile Basin countries did not have any need of the water--they receive enough rainfall every year to cover agricultural needs."[3] He added that

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2 Country Paper of Ethiopia, "Water Resources Management of the Nile Basin: Basis for Cooperation" (Paper presented at the Fifth Nile 2002 Conference, 24-28 February 1997, Addis Ababa, Ethiopia) [unpublished] at 1.

3 F. Farag, "Managing Turbulent Waters" *Al-Ahram Weekly* (16 - 22 September 1999).

what Egypt and Sudan are using is "only six to eight per cent of total rainfall over the Nile Basin."[4]

Thus, it seems that both upstream and downstream Nile states accept that issues of fairness or justice are important considerations in the Nile basin. The validity and success of the new legal regime to be established in the Nile basin is, therefore, strongly tied to its ability to address concerns of distributive justice. However, the Nile states have divergent views as to what is fair or just. Their perception as to what is fair or just is highly influenced by their present position. While upstream Nile states are not impressed by the fairness of according priority to the no harm rule over that of equitable utilization, the downstream riparians are reluctant to accept the fairness of making equitable utilization the prevailing principle.

As noted earlier, one important quality of Rawls' theory of justice is that it requires us to investigate and pass judgment on fairness issues from a neutral position without knowing our present position. The fact that the judgment of the Nile states as to what is fair is influenced by their present position, therefore, further strengthens the appropriateness of using Rawls' theory of justice as a standard. Thus, the following sections assess the issue of supremacy between the principles of equitable utilization and no harm in the Nile basin from fairness or justice point of view by using Rawls' theory of justice.

## 4.1. The Application of Rawls' Theory of the Original Position to the Principles of International Water Law.

The first approach to evaluate the relationship between the principles of equitable utilization and no harm in the light of Rawls' theory of justice is to investigate which alternative - giving precedence to equitable utilization or making the no harm the prevailing principle - would be agreed on by the parties to the Rawlsian original position. In choosing between

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4 *Ibid.*

these alternatives, the parties to the agreement would ask themselves which alternative has the best worst outcome. The risk involved in giving precedence to the no harm principle would be that if a watercourse state lagged behind in using the watercourse due to economic or technical inability, it would be prevented from using any of the water or its equitable share of the water. For instance, if state A and state B share a river and if state B, an economically and technologically advanced state, is using all the waters of the river, then state A cannot use the river since any significant use by state A is bound to cause a significant harm to state B. Due to the veil of ignorance, the parties in the original position, would not know whether the nations they are representing would be in the position of state A or B.

On the other hand, giving precedence to the principle of equitable utilization guarantees to each party an equitable share of the water and at the same time provides protection against most kinds of harms. Since each watercourse state is not allowed to exceed its equitable share, any significant harm caused to another watercourse state by exceeding one's equitable share is prohibited. Thus, each watercourse state is protected against significant harm to its equitable share.

The principle of equitable utilization also provides protection to watercourse states against most environmental harms, albeit not as precisely as that of the no significant harm principle. The principle of equitable utilization requires watercourse states to use the watercourse in an equitable and reasonable manner. A use which is within an equitable share but which causes a significant environmental harm would more likely fail to meet the requirement of reasonableness. It has to be also noted that the environmental effect of a use is one factor to determine an equitable and reasonable use.[5] Besides, since the principle of equitable utilization incorporates the duty to protect a watercourse,[6] a use that causes a significant

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5 U.N. Convention on the Law of the Non-Navigational Uses of International Watercourses, UN Doc. A/RES/51/869, 21 May 1997, Article 6 (1f), reprinted in D. Hunter, et al, eds., *International Environmental Law and Policy: Treaty Supplement* (New York: Foundation Press, 2002) at 246.

6 *Ibid.*, Article 5(1).

environmental harm can be considered against this principle.

