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The American University in Cairo
School of Global Affairs and Public Policy

**THE ROLE OF CUSTOMARY INTERNATIONAL WATER LAW IN
SETTLING WATER DISPUTES BY MEDIATION: AN EXAMINATION
OF THE INDUS RIVER AND Renaissance DAM DISPUTES**

A Thesis Submitted to the

Department of Law

**in partial fulfillment of the requirements for
the LL.M. Degree in International and Comparative Law**

By

Sayed Mohamed Shaarawy

June 2016

The American University in Cairo

School of Global Affairs and Public Policy

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DEDICATION

I dedicate this work to my country Egypt, my father and mother who dreamed by that day along their life, my wife Nesrine Mamdouh, my children Abd Allah and Abd Elrahman, and my brothers Eng. Ahmed and Eng. Amr.

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THE ROLE OF CUSTOMARY INTERNATIONAL WATER LAW IN SETTLING WATER
DISPUTES BY MEDIATION: AN EXAMINATION OF THE INDUS RIVER AND
Renaissance DAM DISPUTES

Sayed Mohamed Shaarawy

Supervised by Professor Hani Sayed

ABSTRACT

Managing internationally shared rivers commonly lead to disputes among the states sharing the watercourse. In general, these disputes mostly relate to water allocation, equitable and reasonable utilization, and potential for harm. Scholars argue that all of the rules of Customary international water law contradict each other and are vague. According to their points of view, this law is not efficient in resolving these disputes. This paper tries to prove the efficiency of these rules in settling these disputes because they identify the different criteria used to manage internationally shared watercourses. This paper contends that these rules whether substantive or procedural are compatible and can settle any water dispute on an equitable basis. However, the intervention of a third party as a neutral mediator especially international organization is important for narrowing the gap between disputants. To support this argument, this paper will examine the role of mediation in settling the Indus River dispute, and the Renaissance Dam dispute based on the rules of Customary international water law . This paper concludes that the rules of international customary law are coherent and effective in settling water disputes. The problem lies in its implementation, which is related to several factors. These include fact-finding, conflict of interest, and politicization of the dispute. It is for this reason that the intervention of a neutral third party, such as an international organization to act as mediator, is important in settling water disputes.

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I. Introduction:

Fear is the common theme among states which share a river. Several factors create this fear: population growth, development pressures, politics, and resource mismanagement.¹ At the same time, the quantity of water in rivers varies considerably from season to season. This is exacerbated by climate change. To illustrate, according to UN Water,² climate change is responsible for the high variability in water resources availability, inland flash floods, coastal flooding, and drought; thus, this has an effect on water quality and quantity.³ According to UN Water, by 2025 around 1.8 billion people will face water scarcity, and two thirds of the world population will live under water stress.⁴ Actually, there are 263 transboundary lakes and rivers that cover one half of the Earth's land surface.⁵ These lakes and rivers account for estimated 60 percent of global fresh water flow.⁶ Because of these facts, according to the World Research Institute, among 167 countries, 33 countries are expected to face extremely high water stress in 2040; 14 countries of these are in the Middle East.⁷ As a result of these pressures, the possibility of water disputes occurring have considerably increased. Most of these disputes relate to water allocation, water distribution, or the inequitable utilization of water.⁸

Customary international water law and international treaties impose on countries sharing watercourses many obligations involving substantive and procedural rules which are the main pillars of many conventions, resolutions, and declarations. The substantive rules are based on the use of water in an equitable and reasonable manner without causing significant harm to the basin countries. This is achieved by taking into account the interests of all of these countries, and the right of basin states to sustainable development without invoking other substantive rules. At the

¹ United Nation, *World Water Assessment Programme (WWAP)*, available at,

<http://www.unesco.org/new/en/natural-sciences/environment/water/wwap/facts-and-figures/allocating-water/>

² UN-Water is the United Nations inter-agency coordination mechanism for all freshwater related issues, available at <http://www.unwater.org/about/en/>

³ UN- Water, *Transboundary Waters: Sharing Benefits, Sharing Responsibilities*, 2 (2008), available at http://www.unwater.org/downloads/UNW_TRANSBOUNDARY.pdf.

⁴ UN-Water, *Water Scarcity Fact Sheet*, available at <http://www.unwater.org/publications/publications-detail/en/c/204294/>

⁵ UN- Water, *Supra note 3* at 2 (2008).

⁶ *Id.*

⁷ Andrew Maddocks, Robert Samuel, and Robert Samuel, *Ranking the World's Most Water – Stressed Countries in 2014*, available at <http://www.wri.org/blog/2015/08/ranking-world%E2%80%99s-most-water-stressed-countries-2014>

⁸ Helga Haftendorn, *Water and International Conflict*, 21 *Third World Q.*, 1(2000).

same time, the procedural rules are based on obligations to cooperate in good faith and to settle water disputes by peaceful means.

Applying the substantive rules of customary international water law requires cooperation among basin states. Nevertheless, because of the conflict of interests in using river water, sometimes the disputants are not able to fully cooperate. They find problems in achieving equitable and reasonable utilization with no significant harm and sustainable development. Also, differences relations between states can play a role in hindering cooperation. As a result, avoiding political conflict and balancing competing interests helps in settling water dispute. Due to mutual mistrust between disputants, the intervention of a neutral third party can narrow the gap between disputants.

This third party should be neutral and have the expertise and power to narrow this gap. Having a third party to act as a mediator is useful. In fact, mediation is characterized by being flexible in its process; in addition, it has no set of rules. Also, mediator plays an active role in narrowing the gap between disputants. For this reasons, states prefer mediation more than other diplomatic mean in resolving their international conflict in case of reaching deadlock in negotiation process.

Moreover, states prefer mediation more than international adjudication in settling international. Actually, arbitral tribunals and international courts have limited jurisdiction because their jurisdiction requires the consent of all the disputants; for example, the International Court of Justice (ICJ) has jurisdiction only if the parties have signed its statute or the disputants agree to refer the dispute to the ICJ, article 36/1.⁹ Also, such requirement is to be fulfilled in the case of arbitration. However, states refuse to submit these kinds of disputes to international adjudication because of the authority of judges and arbitrators over disputant states and the parties' inability to control the outcomes.¹⁰ To illustrate, sometimes the rules of the international law are uncertain; thus, the court has a duty to interpret and prove these rules which may not

⁹ According to article 36 / 1, The jurisdiction of the Court comprises all cases which the parties refer to it and all matters specially provided for in the Charter of the United Nations or in treaties and conventions in force. For details; Statute of the International Court of Justice, 24 October 1945, 59 Stat. 1031, T.S. No. 993 at art. 36(1).

¹⁰ Richard Bilder, *Some Limitations of Adjudication as a International Dispute Settlement Technique*, 23 Va. J. Int'l L. 13 (1982); Anna Spain, *Beyond Adjudication : Resolving International Resource Disputes in an Era of Climate Change* , 30 Stan. Env'tl. L. J. 358 (2011)

serve state`s argument. Also, states fear the bias of the court, especially, if the competent court is the ICJ.¹¹ In fact, water disputes are technically very complex, thus, settling them through international adjudication can lead to inapplicable solutions because judges and arbitrators are not experts on water issues.¹² For this reason, mediation is potentially an optimal means for settling water disputes.

This paper argues that the rules of international water law are compatible and efficient for settling water disputes; the intervention of a third party to act as a mediator is important to narrow the gap between disputants. This paper is divided into four parts. Part II elaborates on the general principles of international customary law on international watercourses focusing on substantive and procedural rules. The substantive rules include the principles of equitable utilization and no significant harm, while the procedural rules include the duties to cooperate in good faith and settle dispute peacefully. Part III elaborates the differences between mediation and the other peaceful means, for example, good offices, enquiry and conciliation, and international adjudication; in addition, the reasons that lead states to prefer it as a peaceful mean in resolving their disputes. Part IV evaluates mediation as a peaceful means for settling the Indus River dispute because the World Bank succeeded in settling this dispute and led the parties to sign the 1960 Indus treaty. Part V evaluates mediation as a peaceful means for settling the dispute over the construction of the Renaissance Dam because the parties till now have failed to settle the dispute in the absence of a neutral mediator. Part VI concludes that the rules of international customary law are coherent and effective in settling water disputes. The problem lies in its implementation, which is related to several problems. These include fact-finding, conflict of interest, and politicization of the dispute. It is for this reason that the intervention of a neutral third party, such as an international organization to act as mediator, is important in settling water disputes.

¹¹ Richard Bilder, *supra note 10*, at 3.

¹² Anna Spain, *supra note 10*, at 358.

II. The efficiency of customary international water law in settling water disputes:

International customary law imposes on countries sharing watercourses a number of obligations involving substantive and procedural rules. These are found in many conventions, resolutions, and declarations.¹³ Substantive rules are based on using water in an equitable and reasonable manner without causing significant harm to the basin countries. This is done by taking into account the interests of these countries, and the right of basin states to pursue sustainable development without invoking other substantive rules. Procedural rules are based on obligations to cooperate in good faith and to settle water disputes using peaceful means.

A fierce debate has erupted among scholars on the effectiveness of these principles. The base of their argument is on whether the rules of customary international water law can settle water disputes or not. In other words, they argue about whether the customary international water law can succeed in promoting a basis for the settling of water disputes. Opponents of the idea of the efficiency of international customary law on watercourses base their opinion on various factors. Weiss, Elvar, and Azarva contend determining equitable utilization and no significant harm is difficult in application because there it is impossible to discern which comes first; according to their problem, one state can argue that its usage is equitable while the other state can reply that this usage causes significant harm.¹⁴

¹³For example, Declaration of Madrid, Apr. 20, 1911, 24 *Ann. De L'Institut de Droit Int'l* 367 (1911); Convention Relating to the Development of Hydraulic Power affecting More than One State and Protocol of Signature, signed at Geneva on 9 December 1923. League of Nations Treaty Series, Vol 36, 76. ; Resolution of the Use of International Non-Maritime Waters of Salzburg 11 September 1961, English translation, [1974], Y.B. Int'l L.COMM'N, Vol. 2, Part 2, (1976); Helsinki Rules on the Use of Waters of International Rivers, adopted by the I.L.A. at the 52nd Conference, Helsinki, Finland, Aug. 1966, reprinted in Bogdanović, S., *International Law of water Resources: Contribution of the International Law Association (1954-200)*, 89 (Kluwer Law International, The Hague, 2001); Convention on the Protection and use of Transboundary Watercourses and International Lakes, 17th March 1992, (entered into force Oct. 6, 1996); reprinted in 31 I.L.M. 1312 (1992); Declaration of the U.N. Conference on Environment and Development, Rio de Janeiro, Brazil, June, 13, 1992; in Report on the United Nations Conference on Environment and Development, Annex I, U.N. Doc. A/Conf. 151/26 (Vol.1) reprinted in 31 I.L.M. 876 (1992); Convention on Cooperation for protection and sustainable use of the Danube River (Danube River Protection Convention), 97/825/EC available at <http://ec.europa.eu/world/agreements/prepareCreateTreatiesWorkspace/treatiesGeneralData.do?step=0&redirect=true&treatyId=587> ; Convention on the Law of Non-Navigational Uses of International Watercourses-New York, 21 May 1997, Entered into force on 17 August 2014, as an implementation of the GA.51/229, 36 I.L.M. 700 (1997).

¹⁴Edith Weiss, *International Law For a Water- Scarse World*, 7 *Hague Acad. Int'l Law*,26-29 (2013) ; Christina Carroll, *Past and Future Legal Framework of the Nile River Basin*, 12 *Geo. Int'l Env'tl. L. Rev.* 288(2000); Scott McKenzie, *Egypt's Choice: From the Nile Basin Treaty to the Cooperative Framework Agreement, an International Analysis*, 21 *Transnat'l L. & Contemp. Probs.* 594-598 (2013); Hilal Elvar, *Peaceful Uses of International Rivers : the Euphrates and Tigris Rivers Dispute*, Transnational Publishers, Inc. 194-195 (2002); Jeffrey Azarva, *Conflict on*

Eliver and Abbas add that in general the international customary law of watercourses does not take into consideration the sustainable development need of states.¹⁵ According to their opinion, in theory, states accept limited sovereignty over transboundary resources; however, in practice, states cannot accept limited sovereignty over transboundary resources. They base this difference between theory and practice that upstream states, as first users, use river water without any limit. Downstream states acting as a last owner use and increasingly abuse water flow. Indeed, opponents¹⁶ agree that the only benefit of international customary law for international water courses is to preserve cooperation and good faith which should be done under the umbrella of international organizations. According to their opinion, the conflict of interest among basin states leads them to rely on various substantive rules which contradict each other. As a result, cooperation is the key to managing water disputes.

Proponents¹⁷ of the effectiveness of the principles of international customary law on water courses argue that the determination of equitable utilization and no significant harm depends in general on the individual case. They add that the measurement can be found in what is specified in the 1997 UN Convention on the Law of the Non Navigational Uses of International Watercourses,¹⁸ which codifies the international customary law on watercourses.

the Nile : International Watercourse Law and the Elusive Effort to Create a Transboundary Water Regime in the Nile Basin, 25 Temp. Int'l & Comp. L.J. 476- 478 (2011).

¹⁵ Hilal Elvar, *Supra note 14*, at 458-459 ; Mohamed Abbas, *Towards Hydro Political Cooperation in the Nile Basin: Assessment of Joint Integrated Water Resources Projects between Sudan and Ethiopia to Transform Conflicts*, UNESCO, 24-25 (2006), Available at <http://www.css.ethz.ch/publications/pdfs/Towards-Hydropolitical-Cooperation.pdf>; Jacob Arsano, *Negotiation for a Nile Cooperation Framework Agreement*, The Institute for Securities Studies, 8 (2011), Available at <http://www.issafrica.org/uploads/Paper222.pdf>; Amer, Jacob Arsano , Atta Battani, Osman Hamad, Magdy Hafny, & Imeru Tamrat, *Sustainable Development and International Cooperation in the Eastern Nile Basin*, 1-12 (2004), Available at <http://www.environmentalexpert.com/Files%5C6063%5Carticles%5C4880%5CQG49K7FME36MPKWU.pdf> ; Jacob Arsano, *the Nile : A Shared Gift or a Subject of Contention ?* 11-13 (2011), Available at http://www.life-peace.org/wp-content/uploads/nr_2011_031.11-13.pdf; Jacob Arsano, *Ethiopia and the Nile Dilemmas of National and Hydro Politics* , Thesis Submitted to Zurich University, 250- 252 (2007), Available at <http://www.css.ethz.ch/publications/pdfs/Ethiopia-and-the-Nile.pdf>; Jacob Arsano, *Progress and Prospects of Cooperation in the Nile Basin*, 1-8 (2012), Available at <http://www.chathamhouse.org/sites/default/files/public/Research/Africa/051012sumMari.pdf>

¹⁶ Edith Weiss , *Supra note 14*, at 157- 160 ; Christina Carroll, *Supra note 14*, at 288; Scott McKenzie, *Supra note 14* ; Hilal Elvar, *Supra note 14*, at 458-459; Karlie Clemons, *Hydroelectric Dams: Transboundary Environmental Effects and International law*, 36 Fla. St. U. L. Rev. 515 (2009) ; Jeffrey Azarva, *Supra note 14*.