From the foregoing discussion, it is plausible to suppose that the parties in the original position would agree to give precedence to the principle of equitable utilization over the principle of no harm since this alternative has the best worst outcome. Giving supremacy to the principle of equitable utilization guarantees to each party a fair share of the watercourse and at the same time provides protection to each watercourse state against most significant environmental harms. On the other hand, giving precedence to the no significant harm principle may have the effect of preventing some states from using the watercourse completely or limiting their use to a share less than their equitable share. Each party in the original position realizes that if his country lagged behind in using the watercourse, it may end up getting little or no right to use the watercourse. This outcome is hardly acceptable to any rational party who does not know his present position due to the information constraint imposed by the veil of ignorance.

Giving precedence to equitable utilization does not protect excess uses made beyond equitable shares, while giving precedence to no significant harm does protect such excess uses. In this regard, one of the features of the maximin rule for choice under uncertainty is that the person choosing cares little to get above the average. As put by Rawls, "[it] is not worthwhile for him to take a chance for the sake of a further advantage, especially when it may turn out that he loses much that is important to him."[7] Getting a fair or an equitable share is very important to the parties and they would not risk it for a larger share. As a result, it seems unwise for the parties to take a chance by adopting an alternative that protects excess uses. Therefore, it is reasonable to conclude that the parties would reject the alternative of giving precedence to the no harm principle and would agree on the safest alternative: giving precedence to the principle of equitable utilization over the principle of

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[7] J. Rawls, *A Theory of Justice*, rev. ed. (Cambridge, Mass.: Harvard University Press, 1999) at 134 [hereinafter, *A Theory of Justice*].

no harm.

Another justification for the assertion that the parties in the original position would agree to give precedence to the principle of equitable utilization is the argument from the strains of commitment. As mentioned earlier, giving precedence to the principle of no harm may prevent some later developing states from using the common resource. The parties who find themselves in such a position might not able to keep the agreement to give precedence to the principle of no significant harm. It requires a large sacrifice for the benefit of others. However, if the parties agree to give precedence to the principle of equitable utilization, they run no such risks. They are always guaranteed their equitable shares. Of course, giving precedence to equitable utilization does not protect states against a significant harm to an existing use which is made in excess of an equitable share. Even if a state which suffered a significant harm to its excess use is without remedy, its equitable share will still remain intact. As a result, the parties will not find it a strain to keep the agreement to give priority to the principle of equitable utilization. Thus, the parties in the original position would conclude that the strains of commitment associated with giving precedence to the principle of equitable utilization are less serious than that of giving precedence to the principle of no significant harm. Hence, they would agree on the supremacy of the equitable utilization principle over the no harm principle.

An assessment of the two alternatives in the light of Rawls' stability argument also indicates that giving precedence to equitable utilization is more stable than the other alternative. Making equitable utilization the governing principle treats all parties equally. It favors neither the upstream nor the downstream, the developed nor the under developed, neither the first user nor the later user. It gives an equal right to all parties to equitably use and benefit from the watercourse. However, giving precedence to the no harm principle tends to favor relatively developed states. Since developing a water resource requires financial and technological capacity, relatively developed states normally start to harness the waters of international watercourses ahead of later developing states. Thus the sense of justice

corresponding to giving precedence to equitable utilization is stronger than the parallel sense of justice associated with making no harm the governing principle. As Rawls asserted, the principle which has the stronger sense of justice is the more stable one. Hence, it is plausible to suppose that the parties in the original position would select the more stable alternative: giving precedence to the principle of equitable utilization over the no significant harm principle.

## 4.2. The Application of Rawls' Principles of Justice to the Principles of International Water Law.

The second approach to evaluate the relationship between the principles of equitable utilization and no harm in the light of Rawls' theory of justice is to investigate their relationship by applying Rawls' actual principles of justice. In this regard, Rawls' difference principle is the most relevant principle, since it is the principle that governs the distribution of income and wealth including natural resources. The difference principle states that social and economic inequalities are to be arranged so that they are both to the greatest benefit of the least advantaged. To put it in a different way, social and economic goods should be distributed equally unless it can be shown that an unequal distribution is to the greatest benefit of the least advantaged group in the society. Thus the first issue to investigate here is whether or not giving precedence to the principle of equitable utilization or to the principle of no significant harm results in an unequal distribution of international watercourses. If both alternatives involve unequal distributions, then the second issue to address is whether or not the inequalities in each alternative are justifiable under the difference principle.