¹⁷ Katak Malla, *Current State of the Law of International Watercourses: Progress and Paradigm Shifts*, 77 Nordic J. Int'l L. 502 – 508 (2008); Jutta Brunee & Stephen Toope, *The Changing Nile Basin Regime : Does Law Matter?* 43 Harv. Int'l L.J. 105 (2002).

¹⁸ The 1997 UN Convention on the Law of the Non Navigational Uses of International Watercourses, *supra note 13*.

For example, the factors which relate to nature and population.¹⁹ In addition, scholars like Abseno find that all the principles of international customary law on international watercourses should be applied together to solve conflicts over the construction of hydroelectric dams on international watercourses.²⁰

A.Substantive rules:

Substantive rules are rules regarding the equitable and reasonable utilization of the waterways, causing no significant harm, and the right to sustainable development. They aim to attain and sustain utilization of shared rivers.

1.Equitable and reasonable Utilization:

Equitable and reasonable utilization is one of the main principles that promote a settlement of disputes over the utilizations of international rivers for non-navigational uses. Nationally, the earliest court to apply this principle was the Federal Court of Switzerland in 1898, in a decree concerning Zurich and Aargau cantons.²¹ The court based its decision on the equal rights of cantons to use the interstate river. This principle has been applied by the U.S courts concerning the utilization of interstate rivers, for example, in the case of *Kansas v. Colorado* in 1907,²² and *New Jersey v. New York* in 1931.²³ It has also been applied in many international cases, for example in the *Indus River, Lake Lanoux*,²⁴ and *Gabcikovo-Nagymaros* project cases.²⁵

According to this principle, each state has equal rights with those of other basin states. Subject to article IV of the 1966 Helsinki Rules on the Uses of the Waters of International Rivers, “each basin state is entitled, within [its] territory, to a reasonable and equitable share in

¹⁹ For details see , Edith Weiss, *Supra note 14*, at 28 .

²⁰ Mousa Abseno, *How Does the Work of the ILC and the General Assembly on the Law of International Water Courses Contribute Toward a Legal Frame Work for the Nile Basin? University of Dundee*, 110 (2009), Available at http://discovery.dundee.ac.uk/portal/files/1159766/Abseno_llm_2009.pdf.

²¹ *Zurich v. Aargau* (1898), 4 Entscheidungen des Schweizerischen Bundesgerichts 34 at 37, 47, in Legal Aspects of the Hydro-Electric Development of Rivers and Lakes of Common Interest UN Doc. E/ECE/136 (1952)

²² *Kansas v. Colorado*, 206 U.S. 46 (1907)

²³ *New Jersey v. New York*, 283 U.S. 336 (1931); For details of these cases see , Yosef Yacob, *Equitable Utilization in the Blue River Sub- Basin : Context, Problems, and Prospects*, York University , Dissertation, 401- 403 (2002); TadesseWoldetsadik , *International Watercourses Law in the Nile Basin* , 196 (2013).

²⁴ *Lake Lanoux Arbitration (France v. Spain)*, [1957] Int'l L. Rep. 101.

²⁵ Judgment in Case Concerning *the Gabcikovo-Nagymaros Project*, ICJ (1998) 37 I.L.M. 162.

the beneficial uses of the waters of an international drainage system.”²⁶This determination is also included in the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes, article 2 (1) (c).²⁷ And, it is mentioned in article 5 of the 1997 United Nations Convention on the Law of the Non-Navigational Uses of International Watercourses,²⁸

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 there from , taking in account the interests of the watercourse states concerned , consistent with adequate protection of the watercourse²⁹

The aim behind such a determination is to achieve the optimal utilization of rivers, constant with adequate protection of the watercourse. Subject to the International Law Commission (ILC) commentary on articles 5 and 12 of the 1997 UN Convention, the expression “with a view to” indicates that the attainment of optimal utilization and benefits is “the objective to be sought by watercourse states in utilizing an international Watercourse”³⁰ Also, the ILC assures that optimal utilization does not mean achieving maximum use. It means, rather, the use of efficient technology to control loss.³¹ Thus, the principle of equitable and reasonable utilization aims to attain maximum possible benefit for all watercourse states when using the waters of rivers in order to satisfy their needs to achieve sustainable development.

In fact, international conventions like the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes (UNECE)³² and the 1997 UN Convention on the Law of Non-Navigational Uses of International Watercourses³³ do not define equitable and reasonable utilization. However, they do both articulate different considerations in a non-

²⁶Muhammad Rahman ,*Principles of International Water Law : Creating Effective Transboundary Water Sustainable*, 1 Int. J. Sustainable Society, 210 (2009); International Law Association, *Berlin Conference 2004* , Fourth Report, 20 (2004); Available at http://www.unece.org/fileadmin/DAM/env/water/meetings/legal_board/2010/annexes_groundwater_paper/Annex_I_V_Berlin_Rules_on_Water_Resources_ILA.pdf

²⁷Convention on the Protection and use of Transboundary Watercourses and International Lakes, supra note 13.

²⁸ The UN Convention on the Law of Non-Navigational Uses of International Watercourses, supra note 13

²⁹ *Id.*

³⁰The International Law Commission, *Draft Articles on the Law of the Non- Navigational Uses of International Watercourses and Commentaries Thereto and Resolution on Transboundary Confined Groundwater Ground*, 1994 U.N.Y.B. Int'l L. Comm'n 97 (1994); International Law Association, *Berlin Conference 2004* , *Supra note 26*

³¹The International Law Commission, *Supra note 30*, at 94.

³²*Supra note 13*

³³ *Supra note 13.*

exhaustive list to help define equitable and reasonable utilization.³⁴In order to determine equitable and reasonable utilization, considerations such as the geography and hydrology of the basin , size of the population dependent on the waters , economic and social needs, existing utilization of waters, potential needs, climatic and ecological factors and the nature and availability of other resources are to be taken into account. It is incorporated in articles 3, 7, 8, and 9 of the 1996 Mahakali River Treaty³⁵ and in articles 4, 5, 6 ,and 26 of the 1995 Mekong Agreement.³⁶ Moreover, it is stated in articles 7, 8, and 9 of the 2002 Sava River Basin Agreement³⁷ and in article 2 (2) (c) of the 1992 UNECE Water Convention.³⁸

Defining the equitable and reasonable utilization depends on its aim which is achieving equity among basin states in benefitting from the waters.³⁹The International Court of Justice (ICJ) promotes this point in its decision on *Gabcikovo-Nagymaros Project* case and in the decision of the Permanent Court of International Justice, when determining the applicability of the Treaty of Versailles to certain navigable tributaries of the River Oder. The ICJ saw equity as the “all perfect equality of all riparian States in the User of the Whole of the course of the river and the exclusion of any preferential privilege of any one riparian state in relation to the others.”⁴⁰ In the *Lake Lanoux* case, the arbitral tribunal highlights equity in a straight forward fashion: “account must be taken of all interests, of whatsoever nature, which are liable to be

³⁴Article v of the 1966 Helsinki Rules on the Uses of the Waters of International Rivers, *supra* note 13; article 6 of the 1997 UN Convention, *supra* note 13 , and article 13 of the 2004 Berlin rules, *supra* note 26.

³⁵Treaty Between His Majesty’s Government of Nepal And The Government of India Concerning The Integrated Development of the Mahakali Barrage Including Sarada Barrage, Tanakpur Barrage and Pancheshwar Project, 1996, available at http://www.internationalwaterlaw.org/documents/regionaldocs/Mahakali_Treaty-1996.pdf.

³⁶Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin, 1995, 34 I.L.M. 864

³⁷Framework Agreement of the Sava River Basin, 2002, available at

http://www.savacommission.org/dms/docs/dokumenti/documents_publications/basic_documents/fasrb.pdf.

³⁸*Supra* note 13

³⁹For Further see , Salman Salman, *The Helsinki Rules, the UN Watercourses Convention and the Berlin Rules: Perspectives on International Water Law*, 23 WATER RESOURCES DEV. 632

(2007); Yosef Yacob, *Supra* note 23, at 418 ; Stephen McCaffrey, *The UN Convention on the Law of the Non Navigational Uses of International Watercourse : Prospects and Pitfalls*, World Bank Technical Paper No. 25, 19 (1997), Available at http://www.unece.org/fileadmin/DAM/env/water/cwc/legal/UNConvention_McCaffrey.pdf, Accessed on 11/1/2015 ; Owen McIntyre, *Utilization of Shared International Freshwater Resources – the Meaning and Role of Equity in International Water Law* , 38 Water Int’l , 112-119 (2013).

⁴⁰The Permanent Court of International Justice, *Territorial Jurisdiction of the International Commission of the River Oder*, *Judgment No. 16, 1929, P.C.I.J., Series A, at 27* ; Yosef Yacob, *Supra* note 23, at 402 ; Joseph Dellapma, the *Customary International Law of Transboundary fresh waters*, 1 Int. j. Global Environmental Issues, 272(2001).

affected by the works undertaken, even if they do not correspond to a right.”⁴¹The same can be concluded from principle 21 of 1972 Stockholm Declaration ⁴² and principle 2 of the 1992 Rio Declaration.⁴³

To conclude, equitable and reasonable utilization does not mean that each state has identical share of and benefits from the uses of water. It means reaching an equitable balance of interests for all basin states depending on a number of relevant factors.⁴⁴Finally, it is a general and flexible principle enabling it to accommodate an enormous range of conditions pertaining to different river basins and the different types and location disputes which might arise.

2.No significant harm

No significant harm is the second principle of international customary law of international watercourses.⁴⁵This principle is stated in many international, regional, and bilateral conventions and initiatives, including, for example, Declaration of Madrid article II 1911, paragraph 2 and 3;⁴⁶the 1961 Salzburg Resolution on the International Non-Maritime Waters article III and IV;⁴⁷the 1966 Helsinki rules article X;⁴⁸ the 1972 Stockholm Declaration principle 21;⁴⁹ the 1992 Convention on the Protection and Use of Transboundary Water and International Lakes article 2 paragraph c;⁵⁰ the Agreement on the Cooperation for the Sustainable Development of the Mekong River article 8; ⁵¹the 1997 UN Convention on the Law of Non- Navigational Uses of International Watercourses article 7;⁵² and the 2004 Berlin rule article 16.⁵³

⁴¹*Lake Lanoux Arbitration*, *Supra* note 24, at 101, 281; Yosef Yacob, *Supra* note 23, at 408 ; William Griffin, *The Use of Waters of International Drainage Basins Under Customary International Law*, 53 *Am. J. Int'l L.* 62 (1959).

⁴²United Nations Conference on the Human Environment, 16 June 1972, 11 I.L.M. 1416 at 1420, UN Doc. A/conf/48 C.R.P (1974)..

⁴³Rio Declaration on Environment and Development, 13 June 1992, UN Doc. A/Conf.151/5/Rev.1, 31 I.L.M, 874 at 876, principle 2.

⁴⁴The ICJ adopted this approach in mention equity in general in the 1982 Tunisia-Libya Continental Shelf case. It held that it was “Equitable principles” . . . refers back to the principles and rules which may be appropriate in order to achieve an equitable result. Owen McIntyre, *Supra* note 39 , at. 112-119,122; Muhammad Rahman, *Supra* note 26, at 210. TadesseWoldetsadik , *Supra* note 23, at 201; Mila Versteg, *Equitable Utilization or the Right to Water? Legal Responses to Global Water Scarcity*, 13 *Tilburg Foreign L.Rev.* 374 (2007).

⁴⁵TadesseWoldetsadik ,*Supra* note 23, at 149.

⁴⁶Declaration of Madrid.*supra* note 13.

⁴⁷ Resolution of the Use of International Non-Maritime Waters of Salzburg 11 September 1961,*supra* note 13.

⁴⁸ The International Law Association, *The Helsinki Rules*, 11 (1966), Available at http://www.internationalwaterlaw.org/documents/intldocs/Helsinki_Rules_with_comments.pdf

⁴⁹ United Nations Conference on the Human Environment, *supra* note 42

⁵⁰ *Supra* note 13

⁵¹ Agreement on the Cooperation for the Sustainable Development of the Mekong River, *supra* note 36.

⁵² *Supra* note 13.

The principle of no significant harm has also been applied in the cases of the *River Oder*,⁵⁴ *Lake Lanoux*,⁵⁵ and *Gabcikovo- Nagymarous Project Case*.⁵⁶

Under this obligation, each basin state must exercise due diligence and take all appropriate measures to utilize a watercourse in a way so as to not to cause significant harm to another basin state.⁵⁷ If significant harm occurs, depending on the nature of harm resulting from a water-related activity,⁵⁸ the injured state is to take all appropriate measures to minimize this harm and consult with the injuring state about these measures,⁵⁹ in light of the equitable and reasonable utilization principle and its factors of determination, with special regard to the vital requirement for human need, as it is understood to be inherently inequitable and unreasonable.⁶⁰ This vital needs which is closely related to ordinary uses for example drinking, cooking and sanitary.⁶¹ To illustrate, any artificial use like economic development is not considered as a vital need.⁶²

The nature of the no significant harm is mentioned by the ILC in its commentary on the second draft of the 1997 UN Convention. It contends that this obligation is an obligation of conduct, not an obligation of result.⁶³ In other words, a basin state is considered breaching this rule, if it knew or ought to have known that its utilization may cause significant harm.⁶⁴ To elaborate, the responsibility of a basin state can only be raised if it has intentionally or negligently caused significant harm to another basin state.⁶⁵ The principle of no significant harm is not an absolute obligation; it may be mitigated by several factors, depending on the circumstances of the particular case. Moreover, the harm must be significant and unreasonable,

⁵³ International Law Association, *Supra note 26*, at 22.

⁵⁴ The Permanent Court of International Justice, *Supra note 40*.

⁵⁵ *Lake Lanoux Arbitration*, *Supra note 24*.

⁵⁶ Project GabCikovo-Nagymaros , *Supra note 25*, at 56.

⁵⁷ The International Law Commission, *Supra note 30*, at 103- 104; Stephen Mccffrey, *An Assessment of the Work of the International Commission*, 36 Nat. Resources J. 310(1996); Salman Salman, *Supra note 39*, at 634; Karlie Clemons, *supra note 16*, at 515 ; Jeffrey Azarva, *Supra note 14*, at 478; Muhammad Rahman, *Supra note 26*, at 211.

⁵⁸ International Law Association, *Supra note 26*, at 23.

⁵⁹ Maria Doria, *the Principle of Co-operation in the Law of International Watercourses, A Thesis Submitted Infulfillment of the Requirements for the Degree of Doctor of Philosophy, University of London*, 100 (2008).

⁶⁰ Stephen Mccffrey, *Supra note 57*, at 311; The International Law Association, *Supra note 26*, at 12, 22.

⁶¹ The International Law Association, *Supra note 26*, at 12, 22.

⁶² The International Law Association, *Supra note 26*, at 12, 22.

⁶³ The International Law Commission, *Supra note 30*, at 103- 104; Stephen Mccffrey & Mpazi Sinjela, *The 1997 United Nations Convention on International Watercourses*, 92 *Am. J. Int'l L.* at 100 (1998).

⁶⁴ Pacteria Wouters, *An Assessment of Recent Developments in International Watercourse Law through the Prism of the Substantive Rules Governing Use Allocation*, 36 Nat. Resources J. 423(1996).

⁶⁵ The International Law Commission, *Supra note 30*, at 103- 104.

and the obligation is one of due diligence.⁶⁶ To illustrate, this principle does not obligate state to prevent every harm; however, it obligates basin state not to cause significant harm to other basin states. Under this obligation, watercourse state should take all appropriate measures in order not to cause significant harm to another basin state.⁶⁷ Also, the basin state should prevent any activities that can involve significant risk of causing such harm.⁶⁸ As a result, arguments may be raised because the application of this principle is incompatible with the application of equitable utilization of river water.

Some authors⁶⁹ maintain that no significant harm may cause a reciprocal problem; the injured state may rely on no significant harm, while the harming state may rely on the argument that its usage is equitable; as a result, the dispute will not be settled. The perspective of basin states differ, for example, if an underdeveloped upstream state seeks to develop its water resources for hydroelectric and agricultural purposes, it will rely on the equitable and reasonable utilization principle. On the other hand, the downstream country may take the no significant harm principle as an argument.⁷⁰

Such authors⁷¹ argue that solving this problem is complicated due to the equivocation of international customary law in determining the primacy of equitable and reasonable utilization or no significant harm. They propose that the old draft of the 1997 UN Convention, submitted by the ILC in 1991 gave primacy to the principle of no harm.⁷² However, article 7(2) of the final revision of the 1997 UN Convention, submitted by ILC in 1994, suggests the primacy of equitable utilization as it does not exclude the significant harm;⁷³ on the contrary, it permits

⁶⁶ Elias Stebek, *Eastern Nile at Cross Roads: Preservation and Utilization Concerns in Focus*, 1 Mizan L. Rev. 50 (2007); Joseph Dellapenna, *Supra note 40*, at 279.

⁶⁷ The International Law Commission, *Supra note 30*, at 103- 104.

⁶⁸ Nahid Islam, *The Regime of International Watercourses and Transboundary Management of the Ganges River Basin*, Dissertation Submitted to Dalhousie University, 50-54 (1993).

⁶⁹ Elias Stebek, *Supra note 66*, at 53; Stephen Mccaffrey, *the Primacy of the Principle of Equitable Utilization in the 1997 Watercourse Convention*, 35 Can. Y.B. Int'l L. 227(1997); Karlie Clemons, *Supra note 16*, at 515; Salman Salman, *Supra note 39*, at 633.

⁷⁰ Stephen McCffrey, *the Contribution of the UN Convention on the Law of the Non Navigational Uses of International Watercourse*, 1 Int L J. Global Env'tl. Issues 250, 250 (2001); Salman Salman, *Supra note 39*, at 633.

⁷¹ Itay Fischhendler, *When Ambiguity in Treaty Design Becomes Destructive: a Study of Transboundary Water*, 8 Global Env'tl. Pol. 111,112(2008); Jeffrey Azarva, *Supra note 14*, at 478; TadesseWoldetsadik, *Supra note 23*, at 149-150.

⁷² Stephen Mccffrey, *Supra note 57*, at 309; Joseph Dellapenna, *Supra note 39*, at 279; Elias Stebek, *Supra note 66*, at 49.

⁷³ Mila Versteeg, *Supra note 44*, at 376.

significant harm in certain circumstances.⁷⁴ They reinforce their idea by stating that the ILC commentary on this version contradicts itself. According to their analysis, although it mentions that watercourse states should avoid causing significant harm to another watercourse state, equitable and reasonable utilization may involve a significant harm to another watercourse state, thus remains the guiding criteria in balancing interests at stake.⁷⁵ However, the ILC commentary mentions that the requirement of due diligence “sets the threshold for lawful state activity;”⁷⁶ as a result, the ILC returns back to the primacy of the principle of no harm. These authors also corroborate their argument by stating that the same problem exists in the 1992 UN Convention on the Protection of International Watercourse and International Lakes, the 1995 Mekong Agreement, and the 2004 Berlin Rules.

Analytically, there is no clash between the principle of equitable and reasonable utilization and the principle of no significant harm. Actually, the principle of no significant harm is complementary to the principle of equitable and reasonable utilization.⁷⁷ According to the ILC commentary, the principle of no significant harm is to reach an equitable result between the different interests of basin states.⁷⁸ Also, the ILA commented the same, according to its commentary, the harm is significant if it interferes with or prevents a reasonable use of water.⁷⁹

To illustrate, according to the analysis of 1997 UN Convention article 7 paragraph 2, no significant harm is to be interpreted through the lens of equitable utilization.⁸⁰ Moreover, no significant harm is one of the determinants of equitable utilization. The 1997 UN Convention, Article 6 states the effect of use or uses of watercourse on other watercourses. In fact, the interpretation of no significant harm through the lens of equitable utilization does not mean the

⁷⁴ Jeffrey Azarva, *Supra note 14*, at 478; Karlie Clemons, *Supra note 16*, at 515-517; Salman Salman, *Supra note 39*, at 637.

⁷⁵ Molcolm Gender, *the Role of International Water Law and Supporting Universally Applicable Water Management Principles in the Development of a Model Transboundary Agreement Between Riparians in International River Basins*, a Dissertation Submitted in Partial Fulfillment of the Degree of Doctor of Philosophy, Washington State University, 19 (2013); Joseph Dellapma, *Supra note 39*, at 283.

⁷⁶ Pacteria Wouters, *Supra note 64*, at 423.

⁷⁷ Molcolm Gender, *Supra note 75*, at 20, 26; Elias Steblk, *Supra note 63*, at 53; Charles Bournie, *The International Law Association's Contribution to International Water Resources Law*, 36 Nat. Resources J., 155-216 (1996).

⁷⁸ International Law Commission, *Supra note 30*, at 103

⁷⁹ The International Law Association, *Supra note 48*, at 14.

⁸⁰ Jeffrey Azarva, *Supra note 14*, at 478; Elias Stebek, *Supra note 66*, at 50; Salman Salman, *Supra note 39*, at 634; Salman Salman, *Dams, International, Rivers, and Riparian: an Analysis of the Recommendations of the World Commission on Dams*, 16 Am. U. Int'l L. Rev. 1487 (2001); Stephen Mccaffrey, *Supra note 69*, at 227.

primacy of the principle of equitable utilization over the principle of no significant harm. According to the 1997 UN Convention Article 10 provisions, there is no inherent priority use of one use over other uses. This approach find its roots in the *Lake Lanoux* arbitration. The court stated that “account must be taken of all interests, of whatever nature, which are liable to be affected by the works undertaken, even if they do not correspond to a right.”⁸¹ And, in discussing the division of waters of *Lake Lanoux* and the responsibility of France, “it could have been argued that the works would bring about a definite pollution of the waters of the canal or that the returned waters would have a chemical composition or a temperature or some other characteristic which could injure Spanish interest.”⁸² This approach is also applied by ICJ in the case of *Gabcikovo- Nagymarous Project*; the court reasoned that:

In 1929, the Permanent Court of International Justice, with regard to navigation on the River Oder, stated the following:[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 the others’⁸³

The ICJ also reasoned that Hungary is entitled to compensation for the damage sustained as a result of the diversion of the Danube, since Czechoslovakia, by putting into operation variant C, and Slovakia, in maintaining it in service, deprived Hungary of its rightful portion of the shared water resources, and exploited those resources essentially for their own benefit. Given the fact, however, that there have been intersecting wrongs by both parties, according to it “the Court wishes to observe that the issue of compensation could satisfactorily be resolved in the framework of an overall settlement if each of the Parties were to renounce or cancel all financial claims and counter-claims.”⁸⁴ To conclude, the aim of these principles equitable utilization and no significant harm is to achieve a balance between different uses.⁸⁵

⁸¹*Lake Lanoux* Arbitration, *Supra* note 24, at 101.

⁸²The International Law Association, *Supra* note 48, at 12.

⁸³ Project GabCikovo-Nagymaros, *Supra* Note 25, at 56, para 85.

⁸⁴ Project GabCikovo-Nagymaros, *Supra* note 25, at 78.

⁸⁵ Molcolm Gender, *Supra* note 75, at 20,26 ; Elias Stebek, *Supra* note 66, at 53 ; Charles Bourne, *Supra* note 76 ,at 155-216.

⁸⁵International Law Association, *Supra* note 26, at 15.

3.Sustainable Development:

Sustainable development is part of the international customary law of watercourse designed to save the usage of water for future generations.⁸⁶ Although sustainable development is implied in the 1966 Helsinki Rules, stating the different criteria for determining the equitable utilization,⁸⁷ it was first incorporated in principles 4 and 6 of the 1972 Stockholm Declaration.⁸⁸ It spread then to many different bilateral and international agreements, conventions and initiatives, including for example the 1997 UN Watercourse Convention, articles 5(1) and 24.⁸⁹ It was also recognized in paragraph 140 of the International Court of Justice in *Gabcikovo- Nagymarous Project* case, the court stated:

Such new norms [relating to protection of the environment] have to be taken into consideration, and such new standards given proper weight, not only when States contemplate new activities but also when continuing activities began in the past. This need to reconcile economic development with protection of the environment is aptly expressed in the concept of sustainable development.⁹⁰

The application of this principle reduces distance between the notion of river water management,⁹¹ and its main objective of protecting the environment and enhancing development.⁹² In this context, international instruments and authors have defined sustainable development as “development that meets the needs of the present without comprising the ability of future generations to meet their own needs.”⁹³ To better understand this definition, the principle of the sustainable development is not an absolute principle,⁹⁴ it is related to the other principles such as equitable utilization and no significant harm.⁹⁵ According to the ILC commentary on article 24 of the 1997 UN Convention:

The use of terms in this article such as "sustainable development" and "rational and optimal utilization" is to be understood as relevant to the process of

⁸⁶ International Law Association, *supra* note 26

⁸⁷ See article V, The International Law Association, *Supra* note 48, at 4.

⁸⁸ Declaration of the UN Conference on the Human Environment, *supra* note 42

⁸⁹ *Supra* note 13

⁹⁰ Project Gabcikovo-Nagymaros, *Supra* note 25, at 78.

⁹¹ Maria Doria, *Supra* note 59, at 110; Elias Stebek, *Supra* note 66, at 55; Yosef Yacob, *Supra* note 23, at 414.

⁹² Maria Doria, *Supra* note 59, at 110; Elias Stebek, *Supra* note 66, at 63; Yosef Yacob, *Supra* note 23, at 414.

⁹³ Maria Doria, *Supra* note 59, at 107; Elias Stebek, *Supra* note 66, at 63; Karlie Clemons, *Supra* note 16, at 506; Salman Salman, *Supra* note 39, at 632; Salman Salman, *the United Nations Watercourses Ten Years Later : Why Has its Entry in to Force Proven Difficult?*, 32 Int'l L. Ass'n Rep. Conf, 4 (2007); Yosef Yacob, *Supra* note 23, at 413; the same meaning is indicated by the ILC, International Law Commission, *Supra* note 30, at 125

⁹⁴ Karlie Clemons, *Supra* note 16, at 506.

⁹⁵ International Law Association, *Supra* note 26, at 22.

management. It in no way affects the application of articles 5 and 7 which establish the fundamental basis for the draft articles as a whole.⁹⁶

Actually, the main aim of connecting the three principles to one another is to obligate states to develop river water in ways that protect the interests of all basin states.⁹⁷ According to the 1992 Rio Declaration, principle 3, "[t]he right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations."⁹⁸ This approach is also confirmed in article 5 of the Protocol on Water and Health to the 1992 Convention on the Protection and use of Transboundary Watercourse and International Lakes.⁹⁹ Additionally, it is embodied in the preamble of the 2003 Convention on the Sustainable Development of Lake Taganyika.¹⁰⁰ Furthermore, articles 3, 4, 5, and 15 of 2003 Protocol for Sustainable Development of Lake Victoria¹⁰¹ state that the right to sustainable development is a right for the parties;¹⁰² however, each party is to take into account the interest of the other parties, the principle of equitable utilization and no significant harm. This vision is stated in the Nile Basin Initiative; with the aim being "[T]o achieve sustainable socioeconomic development through the equitable utilization of, and benefits from, the common Nile Basin water resources."¹⁰³ This principle, subject to principle 4 of Rio Declaration is "to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation"¹⁰⁴

B. Procedural rules:

The procedural rules are imposed by the Customary international water law on states in order to put the substantive rules in the application of managing shared river waters. These rules are the duty to cooperate and peaceful settlement which are discussed in the following section.

⁹⁶ The International Law Commission, *Supra note 30*, at 125.

⁹⁷ Karlie Clemons, *Supra note 16*, at 507.

⁹⁸ Rio Declaration on Environment and Development, *Supra note 43*.

⁹⁹ The 1992 Convention on the Protection and use of Transboundary Watercourse and International Lakes, United Nation, *Supra note 26*.

¹⁰⁰ The 2003 Convention on the Sustainable Development of Lake Taganyika, available at, <http://www.ecolex.org/ecolex/ledge/view/RecordDetails?index=treaties&id=TRE-001482>.

¹⁰¹ EAC, Protocol for Sustainable Development of Lake Victoria Basin, Nov. 29, 2003, available at <http://www.internationalwaterlaw.org/documents/regionaldocs/Lake-Victoria-Basin-2003.pdf>.

¹⁰² The Parties of this protocol are the Republic of Kenya, Uganda, and Tanzania.

¹⁰³ Ryan Stoa, *the United Nations Watercourses Convention on the Dawn of Entry into Force*, 47 Vand. J. Transnat'l L. 1358 (2014).