Before investigating the above issues, it is necessary to give meaning, in the context of international watercourses, to the phrase "the least advantaged" in the difference principle. Rawls defines the least advantaged roughly as those who are least favored by natural, social or historical contingencies in their prospects of obtaining the primary goods such as wealth

and income.[8] Similarly, it is plausible to understand the least advantaged in the context of international watercourses as those states which are least favored in obtaining sufficient water by natural, social or historical contingencies such as absence of alternative water resources, large population size, low level of development, lack of access to capital, etc.

Giving precedence to the principle of equitable utilization may or may not involve equal distribution of the waters of an international watercourse. Under equitable utilization, the uses and benefits of an international watercourse are to be divided based on factors such as social and economic needs, population, availability of alternatives, geographic factors, and so on. If these factors are similar in all the states that are sharing an international watercourse, then the uses and benefits of the watercourse will be divided equally among these states. In such situations equitable utilization becomes equivalent to equal division. However, such situations are very rare in our world. Most of the states that share an international watercourse are not found in similar situations in terms of the above factors. In these cases, the application of the principle of equitable utilization would result in unequal distributions of international watercourses. For instance, if two countries share an international watercourse and if country A has a larger population, lesser access to alternative water resource, etc, then country A may get 70 per cent and country B may get 30 per cent of the international watercourse.

Giving precedence to the principle of no harm also normally results in an unequal distribution of the uses and benefits of an international watercourse. This alternative prohibits a use that causes significant harm to another watercourse state. For instance, if two states share an international watercourse and if one of the states starts to use the lion's share or the whole of the watercourse ahead of the other watercourse state, then the latter watercourse state will get little or no share of the watercourse; thereby resulting in an

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[8] J. Rawls, "A Kantian Conception of Equality" in S. Freeman, ed., *John Rawls: Collected Papers* (Cambridge, Mass.: Harvard University Press. 1999) 254 at 258-59.

unequal division of the uses of the watercourse. Thus both alternatives: giving priority to the principle of equitable utilization or to the principle of no harm usually result in an unequal distribution of international watercourses among watercourse states. The main issue is, therefore, whether or not the inequalities in the utilization of international watercourses in each of the alternatives can be justified under the difference principle.

Making equitable utilization the governing principle accords a greater share to watercourse states that are in a less favorable situation in terms of water resources because of their larger population size, lack of alternative water resources or lower level of development and higher water demand to meet their development needs. The inequalities in the distribution of water resources resulting from giving precedence to the principle of equitable utilization operate to the benefit of states which are relatively in a disadvantageous position in relation to water resources due to natural, social or historical contingencies. In other words, the inequalities are justified under the difference principle, since they are to the greatest benefit of the least advantaged.

According to Rawls, social and economic inequalities are required not only to be to the greatest benefit of the least advantaged but also to be consistent with the principle of fair equality of opportunity.[9] In other words, the principle of fair equality of opportunity acts as a constraint on the difference principle. In this regard, the inequalities involved in giving precedence to the principle of equitable utilization are also consistent with the principle of fair equality of opportunity. The rights and protections provided in the principle of equitable utilization to a watercourse state will not be affected by natural or historical fate such as by being upstream or downstream, developed or under developed, first user or later user. According priority to the principle of equitable utilization insures the fair equality of opportunity among watercourse states, since it gives equal weight to existing and future uses.

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[9] According to Rawls' second priority rule, the principle of fair equality opportunity is prior to the difference principle, i.e. the difference principle is required to be consistent with fair equality of opportunity. *A Theory of Justice*, *supra* note 7 at 266-67.

Watercourse states are always guaranteed their equitable share and are equally protected against unreasonable significant harms.