¹⁰⁴ Rio Declaration on Environment and Development, *Supra note 43*

1.Cooperate in good faith:

The duty to cooperate consists of collective actions between two states or more in order to achieve a common progress in certain aspects.¹⁰⁵ In the context of international watercourse management, it consists of several activities to be carried out in good faith. The aim of such activities is to manage the river waters to mutual benefit, for the optimal utilization and adequate protection of an international watercourse,¹⁰⁶ to reach an equitable solution, and to reach sustainable development.¹⁰⁷ In fact, the functions of this obligation are to ultimately implement the basin states obligations of equitable utilization and no significant harm. Moreover, it measures the degree of due diligence in preventing significant harm, and it has a role in eliminating this harm as well as solving disputes.¹⁰⁸ It is an action to reach one goal, which is the optimal utilization of shared rivers.¹⁰⁹ According to Special Rapporteur McCaffrey, he states that:

It cannot lightly be presumed that state practice has created such a legal state of affairs, since this would mean that the norm of equitable utilization, in effect, creates dispute rather than avoiding them. There would be no legal certainty in respect of states use of international watercourse [...] the practice of states does attest to the existence of a procedural complement to the substantive norm of equitable utilization . Without the sharing of data and information and without prior notification of planned projects or new uses, the doctrine of equitable utilization would be of little use to states in planning their watercourse activities; it would be of use principally for third – party dispute settlement.¹¹⁰

These functions can be seen in the judgment of the ICJ in the *Gabcikovo- Nagymarous Project* case. In this case, the tribunal held that the:

The consequences of the wrongful acts of both parties will be wiped out “as far as possible”, if they resume their cooperation in the utilization of the shared water resources of the Danube, and if the multi-purpose program , in the form of a coordinated single unit, for the use, development and protection of the watercourse is implemented in an equitable and reasonable manner. What is

¹⁰⁵ Maria Doria, *Supra note 59*, at 116.

¹⁰⁶ Owen McIntyre, *International Water Resources Law Relative Priority Accorded to Enviromental Protection*, 38 *Envtl.Pol’y& L.* 134 (2008).

¹⁰⁷ Maria Doria, *Supra note 59* , at 108.

¹⁰⁸ Dante Caponera , *Patterns of Cooperation in International Water Law: Principles and Institutions*, 25 *Nat. Resources J.* 563 1985.

¹⁰⁹ Maria Doria, *Supra note 59*, at 128 ; Yaser Khalaileh, *Prospects for Cooperation and Dispute Over Water in the Middle East*, 5 *Berkeley J. Middle E. & Islamic L.* 83 (2012).

¹¹⁰ Maria Doria, *Supra note 59* , at 190.

possible for the Parties to do is to reestablish cooperative administration of what remains of the project ¹¹¹

The duty of cooperation is a positive duty that imposes on basin states the duty to cooperate in order to use water resources efficiently and to protect international waters.¹¹² The duty to cooperate requires two positive actions: to exchange data and information about the conditions of the international river waters regularly, and to notify other basin states any planned measures.¹¹³

a. Obligation to exchange data and information:

The obligation to exchange data and information is articulated in many multilateral and bilateral conventions.¹¹⁴ Under this obligation, basin states are obliged to exchange all relevant data about the conditions of the shared river water, whether quantity or quality. This information may include technical information for a program, plan, project or activity and the results of any impact assessment.¹¹⁵ Also, it may be hydrological, meteorological, hydro-geological, and ecological related data, or related to water quality.¹¹⁶ If one of the basin states fails to carry out any of this, it must make its best effort to collect and process this information.¹¹⁷ Alternatively, other basin states must cooperate with this state. Each state has also the right to demand from other basin states any such information related to the physical characteristics of a shared river.¹¹⁸

In fact, sharing available data and information is important to the management of the shared rivers.¹¹⁹ Sharing this data among basin states is a means to determine their equitable and

¹¹¹ Maria Doria, *Supra note 59*, at 97.

¹¹² Salman Salman, *Downstream Riparians can Also Harm Upstream Riparians : the Concept of Foreclosure of Future Uses*, 35 *Water Int'l* , 358 (2010). ; Salman Salman, *The World Bank policy and practice for projects affecting shared aquifers*, 36 *Water Int'l* , 597 (2011).

¹¹³ Adele J. Kirschner and Katrin Tiroch, *The Waters of Euphrates and Tigris: An International Law Perspective*, 16 *Max Planck Y.B. U.N. L.* 360 (2012); Jonathan Chenoweth, *International River Basin Management :Data and Information Exchange under International Law and the Case of the Mekong River Basin*, 18 *J. Energy & Nat. Resources L.* 148 (2000); Owen McIntyre, *Benefit-sharing and upstream/downstream cooperation for ecological protection of transboundary waters: opportunities for China as an upstream state*, 40 *Water Int'l* , 48–70 (2015); Owen McIntyre, *Supra note 104*, at 132 ; Maria Doria, *Supra note 59*, at 100,127.

¹¹⁴ For example, the 1923 Convention relating to the Development of Hydraulic Power Affecting more than One State articles 2 and 3, *Supra note 13* ; the 1960 Indus Treaty article 6, *Indus Waters Treaty, India & Pakistan* (1960) 419 *U.N.T.S.* 125 ; the 1966 Helsinki Rules article XXIX, *supra note 13*; the 1997 UN Convention on the Law of the Non-Navigational Uses of International Watercourses article 9, *supra note 13*.

¹¹⁵ Salman Salman , *Supra note 112*

¹¹⁶ Jonathan Chenoweth, *Supra note 113*, at 149.

¹¹⁷ International Law Commission, *Supra note 30*, at 107.

¹¹⁸ Maria Doria, *Supra note 59*, at 191.

¹¹⁹ Jonathan Chenoweth, *Supra note 113*, at 142.

reasonable utilization of a shared river so as not to cause significant harm to each other.¹²⁰ However, there are exemptions from exchanging available data and information. Some of these exemptions are related to intellectual property rights, commercial or industrial secrets, individual privacy, and national security.¹²¹ Nevertheless, basin states are obligated to cooperate in good faith in any circumstances so as not to invoke their obligation under the principles of equitable and reasonable utilization, no significant harm, sustainable development, and duty to cooperate,¹²² as such principles aim to optimize multiple use of shared river waters and mutual benefit.

b. Obligation of notification by planned measures:

The obligation of notification by planned measures is incorporated in many international and bilateral conventions and agreements.¹²³ This obligation is based on the effort to determine how to best manage shared rivers. It was deduced by the Permanent Court of International Justice (PCIJ) in its judgment in the case concerning the Territorial Jurisdiction of the International Commission of the River Oder in 1929. The court decreed that it is "community of interests in a navigable river [which] 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 in relation to the other."¹²⁴ The same point was made by the arbitral court in resolving the case of *Lake Lanoux*. In this case, the court asserted that the upper-stream states should take into account the interests of other basin states.¹²⁵

The obligation of notification by planned measures imposes on upstream and downstream basin states the duty to exchange data and information about the possible effect of the planned

¹²⁰ Jonathan Chenoweth, *Supra note 113*, at 144

¹²¹ Jonathan Chenoweth, *Supra note 113*

¹²² Maria Doria, *Supra note 59*, at 197.

¹²³ For instance, the 1923 Geneva Convention Relating the Development of Hydraulic Power Affecting More than One State the art. 2 and 3, *supra note 13*; the article 9 and 10 of 1961 Salzburg Resolution on the Use of International Non-Maritime Waters, *supra note 13*; the article V 1966 Helsinki Rules, *supra note 13*; the article XXIX of 1982 Montreal Rules on Pollution; the article 12, 28, and 28 of 1997 UN Convention on the Law of the Non-Navigational Uses of International Watercourses, *supra note 13*; the article 6 and 13 of 1992 UN/ECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes, *supra note 13*.

¹²⁴ The Permanent Court of Justice, *Supra note 40*, at 27. Yasser Khalaileh, *Supra note 109*, at 87.

¹²⁵ Lake Lanoux Arbitration, *Supra note 24*, at 101 Paragraph 11 (third subparagraph), at 289 Paragraph 22 (second subparagraph); Yasser Khalaileh, *Supra note 109*.

measure.¹²⁶ This planned measure can be major projects like constructing dams or programs of a more minor nature which can be planned and implemented by the public or private sector. Any planned measures which may have an effect on the condition of shared rivers basin states requires exchanging accurate data and information about them. This effect can be beneficial or adverse; however, the adverse should be significantly lower than that of significant harm to avoid it.¹²⁷

The only international conventions which provide detailed procedures on the system of notification is 1997 UN Convention articles 11 to 19,¹²⁸ and the 2004 Berlin Rules on Water Recourses Law articles 56 to 61.¹²⁹ An analysis of other bilateral and international agreements and conventions,¹³⁰ there is certain consensus among them about certain aspect of this system. This obligation is imposed when a riparian state intends to construct a new project in its territory, for example, a dam.¹³¹ This interested state is obligated to notify the affected state or any competent international organization in order to fulfill this obligation. Moreover, it should provide the affected state with the relevant technical data and information and the results of any impact assessment, relating to the activity and risks involved as well as the potential harms to the states likely to be affected.¹³²

If these steps do not happen, the injured state must send a notice to interested state, as soon as possible, to notify it of the planned measures. It should be accompanied by supporting documents that this planned measure has significant adverse effects.¹³³ In fact, the injured state has the right only to determine that it is affected by the planned measures. In the case of *Lake Lanoux*, the arbitral tribunal decreed that “a state wishing to carry out such that which will affect an international watercourse cannot decide whether another state interest will be affected; the

¹²⁶ International Law Commission, *Supra* note 30, at 111

¹²⁷ The International Law Commission, *Supra* note 30, at 111.

¹²⁸ The International Law Commission, *Supra* note 30, 111- 118.

¹²⁹ International Law Association, *Supra* note 26 , at 46- 49.

¹³⁰ For instance, the 1923 Geneva Convention Relating the Development of Hydraulic Power Affecting More than One State the art. 2 and 3, *supra* note 13 ;the article 9 and 10 of 1961 Salzburg Resolution on the Use of International Non-Maritime Waters, *supra* note 13 ; the article V of 1966 Helsinki Rules, *supra* note 13 ; the article 6 and 13 of 1992 UNIEECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes, *supra* note 13.

¹³¹ Maria Doria, *Supra* note 59, at 198.

¹³² Maria Doria, *Supra* note 59, at 199 ; Adele J. Kirschner and Katrin Tiroch, *Supra* note 113, at 359.

¹³³ The International Law Commission, *Supra* note 30, at 111- 118.

other state is the sole judge of that and has the right to information on the proposals.”¹³⁴ Practically, the World Bank applies this system of notification if a basin state demands funding to construct projects on international shared rivers; for example, this procedure was applied in funding three projects that involve the use of surface and ground waters shared with other countries. These procedures are followed in the Inland Waters Project in Croatia in 2007.¹³⁵

If the injured state is not satisfied with the explanations of the planning state, it may ask for consultation and negotiation so as to prevent water conflict.¹³⁶ In the event of failure in negotiation or consultation, the interested states must compensate the affected state, depending on the degree of the significant harm.¹³⁷ This is seen in article III/ 2 of 2015 Agreement on Declaration of Principles between the Arab Republic of Egypt, the Federal Democratic Republic of Ethiopia and the Republic of the Sudan on the Grand Ethiopian Renaissance Dam Project (GERDP).¹³⁸

The question may be raised whether the interested state may implement the planned measure without prior consent of the affected state or not. Another question may be raised whether the interested state may implement the planned measure during the period of consultation and negotiation or not.

In fact, the situation of the international and bilateral conventions and agreements is indifferent so that there is no international customary obligation imposed on the interested parties this respect. To illustrate, some of the bilateral and international agreements and convention do not impose an obligation on the interested basin state to obtain prior consent of the affected state to implement the proposed project. However, the affected basin state should demand such from the interested basin state, for example, as seen in article 58/ 4 of the 2004 Berlin Rules on Water

¹³⁴ Maria Doria, *Supra note 59*, at 202 - 204.

¹³⁵ Salman Salman, *Supra note 112*, at 597- 601.

¹³⁶ Adele J. Kirschner and Katrin Tiroch, *Supra note 113*, at 360 ; Charles Bourne, *The International Law Commission's Draft Articles on the Law of International Watercourses: Principles and Planned Measures*, 3 *Colo. J. Int'l Envtl. L. & Pol'y* 66 (1992)

¹³⁷ International Law Association, *Supra note 26*, at 47.

¹³⁸ The 2015 Agreement on Declaration of Principles between the Arab Republic of Egypt, the Federal Democratic Republic of Ethiopia and the Republic of the Sudan on the Grand Ethiopian Renaissance Dam Project (GERDP), available at,

http://www.internationalwaterlaw.org/documents/regionaldocs/Final_Nile_Agreement_23_March_2015.pdf

Resources.¹³⁹ On the one hand, there are other bilateral and international agreements and conventions which do not include such point, for example, the 1992 Rio Declaration.¹⁴⁰

On the other hand, other international /international agreements and conventions obligate the interested state to not implement the planned measure without the consent of the affected state. For example, this obligation is articulated in articles 2 and 3 of the 1923 Geneva Convention relating to the Development of Hydraulic Power affecting more than one State,¹⁴¹ article 11 of the 1994 Danube Convention,¹⁴² articles V/ 2 and VI/ 2 of the 1994 Israel – Jordan Peace Treaty¹⁴³ and article 14 of the 1997 UN Convention¹⁴⁴. However, the expression of the approval is not absolute; it is limited by a period of time differing among these international and bilateral conventions and agreements. For example, the 1994 Israel – Jordanian Peace Treaty¹⁴⁵ and the 1997 UN Convention mentions the period six month to respond to the notifying state,¹⁴⁶ while 1933 Declaration Concerning the Industrial and Agricultural Use of International Rivers states three months.¹⁴⁷ However, the 1994 Danube Convention gives one year.¹⁴⁸ For this reason, the ILC states that a special agreement is needed to establish this point, according to article 13.¹⁴⁹ As a result, a special agreement is needed to establish this point, in case that there is no international or bilateral agreement /convention binding wither the interested and affected state. However, there is an exception in the case of urgent implementation of program, plan, project, or activity , public health, public safety, or similar interests without violating to its duties under international law.¹⁵⁰ In general, the planned measure must be, in general, consistent with the duties and rights of basin states under international law.¹⁵¹

¹³⁹ International Law Association, *Supra* note 26.

¹⁴⁰ Rio Declaration on Environment and Development, *Supra* note 43.

¹⁴¹ Convention Relating to the Development of Hydraulic Power affecting More than One State and Protocol of Signature, *supra* note 13.

¹⁴² Convention on Cooperation for protection and sustainable use of the Danube River, *supra* note 13

¹⁴³ The Israel Jordan Treaty o f Peace, Oct. 26, 1994, Ann. II, 34 I.L.M. 46, 58 (1995)

¹⁴⁴ International Law Commission, *Supra* note 30, at 114

¹⁴⁵ *Supra* note 143

¹⁴⁶ *supra* note 13

¹⁴⁷ Declaration of the Seventh Pan-American Conference on the Industrial and Agricultural Use of International Rivers adopted at Montevideo on December 24, 1933, in 28 Am. J. Int'l L., Supp., 59-60 (1934).

¹⁴⁸ *supra* note 13

¹⁴⁹ The International Law Commission, *supra* note 30, at 114.

¹⁵⁰ International Law Association, *Supra* note 26, at 49.

¹⁵¹ The International Law Commission, *Supra* note 30, at 114.

To conclude, notification of a planned measure is a reciprocal obligation which applies to both upstream and downstream countries because it is related to the principles of equitable utilization and no significant harm to reach optimal utilization of a shared river.¹⁵² Under this obligation, any basin state may claim that a planned project undertaken or to be undertaken by another state may affect it; however, the harm should involve significant adverse effect and be supported by a technical document in order to facilitate exchange of information or consultation. If consultation and negotiation fail and there is significant harm, the interested state must compensate the affected states.

2. Peaceful Settlement:

The United Nations organization impose on countries the duty to resolve their disputes through peaceful means,¹⁵³ so as not to threaten international peace and security.¹⁵⁴ Peaceful means is specified in article 33 of the UN Charter, which includes negotiation, enquiry, mediation, conciliation, international adjudication, and any other peaceful means; moreover, the parties may request the intervention of the Security Council.¹⁵⁵ This article is also integrated in the General Assembly's Declaration on Principles of International Law Concerning Friendly Relations and Cooperation among States of 1970.¹⁵⁶ These means are stated in the articles of many bilateral and international agreements and conventions, for example, article 12 of the 1923 Geneva Convention Relating the Development of Hydraulic Power Affecting More than One State,¹⁵⁷ article 9 of the 1933 Declaration Concerning the Industrial and Agricultural Use of International Rivers,¹⁵⁸ article XXVII of the 1966 Helsinki Rules.¹⁵⁹ In the context of water disputes, disputes mean any difference in interpretation of water treaties, any question of international law or the existence of any fact that may breach international obligation concerning management of shared rivers.¹⁶⁰

¹⁵² Adele J. and Katrin Tiroch, *Supra note 113*, at 359 ; Salman Salman , *Supra note 112*, at 354.

¹⁵³ Article 2/3 of Charter of the United Nations. Done at San Francisco, California, USA, June 26, 1945, entered into force October 23, 1945, T.S. No. 993.

¹⁵⁴ *Id.*

¹⁵⁵ *Id.*

¹⁵⁶ GA/RES/25/2625 (1970).

¹⁵⁷ *supra note 13.*

¹⁵⁸ *supra note 13*

¹⁵⁹ *supra note 13*

¹⁶⁰ The International Law Association, *Supra note 48*, at 29.

In fact, mentioning any means of peaceful settlement is appropriate to water disputes, subject to the approval of the parties, the circumstance and the nature of the dispute.¹⁶¹ For example, Egypt and Ethiopia include in the 2015 Agreement on Declaration of Principles between the Arab Republic of Egypt, the Federal Democratic Republic of Ethiopia and the Republic of the Sudan on the Grand Ethiopian Renaissance Dam Project (GERDP)¹⁶² in article X that mediation and conciliation are means to settle any disputes over the construction of GERDP if negotiation is reached deadlock.

To conclude, the substantive and procedural rules that are imposed by customary international water law are compatible and effective in resolving disputes. The substantive rules are based on using waters of a shared river in an equitable and reasonable manner without causing significant harm to the basin states. This done by taking into account the different interests of the basin states, and the right of basin states to achieve sustainable development without breaching other substantive rules. In fact, the different interests of the basin states are equal and no hierarchies among them except for vital needs which is closely related to ordinary uses for example drinking, cooking and sanitary. For this reason, the customary international water law imposes on basin states by the virtue of procedural rules to cooperate in good faith and settle their dispute through peaceful means. Actually, the intervention of a third party is important to narrow the gap between the disputants because the main problem in water disputes is fact- finding, which I will show later. These peaceful means can be negotiation, good offices, mediation, enquiry and conciliation, or international adjudication according to disputants' agreement. In fact, states prefer mediation as a peaceful means to settle their water disputes which I will discuss in the following part.

¹⁶¹GA Res 37/10 (1982).

¹⁶² Agreement on Declaration of Principles between the Arab Republic of Egypt, the Federal Democratic Republic of Ethiopia and the Republic of the Sudan on The Grand Ethiopian Renaissance Dam Project (GERDP), *Supra* Note 138.

III. Mediation as a peaceful mean in settling water disputes:

The United Nations Organization imposes on countries the duty to resolve their disputes through peaceful means,¹⁶³ so as not to threaten international peace and security.¹⁶⁴ Peaceful means is specified in article 33 of the UN Charter, which includes negotiation, enquiry, mediation, conciliation, international adjudication, and any other peaceful means.¹⁶⁵ This article is also integrated into the General Assembly's Declaration on Principles of International Law Concerning Friendly Relations and Co-operation among States of 1970.¹⁶⁶ These means of peaceful settlement are also confirmed and elaborated on many international and bilateral treaties.¹⁶⁷ In fact, negotiation is the preferable means for disputants to use it in order to identify a reciprocal and acceptable solution.¹⁶⁸ Interested states negotiate and consult the issues of conflict in order to reach common ground.¹⁶⁹ If they fail to find common ground in settling their disputes and reached a deadlock, they may search for the intervention of a third party.¹⁷⁰ In this chapter, I discuss mediation and the other peaceful means as specified in article 33 of the UN Charter that disputants can use to settle their disputes, and I will highlight the role of mediation in solving water disputes in comparison with other peaceful means.

A. Mediation:

Mediation is one peaceful mean by which the parties agree on the intervention of a third party. This intervention is conducted upon the request of the parties or as a result of accepting a proposal from the third party.¹⁷¹ This third party can be an individual, organization, or state.¹⁷²

¹⁶³ Article 2/3 of the UN Charter, *Supra* note 153.

¹⁶⁴ *Id.*

¹⁶⁵ According to article 33/ 1 of UN Charter “ [t]he parties to any dispute, the continuance of which is likely to endanger the maintenance of international peace and security, shall, first of all, seek a solution by negotiation, enquiry, mediation, conciliation, arbitration, judicial settlement, resort to regional agencies or arrangements, or other peaceful means of their own choice.” *Supra* note 153.

¹⁶⁶ *Supra* note 156.

¹⁶⁷ See page

¹⁶⁸ Felicia Maxim , *Place and Role of Political - Diplomatic Means Within the Peaceful Settlement of International Disputes* , 2011 Law Annals Titu Maiorescu U. 56 (2011).

¹⁶⁹ Larry Bakken, *International Joint Commission: Water Conflicts and Dispute Resolution*, 31 Hamline L. Rev. 603 (2008)

¹⁷⁰ Larry Bakken, *Supra* note 169, at 603.

¹⁷¹ Undala Alam , *Water Retionality : Mediating the Indus Waters Treaty*, Durham theses, Durham University, 98 (1998).

¹⁷² Neda Zehawe, *Third Party Mediation of International Disputes: Lessons From the Indus River*, 14 Int'l Negotiation 283 (2009) ; Felicia Maxim , *Supra* note 168 , at 30.

The mediator plays an active part during the process of mediation. It facilitates communication between two or more states in order to settle the dispute.¹⁷³ Its aim is to facilitate negotiation and to abate or resolve the dispute.¹⁷⁴ It actively participates in the conflict and proposes solutions. Its role also is to examine the conflict in order to reach equitable and reciprocal solutions.¹⁷⁵ It can sometimes lead parties to sign treaties to solve their dispute permanently.¹⁷⁶ For example, in 1987, the United Nations Environmental Program succeeded in leading Botswana, Mozambique, Tanzania, Zambia, and Zimbabwe to sign agreements over the Zamia River.¹⁷⁷

In fact, there are many variables that control the outcomes of the mediation process. For example, Zawahri and Kleiboer propose that the success of a mediator depends on the intensity and the nature of the dispute, and the overall relationship between disputing states.¹⁷⁸ Into their opinion, the timing of intervention in the dispute is very important because if the dispute reaches a degree of complication, the mediator will fail in its efforts.¹⁷⁹ The nature of the dispute also plays a role in solving a dispute by mediation.¹⁸⁰ Disputes which are related to national security disputes like territorial and watercourse disputes are less likely to have successful outcomes.¹⁸¹ Scholars like Bakken add that disputes between states which have ongoing relationship are most likely to settle using mediation because the existing cooperation between the states facilitate the role of the mediator.¹⁸² According to Cooper, it depends on the willingness of the disputants to reach a settlement and to compromise in good faith.

The mediator is an important variable in the success or failure of mediation.¹⁸³ Parties accept mediation and outcomes when they feel that the mediator is professional and trust during

¹⁷³ Undala Allam , *Supra* note 171. , at 98

¹⁷⁴ Neda Zehawe, *Supra* note 172, at 283; Felicia Maxim , *Supra* note 168 , at 30; Undala Alam, *Supra* note 171.

¹⁷⁵ Undala Alam, *Supra* note 171, at 98 ; Jacob Bercovitch, *Mediation Success or Failure: a Search For the Elusive Criteria* , 7 Cardozo J. Conflict Resol. 294 (2005).

¹⁷⁶ Neda Zehawe, *Supra* note 172, at 285; Felicia Maxim , *Supra* note 168 , at 30.

¹⁷⁷ Neda Zehawe, *Supra* note 172, at 285.

¹⁷⁸ Neda Zehawi, *Supra* note 172, at 284; Marieke Kleiboer , *Understanding Success and Failure of International Mediation*, 40 J. Conflict Res.,362 – 374 (1996); Jacob Bercovitch and Jeffrey Langely, *The Nature of the Dispute and the Effectiveness of International Mediation*, 37 J. Conflict Res., 675 (1993).

¹⁷⁹ Jacob Bercovitch and Jeffrey Langely, *Supra* note 178 , at 676

¹⁸⁰ Neda Zehawe, *Supra* note 172, at 285.

¹⁸¹ Neda Zehawe, *Supra* note 172.

¹⁸² Larry Bakken, *supra* note 170, at 275 , 276

¹⁸³ Undala Alam, *Supra* note 171, at 101 to 104; Felicia Maxim , *Supra* note 168, at 30 2011.

exercising mediation process.¹⁸⁴ A neutral mediator builds trust in its relation with the disputants.¹⁸⁵ This trust is responsible for motivating disputants to settle the dispute. This trust depends on the qualities of the mediator, and how the mediator behaves.¹⁸⁶ To reach such trust, the mediator must communicate with the parties equally in the mediation process. In addition, the mediator can focus on the common interests to narrow the gap over issues in conflicts. The mediator should be neutral and professional in settling the dispute. For this reason, international organizations are preferable as mediators to settle water disputes because they have the expertise to solve these disputes. Moreover, they have the technical and financial resources for solving such disputes.

In fact, mediation is an informal process that follows no set rules because it is non-binding in nature and depends on the consent of the parties.¹⁸⁷ Its strength comes in its flexibility because it has no set process and structure.¹⁸⁸ It does not have any direct legal basis or institutionalized authority.¹⁸⁹ It addresses a several question to the disputants, and the issues of conflicts according to their view.¹⁹⁰ It can begin facilitate communication, establish fact- finding committees, and propose solutions.¹⁹¹ This process can be done using the carrot and stick approach to persuade states to change their behavior, to comprise, and to cooperate.¹⁹² This flexibility in settling disputes leads states to prefer mediation as a peaceful means over other forms of settlement.¹⁹³

States prefer mediation as a peaceful means of settling water disputes.¹⁹⁴ To illustrate, water disputes are technically and scientifically complex,¹⁹⁵ for example, the determination of

¹⁸⁴ Undala Alam, *Supra* note 171.

¹⁸⁵ Undala Alam, *Supra* note 171 , at 101

¹⁸⁶ Undalla Alam , *Supra* note 171, at 101 - 104

¹⁸⁷ Jacob Bercovitch, *Supra* note 169, at 290.

¹⁸⁸ Catherine Cooper, *The Management of International Environmental Disputes in the Context of Canada-United States Relations: A Survey and Evaluation of Techniques and Mechanisms*, 24 Can. Y.B. Int'l L. 284 (1986)

¹⁸⁹ Jacob Bercovitch, *Supra* note 169, at 290; Catherine Cooper, *Supra* note 188, at 283; Bakken, *Supra* note 163. at 602.

¹⁹⁰ Dean Pruitt, Robert Peirce, Neil McGillicuddy, Gary L. Welton and Lynn M. Castrianno , *Long Term – Success Mediation*, 17 Law and Human Behavior, 316 (1993) ; Larry Bakken, *Supra* note 169, at 602.

¹⁹¹ Neda Zehawe, *Supra* note 172, at 284

¹⁹² Jacob Bercovitch and Su-Mi Lee, *Mediating International Conflicts: Examining the Effectiveness of Directive Strategies*, 8 Int'l J. of Peace Studies, 4 (2003).

¹⁹³ Jacob Bercovitch, *Supra* note 175, at 290.

¹⁹⁴ Catherine Cooper, *Supra* note 188, at 281; John Dryzek & Susan Hunter, *Environmental Mediation for International Problems*, 31 Int'l Studies Quarterly, 90-91 (1987); Lesley Terris & Zeev Maoz, *Rational Mediation :*

the equitable utilization and no significant harm. As a result, parties hire experienced mediator to address the issues of the conflict and suggest an action plan to settle the dispute.¹⁹⁶ Also, the mediator helps them to manage joint fact-finding research or funding.¹⁹⁷ Also, mediation helps in addressing the numerosity of parties and their agendas.¹⁹⁸ In fact, mediator helps parties to address many issues like the cost of hiring experts, and the cost of compensation. Also, the parties prefer mediation as the mediator can help them in sharing data and information which can help in building trust between the parties.¹⁹⁹ Also, the disputants prefer mediation because mediator helps them to reach an agreement in order to establish commission to address further disputes. And enhance cooperation²⁰⁰ In fact, mediator promotes an “honorable escape route” from the political responsibility. Also, the mediator facilitates the communication between disputants, helping them to narrow the gap between their views, or directs the disputants to the solutions that may end up the conflict. Moreover, in the mediation, the parties have full control over the outcomes, and it reflects their local need.²⁰¹ Actually, mediation can help in signing treaties, terminating disputes, and reducing immediate threat of violence. In fact, the cost of mediation is lower than any other alternatives because it can help in settling the dispute in early stage.²⁰² It gives space to the disputants to interact with each other peacefully and give them chance to manage the conflict.²⁰³

B. Good offices:

Good offices are another peaceful means for settling disputes. Good offices are the efforts which are undertaken by a third party in order to create favorable conditions that facilitate direct negotiation between parties.²⁰⁴ This third party can be a state or group of states or international organizations or several international organizations.²⁰⁵ The third party cannot participate in the

a Theory and a Test, 44 *J. Peace Research*, 575 (2005); Neda Zawahri, *Supra* note 172, at 284. Larry Bakken, *Supra* note 169, at 604.