On the other hand, giving precedence to the principle of no significant harm usually entitles a greater share to prior users of a watercourse. The prior users may not be the least advantaged. For instance, if two states share a watercourse and one of them, a relatively developed state with a lesser population and greater access to alternative water resources is using most of the waters, then, the other state, which is the least advantaged in terms of water resources, will get a very small share of the watercourse. Thus, the inequality involved in giving precedence to the principle of no significant harm may not be to the benefit of the least advantaged. As a result, the inequality resulting from giving priority to the principle of no harm is not always justified under the difference principle.

Making no harm the overriding principle may also be inconsistent with the principle of fair equality of opportunity. Under the no harm principle, if a watercourse state lags behind in using a watercourse due to historical or other contingencies, it may not have equal opportunity to utilize the watercourse. However, according to the principle of fair equality of opportunity, a watercourse state's chance to use an international watercourse should not be influenced by historical or other contingencies. Thus, giving supremacy to the no harm principle may not be consistent with the principle of fair equality of opportunity.

Therefore, giving precedence to either the principle of equitable utilization or to the principle of no significant harm usually results in an unequal distribution of the uses of international watercourses. However, the inequality resulting from according priority to the principle of equitable utilization is justified under the difference principle, since it is to the benefit of the least advantaged as well as consistent with the principle of fair equality of opportunity. On the other hand, the inequality in giving precedence to the principle of no significant harm cannot be justified under the difference principle, since it may not be to the benefit of the least advantaged and at the same time may not be consistent with the principle of fair

equality of opportunity.

## 4.3. Conclusion

The application of Rawls' theory of justice (both his concept of the original position and his actual principles of justice) suggests precedence should be given to the principle of equitable utilization over the principle of no harm. Giving precedence to equitable utilization ensures the equal right of watercourse states to equitably use and benefit from a watercourse. The strains of commitment associated with the principle is reasonably tolerable. It is also more stable as the sense of justice corresponding to it is strong. Besides, the inequality in the distribution of water resources resulting from making equitable utilization the governing principle is morally justifiable since it is to the benefit of the least advantaged.

The same reasoning lead us to the conclusion that if representatives of the Nile states deliberate on the issue without knowing their present situation or the country they are representing, they would most likely agree to make equitable utilization the governing principle. According to Rawls, decisions made in such a situation of equality and absence of biases by present positions are just. Therefore, it is plausible to conclude that if fairness or justice is one of the main considerations in establishing a legal regime for the Nile, and it is submitted that it must be and the Nile states apparently accept this as well, then priority should be given to the principle of equitable utilization over the no harm principle in the new Nile legal framework.

# GENERAL CONCLUSION

The Nile waters have been a central political factor in the region since ancient times and continue to be critical today. The interests and aspirations of each country for the Nile waters have significantly informed the overall relationship of the Nile states with each other. This should not be surprising given the cardinal importance of the Nile waters for the development and, in some cases for the very survival of, most of the Nile states. More than half of the Nile states have already fallen into the category of water stressed countries, with the remaining to follow suit in the near future. The Nile basin contains five of the ten least developed countries of the world. It also contains a country, Egypt, which completely depends on one source - the Nile - for its fresh water demands. Moreover, reconciling the reliance interest of some of the Nile states created through historical use, on the one hand, and the demands of the other states for a fair share of the common resource on the other is not an easy task. Thus, to agree with Waterbury, the Nile basin is a prime example that "embodies all the challenges that transnational management of fresh water could possibly present."[10]

The existing Nile legal regime is compounded by a number of shortcomings and has practically proved to be unfit and incapable of meeting the exigencies of the present Nile situation. Thus, establishing a new legal framework that reflects the physical as well as the socio-economic factors of the basin has become imperative. The acceptance of the need for a new legal regime by the Nile countries and the efforts that are undergoing in the Nile Basin Initiative towards this goal are encouraging steps in the right direction and long over due. Given the history of competition and confrontation that has prevailed for generations in the basin and the vitality of the Nile waters to most of the basin states, the task of establishing