¹⁹⁵ Stephen Higgs, *the Potential for Mediation To Resolve Environmental and Natural Resources Disputes*, 1 *Am. J. Mediation* 108 (2007)

¹⁹⁶ Stephen Higgs, *Supra* note 195, at 108.

¹⁹⁷ Stephen Higgs, *Supra* note 195, at 113.

¹⁹⁸ Stephen Higgs, *Supra* note 195, at 113.

¹⁹⁹ Stephen Higgs, *Supra* note 195, at 113.

²⁰⁰ Neda Zehawe, *Supra* note 172, at 282

²⁰¹ Undala Alam, *Supra* note 171, at 98.

²⁰² Stephen Higgs, *Supra* note 195, at 118.

²⁰³ Undala Alam, *Supra* note 171, at 98

²⁰⁴ Felicia Maxim, *Supra* note 168, at 28

²⁰⁵ Felicia Maxim, *Supra* note 168, at 28; Catherine Cooper, *Supra* note 188, at 284.

negotiation process; its role ends when the parties begun to negotiate.²⁰⁶ Nevertheless, it can send proposals to the parties as a sender and not as a negotiator. Good offices produce only an advisory recommendation.²⁰⁷ Mainly, good offices facilitate the resumption and continuation of negotiation which is similar to the aim of the mediator.²⁰⁸ However, the mediator participates in providing solutions to the disputes.²⁰⁹ In fact, this role leads parties to prefer mediation because the mediator has an active role in settling the dispute. In fact, during the negotiation process, the good offices may be converted into mediation upon the request of the parties.²¹⁰ Nevertheless, the purpose of both good offices and mediation is to activate direct negotiations.²¹¹

C.Enquiry and Conciliation:

Enquiry and conciliation are peaceful means for settling international disputes. Frequently, they are used together under one umbrella.²¹² To illustrate, enquiry can be formal by establishing a commission of enquiry, or it can be informal as a form of investigation and the determination of questions of fact by technical experts.²¹³ Conciliation is similar to arbitration in process. Nevertheless, conciliation is a non conflictual means.²¹⁴ Parties are directed to conciliation upon an agreement between them. In this agreement, the parties agree on the nominated conciliators and the procedures which will lead the conciliation process.²¹⁵ The conciliators starts by determining the facts that have been raised in the dispute;²¹⁶ in addition, they determine the laws which apply.²¹⁷ Then, the commission follows the procedures according to the agreement of the parties.²¹⁸ After the commission finished the procedure it issues a report. This report includes all the facts , applicable laws and the suggested solution.²¹⁹ These solutions are not binding and not

²⁰⁶ Felicia Maxim , *Supra* note 168 , at 28 ; Larry Bakken, *Supra* note 169, at 603.

²⁰⁷ Dominique Alheritiere, *Settlement of Public International Disputes on Shared Resources: Elements of a Comparative Study of International Instruments*, 25 Nat. Resources J. 705(1985); Felicia Maxim , *Supra* note 168 , at 28.

²⁰⁸ Dominique Alheritiere, *Supra* note 207 , at 706; Felicia Maxim , *Supra* note 168, at 28.

²⁰⁹ Dominique Alheritiere, *Supra* note 207, at 706 ; Felicia Maxim , *Supra* note 168, at 28 .

²¹⁰ Dominique Alheritiere, *Supra* note 207, at 706.

²¹¹ Dominique Alheritiere, *Supra* note 207, at 705.

²¹² Catherine Cooper, *Supra* note 188, at 290.

²¹³ Catherine Cooper, *Supra* note 188, at 283.

²¹⁴ Dominique Alheritiere, *Supra* note 207, at 708.

²¹⁵ Dominique Alheritiere, *Supra* note 207, at 708.

²¹⁶ Felicia Maxim , *Supra* note 168 , at 33- 36.

²¹⁷ Felicia Maxim , *Supra* note 168 , at 33-36.

²¹⁸ Felicia Maxim , *Supra* note 168 , at 35.

²¹⁹ Felicia Maxim , *Supra* note 168 , at 33- 36.

mandatory on the parties.²²⁰ However, the parties should ideally accept them.²²¹ Although enquiry and conciliation is a good mean in settling disputes, they are costly mean as adjudication. As a result, disputants preferred mediation because it ends disputes at a primary stage; in addition, it is more flexible.²²²

D. International adjudication:

International adjudication is a formal legal means which can be either by the process of arbitration or the judicial settlement to reach a binding decision to resolve the dispute.²²³ International arbitration is the oldest means of dispute settlement. It emerged in 1899 when twenty eight states adopted the Convention for the Pacific Settlement of International Disputes and established the Permanent Court of Arbitration (PCA);²²⁴ however, the judicial settlement emerged after World War II when the International Court of Justice (ICJ) was established as a judicial organ of the United Nations to provide judicial settlement.²²⁵ Indeed, the judicial settlement and arbitration are different. In arbitration, the parties are autonomous in choosing the arbitrators, establishing the procedures of arbitration, and the scope of the arbitral decision through the arbitral clause.²²⁶ Nevertheless, in judicial settlement, the parties are obligated by the rules of the court.

In fact, scholars²²⁷ argue that states refuse to send water disputes to international adjudication because of the authority of judges and arbitrators over disputant states, preventing them from controlling the procedures and the outcomes of the decisions.²²⁸ Bilder and Spain add that in some cases the decision do not promote effective solutions for the parties, and increase

²²⁰ Felicia Maxim , *Supra* note 168 , at 33- 36.

²²¹ Felicia Maxim , *Supra* note 168 , at 33- 36.

²²² Catherine Cooper, *Supra* note 188, at 283.

²²³ Anna Spain, *supra* note 10, at 355; in the same meaning, Charles Bournie, *Mediation, Conciliation , and Adjudication in the Settlement of International Darrinage Basin* , 9 Can. Y.B. Int'l L. 126 – 156 (1971); Anna Spain, *Examining the International Function : International Courts as Dispute Resolvers*, 34 Loy. L.A. Int'l & Comp. L. Rev 5 11 (2011); Richard Bilder, *supra* note 10, at 1; *Richard Bilder, International Dispute Settlement and the Role of International Adjudication*, 1 Emory J. Int'l Disp. Resol. 133 (1987); Mohamed Amr , *Diversion of International Water Courses Under International Law*, 10 Afr. Y.B. Int'l L. 172 (2002).

²²⁴ Anna Spain, *Supra* note 223.

²²⁵ *Id.*

²²⁶ Richard Bilder, *Supra* note 223, at 134.

²²⁷ Anna Spain, *Supra* note 223 , at 346 – 375 ; See also , Anna Spain , *Integrating Matters : Rethinking the Architecture of International Dispute*, 32 U. Pa. J. Int'l L. 4- 10 (2011); Richard Bilder, *Supra* note 223, at 151- 161; Mohamed Amr , *supra* note 223, at 174.

²²⁸ Richard Bilder, *Supra* note 223, at 151 – 154; Anna Spain, *Supra* note 223, at 358.

dispute costs and consume time.²²⁹ Water disputes are technically complex, and settling them by international adjudication can lead to inapplicable solutions because judges and arbitrators are not expert.²³⁰ Also, the international adjudication faces many challenges to promote practical solutions, for instance finding an appropriate and well defined source of law to resolve the conflict.²³¹ Moreover, there are concerns about the ability of the international law to prevent harms and provide effective remedies because there is failure in mentioning specific standards for the equitable use and appreciate harm, as seen in *Cabcikovo – Nagmaros Project* case.²³²

To conclude, theoretically, mediation is a preferable means to solve water disputes due to its flexibility. States consider it as a route to narrow the gap between them when negotiation and consultation have reached a deadlock. However, the success of the mediator to reach an equitable solution depends on many variables which differ from case to case. As a result, in the following chapters, I examine the role of mediation in solving the Indus dispute and the Renaissance dispute and in proving the efficiency of customary international water law to solve water disputes.

²²⁹ Richer Bilder, *Id.* at 159; Anna Spain, *Id.*

²³⁰ Richard Bilder, *Supra* note 10 , at 4; Anna Spain, *Id.*

²³¹ Anna Spain, *Supra* note 223, at 358- 362; Richard Bilder, *Supra* note 223, at 160.

²³² *Id.*

IV. Mediation as a peaceful means in settling the Indus River Dispute:

*No armies with bombs and shellfire could devastate
a land so thoroughly as Pakistan could be
devastated by the simple expedient of India's
permanently shutting off the source of waters that
keep the fields and people of Pakistan green.*

*David Lilienthal, 1951*²³³

In this chapter, mediation as a peaceful means used in settling the Indus River dispute is discussed. It chose to show how water disputes can be settled and establish rules to settle future water disputes. The World Bank played a significant role in resolving this dispute. This chapter begins with the general features of the river and the reasons for the dispute. This is followed by the historical background of the dispute beginning with the independence of both states until the signing of the Indus Treaty in 1960. Then, I will display the different techniques that were used by the World Bank to succeed in its role. The aim behind presenting these different techniques is to crystallize the role of procedure of the customary international water law in solving water disputes. Finally, the outcomes will be discussed.

A. General features of the Indus River:

The Indus drainage basin is the twelfth largest river in the world and its delta area ranks the seventh in size.²³⁴ The river originates in the Tibetan plateau in the Western Himalaya,²³⁵ passes through Kashmir in Pakistan²³⁶ to finally merge into the Arabian Sea, south of Karachi.²³⁷ Its basin includes four states China, India, Pakistan, and Afghanistan.²³⁸ In India, the basin lies in Jammu and Kashmir, Himachal Pradesh, Punjab, Haryana and Rajasthan. In Pakistan, most of the basin lies in the North West Frontier Province, in Punjab and Sind, and all provinces except

²³³ Azhar Ahmad, *Indus Waters Treaty A Dispassionate Analysis*, 8 Pluto J. , 73 (2011).

²³⁴ Kathleen Hogan, *Divide or Share : the Role of Norms in Water- Sharing Arrangements in the Indus , Jordan , and Sengal River Basins* , PHD, George Town University , 85 (2006).

²³⁵ Nijim Khalil, *the Indus, Nile, and Jordan: International Rivers and Factors in Conflict Potential*, PHD, Indiana University, 31 (1969).

²³⁶ Jeremy Allouche, *Water Natioanlism: an Explanation of the Past and Present Conflicts in Central Asia , The Middle East and The Indian Subcontinent?*, PHD, University of Geneva, 199 (2005).

²³⁷ Kathleen Hogan, *Supra note 234*, at 84.

²³⁸ Neda Zawahri, *supra note 172*, at 290.

Balochistan.²³⁹ Its main tributaries from the west are the Kabul River and the Kurram River, while its five main tributaries from the east are Jelhum , Chenab, Ravi, Beas, and Sutlej.²⁴⁰ The Kabul River rises in Afghanistan and flows through the Peshawar Valley to join the Indus at Attock. The Chenab rises in Indian Punjab and passes through Himachal Pradesh and Jammu before entering Pakistan. The Beas rises and flows in India ,then joins the Sutlej, which is considered the longest tributary.²⁴¹

B.Reasons for the dispute:

The reasons for this dispute between India and Pakistan are varied. They include the high variation of the entire flow of the river, the geographical nature of the river, and the independence of India and the creation of Pakistan.

One reason is based on the dramatic change of rain runoff. In fact, the flow of the river is highly varied. The Indus River is fed by melting ice and snow from the Himalaya glaciers and by Indian monsoons.²⁴² 70 % of the total rain runoff occurs between June and September. During winter, the rise in the level depends upon the melting of snow.²⁴³ Most of the water flow originates from India 69 % , compared to 19% from Pakistan and 12 % from Tibet.²⁴⁴

The geographical nature of the river represents also another cause of the dispute because it leads to a conflict of interests. In fact, two thirds of the Indus basin pass through desert plains and the third passes through a mountainous region. This is a potential point for conflict as it contains good sites suitable for dam construction,²⁴⁵ especially in China and Afghanistan.²⁴⁶ However, these reasons altogether with the war going on in Afghanistan have caused both countries abilities to develop the river to decrease.²⁴⁷ As a result, only India and Pakistan have been able to develop the other six tributaries Indus, Jhelum, Chenab, Ravi, Beas, and Sutlej they share. These tributaries are considered the main source of water to Pakistan.²⁴⁸ In fact, Pakistan geography depends completely on water flow coming from the upstream

²³⁹ Jeremy Allouche, *Supra note 236*, at 200.

²⁴⁰ Jeremy Allouche, *Supra note 236*, at 198.

²⁴¹ Nijim Khalil, *Supra note 235*.

²⁴² Jeremy Allouche, *Supra note 236*, at 201; Uprety, K. & Salman, Salman , *Legal Aspects of Sharing and Management of Transboundary Waters in South Asia: Preventing Conflicts and Promoting Cooperation*. 56 *Hydrol. Sci. J.* 643 (2011).

²⁴³ Jeremy Allouche, *Supra note 236*, at 201.

²⁴⁴ Jeremy Allouche, *Supra note 236*.

²⁴⁵ Jeremy Allouche, *Supra note 236*, at 198. ; Nijim Khalil, *Supra note 235*, at 31.

²⁴⁶ Neda Zawahri, *Supra note 172*, at 290.

²⁴⁷ Neda Zawahri, *Supra note 172*, at 289.

²⁴⁸ Neda Zawahri, *Supra note 172*, at 290.

tributaries for its agricultural product, which is considered the primary source of income, and municipal uses of Pakistan.²⁴⁹ On the other hand, India relies on many river systems, including for example, the Ganges-Yamuna System in the north and the Cauvery River in the south. While, the Indus River is the only source of water for Pakistan; for India the river is the economic foundation for its provinces.²⁵⁰

Another reason for the dispute came from the partition of India and the creation of Pakistan.²⁵¹ The partition of India divided one set of canals between West Punjab in Pakistan, and East Punjab in India.²⁵² The downstream western rivers Indus, Jhelum, and Chenab are under Pakistan control, while the upstream rivers, Sutlej, Beas, and Ravi that feed both West and East Punjab are under India control.²⁵³ The partition neglected the topography, ecology, and the existing irrigation infrastructure based on the Indus River.²⁵⁴ During the demarcation of the new border between India and Pakistan, the Boundary Line Commission finds that the division of the water supply is problematic due to the present canal system and the high dependence of agriculture upon canal water.²⁵⁵ This partition led to 16 water disputes between both states mainly related to water allocation, four incidents of which are related also to territorial and border matters.