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[10] John Waterbury, "The Near Term Challenge of Managing Resources in the Nile Basin", in Mohamed O. Beshir, ed., *The Nile Valley Countries: Continuity and Change* (1984) Vol. 1 165 at 166, quoted by L.M. Jacobs, "Sharing the Gifts of the Nile: Establishment of a Legal Regime for Nile Waters Management" (1993) 7 Temp. Int'l & Comp. L. J. 95 at 96.

a new Nile legal regime acceptable to all Nile states is expected to be difficult and time consuming, if not impossible. At any event, the success of the new legal framework to be established in the Nile basin will be measured by the extent to which it promotes the optimal, equitable and sustainable utilization of the Nile waters.

This thesis has emphasized the importance of joint management and cooperation among watercourse states for the optimal, fair and sustainable utilization of international watercourses, as espoused by the theory of community of interests. In the case of the Nile basin cooperation is not even a matter of choice. It is a precondition to finding a meaningful solution to the complex problems of the basin. It is only if the competitive approach that has prevailed in the Nile for centuries is replaced by common understanding and cooperation that efficient, equitable and sustainable development of the Nile can be envisaged. Thus, this broad framework or objective has in large part informed the analysis of the question of the relationship between the principles of equitable utilization and no harm in the new Nile legal regime.

The analysis of the issue of the relationship between the principles of equitable utilization and no harm, both from legal and justice point of views, suggests that equitable utilization is and should be the dominant principle regarding the utilization of international watercourses. The physical, socio-economic and other peculiar features of the Nile basin make the primacy of equitable utilization over the no harm principle even more imperative. According priority to the no harm rule in the Nile basin will likely lead to a 'zero sum game', as it makes few Nile states, principally Egypt, clear winners and the rest clear losers. Moreover, it practically amounts to endorsing the existing legal regime which has already proved to be inefficient, unfair and unsustainable. Thus, it is inappropriate and unrealistic to expect any agreement, let alone cooperation, in the Nile basin on the basis of the primacy of the no harm rule.

On the other hand, making equitable utilization the governing principle in the Nile basin is

more appropriate and has a better chance of being accepted by all the Nile states. Of course, this alternative would likely result in a decrease in the amount of existing uses by some countries, mainly Egypt. However, this impact should not be exaggerated for the following reasons. First, due to geographic, hydrological and other limitations, upstream Nile states are contemplating only modest withdrawals of the Nile waters. Second, if upstream water developments are accompanied by storage facilities in such areas, water loss through evaporation could be cut significantly, thus resulting in additional water. Third, if equitable utilization is implemented in its wider sense so as to involve not only sharing of water but also sharing of benefits, the decrease in Egypt's existing use could be offset by sharing the benefits of upstream developments, in particular, hydropower production. Moreover, securing the Nile flow has always been the major pre-occupation of Egypt. Until now, Egypt has been able to dominate the utilization of the Nile mainly relying on the relative weakness of the other Nile states. This is not, however, a stable form of security. Egypt could achieve a more stable sense of security by legitimizing its use through making some concessions in the form of accepting a certain decrease in its existing use. Thus, unlike what happens if we accord primacy to the no harm rule, making equitable utilization the governing principle in the Nile basin would not lead to a zero sum game. It would rather create ample opportunity for the optimal and sustainable development of the Nile for the benefit of all Nile countries.

Historically, international watercourses have played the roles of both connecting and separating people. They have connected people or nations not only through their navigable channels but also through necessitating and stimulating cooperation among nations sharing them. Sometimes they have also separated people by marking boundaries between states or by being a source of competition and confrontation between nations. For the most part the Nile has been a source of competition and confrontation among the Nile states, and hence a separating factor. It is high time that the Nile should cease to be a dividing factor and start playing a connecting role in the basin. The transition from the history of confrontation to cooperation can only be achieved by establishing a legal regime based on the principle of equitable utilization.

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