C. Historical background of the dispute from independence to the 1960 Indus Treaty:

On July 1947, after Britain had withdrawn from the subcontinent, India became independent and Pakistan created by the new boundaries.²⁵⁶ The demarcation of the new border dividing the region's extensive canal colonies and the headwork for operating Upper Bari Daab, Dipalpur and Eastern Grey canals, whose water Pakistan used to cultivate land, was put under Indian control.²⁵⁷ On August 1947, the dispute between East Punjab (India) and West Punjab (Pakistan) rose over the continuation of water supply from the Ferozepur headworks in East Punjab to the

²⁴⁹Undala Alam, *Questioning the Water Wars Rationale: A Case Study of the Indus Waters Treaty*, Wiley on behalf of The Royal Geographical Society (with the Institute of British Geographers), 168 Geo. J., 342 (2002)

²⁵⁰Neda Zawahri, *Supra note 16*, at 289.

²⁵¹Uprety, K. & Salman, Salman, *Supra note 242*, at 643; Huma Baqai, *Water-related Issues in South Asia: Conflicts in the Making*, *Pakistan Institute of International Affairs*, 58 Pakistan Horizon, 80 (2005).

²⁵²Uprety, K. & Salman, Salman, *Supra note 242*, at 643.

²⁵³Uprety, K. & Salman, Salman, *Supra note 242*, at 643.

²⁵⁴Uprety, K. & Salman, Salman, *Supra note 242*, at 643.

²⁵⁵ Raja Nazakat, *Indus Water Treaty: A Geo Political Study, Thesis Submitted to the University of Kashmir for the Award of the degree of Doctor Of Philosophy In History*, University Of Kashmir, 87 (2013), available at <http://shodhganga.inflibnet.ac.in/handle/10603/14384>

²⁵⁶ Raja Nazakat, *Supra note 255*, at 84.

²⁵⁷F. H., *The Eastern Rivers Dispute between India and Pakistan*, Royal Institute of International Affairs, 13 World Today, 536 (1957).

UBDC West Punjab.²⁵⁸ This dispute flared up when East Punjab, being an upstream user of the three eastern rivers, claimed that the property rights in the waters of East Punjab's rivers were vested in itself, refusing such right to the West Punjab.²⁵⁹ This claim is problematic because there are ten canals in Pakistan and only two in India. Furthermore, the most developed canal colonies, the granary of the Punjab, were in Pakistan.²⁶⁰ On the other hand, India, as the upper riparian state, needed to develop its irrigation project to cultivate new farm land, while Pakistan needed to safeguard the existing supply for its canal.²⁶¹ In order to resolve this issue, a number of official committees were formed and nominated from both countries, however, these committees failed to settle the issue as the parties did not agree on the valuation of the canal;²⁶² moreover, state practice did not tackle the legality of such claim at that time.²⁶³

On December 20 1947,²⁶⁴ chief engineers from West and East Punjab signed an agreement called the Standstill Agreement to stop water allocation,²⁶⁵ allowing discharges from headworks on the Upper Bari Daab canal (UBDC), the Dipalpur canal and the Bahawalpur canal System.²⁶⁶ This agreement was based on dividing water equally;²⁶⁷ in other words, this agreement imposed on India the duty to allow pre-partition allocation of water of the basin up to March 31, 1948.²⁶⁸ It also tried to reestablish the *status quo* prior to independence in the division and use of these canals. However, it proved to favor Pakistan, as it received more farm lands from the Punjab, and consumed more canal waters, while the largely neglected eastern Punjab belonged to India. Consequently, the dispute flared up because of the desire of both states to develop their tributaries.

On March 31, 1948, the Standstill Agreement expired, and on April 1, 1948,²⁶⁹ Indian East Punjab stopped the supply of Upper Bari Daab and Dipalpur canals by cutting the flow of the Sultej and Ravi Rivers,²⁷⁰ without the prior consent of Pakistan.²⁷¹ It constructed several

²⁵⁸ Kathleen Hogan, *Supra* note 234, at 91.

²⁵⁹ Raja Nazakat, *Supra* note 255, at 88.

²⁶⁰ Raja Nazakat, *Id*, at 90.

²⁶¹ Raja Nazakat, *Id*, at 90.

²⁶² Raja Nazakat, *Id*, at 88.

²⁶³ F.H, *Supra* note 181, at 539

²⁶⁴ Azhar Ahmad, *Supra* note 233, at 75

²⁶⁵ Undala Alam, *Supra* note 249, at 342; For details, F.H, *Id*, at 536

²⁶⁶ Raja Nazakat, *Supra* note 255, at 90.

²⁶⁷ Uprety, K. & Salman, Salman, *Supra* note 242, at 644.

²⁶⁸ Azhar Ahmad, *Supra* note 233, at 75

²⁶⁹ Azhar Ahmad, *Supra* note 233

²⁷⁰ Uprety, K. & Salman Salman, *Supra* note 242, at 644.; Undala Alam, *Supra* note 249, at 343

dams and canals on the Indus tributaries, including for example, the Bhakra dam, Nangal Barrage, Bhakra Canals, Bhakra Main Line, and Ferozepore Feeder, controlling and diverting waters on which Pakistan rely, without taking in to account the fear of Pakistan from such designs. This action deprived Pakistan of municipal water and hydropower. It also deprived it from irrigation water for 1.66 million acres of farmland, leaving millions with ruined crops.²⁷²

Different proposition have been introduced for the reasons for this action. One argument argued that India`s action justified it on the absolute sovereignty,²⁷³ in the absence of rules that controlled water management.²⁷⁴ Other arguments narrowed this action to four possibilities; first, India could consider this action as a sovereign right on its tributaries.²⁷⁵ Second, this action may be explained as an action taken to create pressure on Pakistan to withdraw from Kashmir;²⁷⁶ in fact, if this possibility is right, it violates international law in this arena. International law prohibits any military action against civilian or natural resources in this arena because it allowed only actions that weaken the military power of other counter state.²⁷⁷ Third, India sought to demonstrate Pakistan`s dependence from India, in an attempt to force reconciliation.²⁷⁸ Fourth, the East Punjab did not approach the central government in implementing these projects.²⁷⁹

In order to minimize Indian ability to control the waters, Pakistan did the same by constructing several barrages including the Ghulam Mohammad, Kotri, Gudu, and Taunsa barrages. Link canals, such as the Balloki-Suleimanke Link and Bamban wala-Ravi-Bedian Link. Moreover, an attempt was made from Pakistan to secure the supplies of Sultej tributary and to prevent India from stopping the Dipalpur canal (DC). On May 3, 1948, after intensive negotiations, India re-opened the canal which caused the Pakistani leaders to remember their dependence.²⁸⁰

²⁷¹ Jeremy Allouche, *Supra note 236*, at 215; Raja Nazakat, *Supra note 179*, at 90; F.H, *Supra note 257*, at 536

²⁷² Raja Nazakat Ali, *Supra note 255*, at 90.

²⁷³ John Knop, *The World Bank in the Indus Basin : A Unique Form of Multilateral Aid*, 2 Stud. L. & Econ. Dev. 289 (1967).

²⁷⁴ Uprety, K. & Salman Salman, *Supra note 242*, at 644.

²⁷⁵ Raja Nazakat, *Supra note 255*, at 90.

²⁷⁶ Raja Nazakat, *Supra note 255*, at 90.

²⁷⁷ For details, Fredrick Lorenz, *The Protection of Water Facilities Under International Law*, available at <http://unesdoc.unesco.org/images/0013/001324/132464e.pdf>.

²⁷⁸ Raja Nazakat , *Supra note 255*, at 90.

²⁷⁹ Raja Nazakat, *Supra note 255*, at 90.

²⁸⁰ Nadia Zawahri, *Supra note 172*, at 290.

After the re-opening of the canals, on May 4, 1948, India and Pakistan signed an Inter-Dominion Agreement, also known as the Delhi Agreement,²⁸¹ covering a new arrangement for sharing the canals.²⁸² Under this agreement, India has the right to increase its consumption of the Indus River, and Pakistan is compelled to pay India for canal operation and water transportation.²⁸³ Equal in importance, both East and West Punjab agreed to settle the dispute on the basis of equal sharing of water. They agreed that for India to be in control of a headworks, Pakistan's motive was to secure the ownership of waters.²⁸⁴ It later expressed its intent in a note dated 16 June, 1949 calling for "equitable apportionment of all common waters" and suggested turning jurisdiction of the case over to the International Court of Justice,²⁸⁵ a suggestion refused by India.²⁸⁶

On May 1948, Pakistan decided also to dig a channel from the section where it was upstream of India to safeguard water supply on the Sutlej River before it reached India's Ferozepore Headwork, which distributes water to both states. The aim of such a project was to lower the waters supplies to India's Ganga Canal Colony and the planned Bhakra Canals, which would lose the waters feeding East Punjab. In a response to this action, India demanded that Pakistan stop digging the Channel considering it a hostile action.²⁸⁷ It also pointed to the commitment imposed by the New Delhi Agreement.

In December 1949, as attempts to settle this issue through negotiations failed, India unilaterally diverted the Sutlej River further upstream before entering Pakistan by constructing a barrage at Harike to divert the river directly into the Ferozepore Headwork. It was estimated that the reservoir of this dam would allow India to store the entire Sutlej River water.²⁸⁸ In a response to the diversion of the Sutlej River, Pakistan decided to build new irrigation projects on three of the tributaries, Chenab, Indus, and Ravi, while India concentrated its irrigation projects on the Sutlej, Beas, and Ravi Rivers. In a direct escalation of the tension between both countries,

²⁸¹ Inter-Dominion Agreement Between the Government of India and the Government of Pakistan, on the Canal Water Dispute Between East and West Punjab, Signed at New Delhi, 4 May 1948, available at <http://www.internationalwaterlaw.org/documents/regionaldocs/punjab-canal.html>.

²⁸² Undala Alam, *Supra note 249*, at 343

²⁸³ Raja Nazakat, *Supra note 255*, at 91.; Inter-Dominion Agreement Between the Government of India and the Government of Pakistan, *supra note 281*.

²⁸⁴ Uprety, K. & Salman, Salman, *Supra note 242*, at 644.

²⁸⁵ Raja Nazakat, *Supra note 255*, at 92.

²⁸⁶ Undala Alam, *Supra note 249*, at 343

²⁸⁷ Jeremy Allouche, *Supra note 236*, at 216.

²⁸⁸ Jeremy Allouche, *Supra note 236*, at 217.

Pakistan threatened to use force to settle this dispute.²⁸⁹ In a unilateral action, in July 1950, Pakistan stopped in paying the fixed amount in the agreement of May 4th1948, and stated that this amount would be paid only after referring this dispute to the ICJ,²⁹⁰ the Security Council or any international organization.²⁹¹ Pakistan also declared the termination of the New Delhi Agreement because it was forced to sign it; it claimed that its signing for the agreement to save its existing demand from the River Sutlej.²⁹² Indian commented on such a declaration that this agreement is a reflection of goodwill and friendship, and considered part of a cooperative framework.²⁹³ During this year, communication stopped and negotiations on managing the waters of Indus River reached a deadlock.²⁹⁴ However, at the end of 1951, the negotiation resumed after both parties accepted the good offices of the World Bank.²⁹⁵

To sum up, from 1948 to 1952, both states competed in controlling the waters of the rivers by increasing the construction of hydrological infrastructure along the basin without taking into their account the riparian neighbor's concerns. Although both countries signed agreements to manage the waters of the river, they failed to implement them.

From 1952 to 1960 the World Bank acted as a mediator, which succeeded in settling the dispute and to facilitate the way to lead the parties to sign the IWT.²⁹⁶ After threats by Pakistan to use force, the US Department of State and the World Bank worked to settle the dispute by providing good offices. This interference was initiated in 1952 when Pakistan complained that the supply of water in the tributaries and canals had been reduced and blamed its shortage for the threat of a widespread famine. On January 27, 1953 the Bank delivered the complaint to India and requested a response. After investigation, India found that Pakistan complaint was legitimate. Negotiations then took place between both states under the supervision of the World Bank. In fact, the Bank succeeded in narrowing the gap between the perspectives of both states,

²⁸⁹ Jeremy Allouche, *Supra note 236*, at 216.

²⁹⁰ John Knop, *Supra note 273*, at 292.

²⁹¹ Raja Nazakat, *Supra note 255*, at 94.

²⁹² Undala Alam, *supra note 171*, at 90.

²⁹³ Raja Nazakat, *Supra note 255*, at 94.

²⁹⁴ Jeremy Allouche, *Supra note 236*, at 217.

²⁹⁵ Jeremy Allouche, *Supra note 236*, at 217; Undala Alam, *Supra note 249*, at 343

²⁹⁶ John Knop, *supra note 273*, at 297

which resulted in several bilateral agreements from 1 April 1955 to 31 March 1960²⁹⁷ ending with the signing of the Indus Treaty on September 19, 1960.²⁹⁸

On the same date, the Indus Development Fund was established to fund the development works envisaged in the treaty. Australia,²⁹⁹ Canada, West Germany, New Zealand, United Kingdom, United States and World Bank contribute in total \$ 893.5 million in the trust of the World Bank to administer this money in accordance with the treaty.³⁰⁰ In fact, the World Bank stipulated that India and Pakistan administrate the money according to its policies.³⁰¹

D. Legal dilemma before the intervention of the World Bank:

India and Pakistan had different legal perspectives on the utilization of the entire water flow of the Indus River and its tributaries. In fact, prior to the independence of India and the creation of Pakistan, there were no boundaries between them, and the irrigation projects were constructed to benefit the whole subcontinent. To illustrate, the entire water flow of the Indus River and its tributaries was to benefit East Punjab and West Punjab.³⁰² The partition of India divided one set of canals between West Punjab in Pakistan, and East Punjab in India.³⁰³ The downstream western rivers Indus, Jhelum, and Chenab were under Pakistan control, while the upstream rivers, Sutlej, Beas, and Ravi that feed both West and East Punjab are under India control.³⁰⁴ To illustrate, the new demarcation has divided the region's extensive canal colonies and the headwork for operating Upper Bari Daab, Dipalpur and Eastern Grey canals, whose water Pakistan used to cultivate land, was put under Indian control.³⁰⁵ Meanwhile, India asserted that its independence from Great Britain and its new boundaries with Pakistan created a new *Status quo*.³⁰⁶ It argued

²⁹⁷ Raja Nazakat, *Supra note 255*, at 100

²⁹⁸ The 1960 Indus Treaty, *supra note 114*; Jeremy Allouche, *Supra note 236*, at 234; Huma Baqai, *Supra note 175*, at 80

²⁹⁹ Indus Basin Development Fund Agreement. Done in Karachi, 1 April 1960, available at <http://www.internationalwaterlaw.org/documents/asia.html#Indus River Basin>.

³⁰⁰ John Knop, *supra note 273*, at 298

³⁰¹ John Knop, *supra note 273*, at 298

³⁰² F.H., *supra note 257*, at 538

³⁰³ Uprety, K. & Salman, Salaman, *Supra note 242*, at 643.

³⁰⁴ Uprety, K. & Salman, *Supra note 242*, at 643.

³⁰⁵ F. H., *supra note 257*, at 536.

³⁰⁶ John Knop, *supra note 273*, at 290; K.K.R., *The Problem of the Indus and Its Tributaries: An Alternative View*, *Royal Institute of International Affairs, 14 World Today*, 269 (1958); F.H., *supra note 257*, at 539

that it became a sovereign state, and its natural resources were under its control as properties.³⁰⁷ India claimed that the international law granted it as an upstream country an absolute right in exploring and utilizing its natural resources.³⁰⁸ To discuss, India claimed that it can utilize the entire water flow of the river which was under control regardless the consequences of existing uses of water by Pakistan as downstream country.³⁰⁹ This new *Status quo* was renounced by Pakistan because Pakistan approved to pay money for canal operation and water transportation from India.³¹⁰ By the virtue of the Inter- Dominion Agreement,³¹¹ Pakistan recognized India's proprietary rights and it had the right to cut off Pakistan's share of the Water.³¹²

On the counter part, Pakistan argued that international law protects its existing use of water under prior allocation right.³¹³ To elaborate, Pakistan claimed that the distribution of the entire flow of the Indus River and its tributaries cannot be affected by the new demarcation for many reasons.³¹⁴ In the time of partition, India did not raise any objection over Pakistani existing water use of East Punjab.³¹⁵ Also, the international law imposes on basin states to divide waters of shared river in an equal portion regardless of territorial boundaries.³¹⁶ Further, the international law prevents any unilateral action that affects the entire water flow of shared river.³¹⁷ Moreover, the unused waters of shared water should be shared equally among basin states.³¹⁸ This principle is considered and applied by the Indus (Rau) Commission, in 1942, in deciding a dispute over the uses of water between the Sind Province and the Province of the Punjab.³¹⁹ Concerning the Inter- Dominion Agreement, it declared that it terminated the agreement as to protect the survival of its inhabitants³²⁰

³⁰⁷ John Knop, *supra* note 273, at 290.; Hafeez Khan, *Indo -Pakistan Waters Dispute*, 12 *Pakistan Horizon*, 325 (1959).

³⁰⁸ Hafeez Khan, *supra* note 307 , at 326.

³⁰⁹ John Knop, *supra* note 273, at 291

³¹⁰ Raja Nazakat, *Supra note* 255, at 91.

³¹¹ John Knop, *supra* note 273, at 291;K.K.R. *supra note* 306, at 271 ; F.H, *supra* note 257, at 541.

³¹² John Knop, *supra* note 273, at 291; Hafeez Khan, *supra* note 307 , at 326.

³¹³ John Knop, *supra* note 273, at 291

³¹⁴ Hafeez Khan, *supra* note 307, at 325.

³¹⁵ Hafeez Khan, *supra* note 307 ,at 325

³¹⁶ John Knop, *supra* note 273, at 291

³¹⁷ John Knop, *supra* note 273, at 291.

³¹⁸ K.K.R., *supra note* 306 , at 271.

³¹⁹ John Knop, *supra* note 273, at 291.

³²⁰ Hafeez Khan, *supra* note 307 ,at 327.

E. World Bank techniques in settling the dispute:

After David Lilienthal, the former chairman of the Tennessee Valley Authority (TVA), visited India and Pakistan for an article he was writing about the dispute, he had recommendations for settling the dispute.³²¹ Mr. Lilienthal noted that if this dispute were referred to the International Court, as Pakistan requested, it would protect Pakistan's right. However, the decision would not provide an adequate solution to maintain peace or provide sufficient food for the people of the Indus River,³²² especially, as both states violated their bilateral agreements and there was no state practice to govern the dispute. He determined also in his article that the nature of this dispute was not a religious or politically related problem; it was a practical engineering and business one.³²³ In his article, he mentioned that politics and heightened emotions increased the tension between both parties although the dispute was completely related to technical irrigation issues.³²⁴ He also elaborated that the technical problem involved the way both states may use the water by constructing a shared irrigation project.³²⁵ He also proposed the establishment of a joint management system operating the Indus Basin to reinforce cooperation between the two states.³²⁶ Given the strength of his contentions, the World Bank tried to adopt his recommendations, amending them subject to the variable circumstances of the dispute.

The World Bank used several techniques to settle the dispute. Some highlights the importance of third party involvement in resolving water disputes in the absence of a bilateral agreement. These techniques crystallize the role of a third party in the interpretation of agreements in case of mistrust between parties. The following section discusses the different techniques the World Bank that used to settle this dispute and lead the parties to sign the 1960 IWT, as to be the basis of resolving any water dispute until now:

³²¹ Raja Nazakat , *Supra* note 255, at 95; John Laylin, *Indus River – Comments*, 54 Am. Soc'y Int'l L. Proc. 145 (1960)

³²² Raja Nazakat, *Id*, at 96; Leilienthal, *Another Korea in the Making?*, *Colliers`*, August 4, 1951 , at 56-57 as it cited in footnote 55 , John Knop, *supra* note 273, at 293

³²³ Kathleen Hogan, *Supra* note 234, at 99; Leilienthal, *Another Korea in the Making?*, *Colliers`*, August 4, 1951 , at 56-57 as it cited in footnote 55 , John Knop, *supra* note 273, at 293.

³²⁴ Kathleen Hogan , *Supra* note 234, at 99; Asit Biswas, *Indus Treaty: The Negotiation Process*, 17 *Water Int'l*, 205 (1992); Jeremy Allouche, *Supra* note 236, at 231; Leilienthal, *Another Korea in the Making?*, *Colliers`*, August 4, 1951 , at 56-57 as it cited in footnote 55 , John Knop, *supra* note 273, at 293.

³²⁵ Asit Biswas, *Supra* note 324 , at 205; Tufail Jawed, *The World Bank And The Indus Basin Dispute: Mediation By The World Bank —II*, *Pakistan Institute of International Affairs*, 19 *Pakistan Horizon*, 34 (1966); Leilienthal, *Another Korea in the Making?*, *Colliers`*, August 4, 1951 , at 56-57 as it cited in footnote 55 , John Knop, *supra* note 273, at 293.

³²⁶ Raja Nazakat , *Supra* note 255, at 96; Leilienthal, *Another Korea in the Making?*, *Colliers`*, August 4, 1951 , at 56-57 as it cited in footnote 55 , John Knop, *supra* note 273 , at 293

1. Establishing flexible settlement principles :

The first technique the World Bank was to discuss the principles that would be used as the basis for settling the dispute. The president of the World Bank corresponded with the leaders of both states, stating the key principles for resolving the conflict.³²⁷ The first principle was that the water in the Indus River was enough for both countries.³²⁸ The second principle was that the Sutlej River is to be treated as a single unit and all rivers are to be discussed separately.³²⁹ The third principle involves the negotiations, stating that they were to be based on technical arguments and not on political views.³³⁰ As a means of evaluating of these propositions, the three principles allowed the participants, including the World Bank and the disputants, to interpret them, each in their own way. They also embody the right of both states in developing the waters of the Indus in order to satisfy their needs for water.

2. Establishing a fact- finding committee:

The second technique the World Bank was used to establish a fact finding committee as to measure the needed and available water for both states. On May 25 1952, an ad hoc committee comprised from Indian and Pakistani engineers plus a World Bank team to develop an outline for Indus River basin water management schemes.³³¹ This task force suggested that the total supply might be divided by catchment and use.³³² This task force also determined how to calculate the water requirements of cultivated irrigable areas in each country. Equally important, the task force highlighted the importance of data and survey exchange, as requested by both states. The task force determined that cost estimates were to be calculated and a standardized schedule was to be set forth to execute a new project.³³³

3. Facilitating negotiations in order to sign temporary agreements:

The third technique the World Bank used to facilitate negotiation between the disputants was to establish the points of conflict and narrow the gap between them permanently.

³²⁷ K.K.R., *supra note 306* , at 275; Neda Zawahri, *Supra note 128*, at 292.

³²⁸ Raja Nazakat, *Supra note 255*, at 96; Tufail Jawed, *Supra note 325*, at 35; Jeremy Allouche, *Supra note 236*, at 231.

³²⁹ Raja Nazakat, *Supra note 255*, at 96; Tufail Jawed, *Id*, at 35 ; Jeremy Allouche, *Supra note 236*., at 231.

³³⁰ Raja Nazakat, *Supra note 255*, at 96; Tufail Jawed, *Id*, at 35 ; Jeremy Allouche, *Supra note 236*., at 231.

³³¹ Asit Biswas, *Supra note 324*, at 205; John Knop, *Supra note 273*, at 293.

³³² Tufail Jawed, *Supra note 325*, at 35

³³³ Raja Nazakat, *Supra note 255*, at 97.

In November 1952 in Karachi and in 1953 in Delhi, both states failed to achieve a common plan to develop the Indus River.³³⁴ As a result, the World Bank requested each of the states' delegations to set up its own plans in order to determine the outstanding issues causing controversy between both parties.

On October 6th 1953 a Pakistani consultant engineer named Tipton who was appointed from the World Bank tried to evaluate the action plan of the both states.³³⁵ Tipton stated in his report that both states agreed upon the supplies available for irrigation;³³⁶ however, they differed on how these supplies would be allocated.³³⁷ Each state preferred its own use over the other's, as their estimate of available water within the basin was similar.³³⁸ They also agreed on the allocation of water between them and recognized Indian's right to use waters coming from eastern rivers. However, they deprived each other of allocation for planned uses and future development.³³⁹ Tipton suggested in his report the pooling together of all the water of the basin and then allocating it.³⁴⁰ This suggestion was rejected by the parties.

The World Bank found that the margin of difference remained wide;³⁴¹ consequently, the Bank tried to narrow this gap.³⁴² This became more obvious in the numerous complaints filed against each other concerning the exchanging of data about existing projects and the shortage of water.³⁴³ At this point, the Bank realized that "the problem could not be solved solely by technicians; the Bank would, positively, have to negotiate according to a strategy or strategies of its own".³⁴⁴ Thus, the Bank notified both parties that "[t]he proposed plan [would] not fully satisfy either side",³⁴⁵ however, it pointed that "[n]o plan could do that; there [was] not enough water to fulfill all demands"³⁴⁶ In fact, the World Bank announced that after the technical

³³⁴ Asit Biswas, *Supra note 324*, at 206.

³³⁵ Undala Alam, *Supra note 171*, at 176.

³³⁶ John Knop, *Supra note 273*, at 294.

³³⁷ Undala Alam, *Supra note 171*, at 196.

³³⁸ Undala Alam, *Supra note 171*, at 176

³³⁹ Undala Alam, *Supra note 171*, at 196.

³⁴⁰ Undala Alam, *Supra note 171*, at 176

³⁴¹ Undala Alam, *Supra note 171*, at 174.

³⁴² Tufail Jawed, *Supra note 325*, at 35

³⁴³ For details, Undala Alam, *Supra note 171*, at 176; Neda Zawahri, *Supra note 172*, at 293.

³⁴⁴ IBRD-8/5/54 as cited in Undala Alam, *Supra note 171*, at 177.

³⁴⁵ IBRD-8/5/54 as cited in Undala Alam, *Supra note 171*, at 177.

³⁴⁶ Undala Alam, *Supra note 171*, at 177.

committee failed to apportion waters between the two states because of their conflict of interest.³⁴⁷

After such a determination, in 1954 the World Bank proposed having the entire flow of the eastern rivers Ravi, Sutlej, and Beas Rivers allocated to India,³⁴⁸ and all the western rivers Jhelum, Chenab, and Indus Rivers with the exception of a small amount of the Jhelum River used in Kashmir allocated to Pakistan.³⁴⁹ According to the proposal, both sides would agree to a transition period during which Pakistan would complete link canals dividing the watershed, while India continued to allow Pakistan historic use of water from the Ravi, Beas and Sutlej rivers.³⁵⁰ The Bank formulated the basis for solving the dispute for the existing and future usage. Afterwards, the World Bank notified the parties of its benefits:

[h]owever, the plan would bring great benefits. It would protect existing irrigation and would permit, and even stimulate, substantial future development. Most important of all, by providing a fair, understandable and definitive division of waters, it would eliminate a point of serious friction between the two countries³⁵¹

India quickly accepted the proposal in March 1954;³⁵² it tried to show that this acceptance was a final sacrifice on its part to solve the dispute. India replied to the World Bank that “in the interest of a speedy and constructive settlement and in the spirit of goodwill and friendship that has guided [its] Government ever since the beginning of this controversy, [it accepts] the principles of the Bank Proposal as the basis of agreement.”³⁵³ However, it stated, expressing that this acceptance was to be considered its final attempt to settle this conflict,

The Bank Proposal requires India to give up the use of a large part of the waters flowing through her own territory and thus to abandon, for all time, any hope of the development of a considerable portion of the extensive arid lands in India which has no possible source of water supply other than the Indus system of rivers and which will therefore remain a desert forever. Its acceptance would also imply a very heavy financial burden for my Government; not only would it involve the payment of large sums of money to Pakistan, but would also make new developments in India much more expensive than if all the waters running

³⁴⁷ Undala Alam, *Supra note* 171, at 177.

³⁴⁸ K.K.R., *Supra note* 306, at 276; Neda Zawahri, *Supra note* 162, at 295.

³⁴⁹ Undala Alam, *Supra note* 171, at 179; Neda Zawahri, *Supra note* 172, at 295.

³⁵⁰ Raja Nazakat, *Supra note* 255, at 97.

³⁵¹ IBRD- 8/2/54 as it cited in Undala Alam, *Supra note* 171, at 178; Neda Zawahri, *Id.*, at 295.

³⁵² Asit Biswas, *Supra note* 324, at 206; K.K.R., *Supra note* 306, at 276.

³⁵³ Undala Alam, *Supra note* 171, at 179.

through her territory and indispensable for her normal development could have been utilised therein³⁵⁴

On the other hand, Pakistan's response was a flat out rejection of the proposed plan. The proposed plan would not provide enough water for its needs, as under the proposed plan it would not be able to execute new projects to meet its water needs due to the potential economic and political instability.

In response to Pakistan's refusal, the World Bank continued its role as a mediator to settle the dispute over water allocation. The World Bank, in its written memo to both parties, suggested four approaches, including "[i] to use the Lilienthal approach. [ii] to consider the Bank's February 1954 proposal - rejected, and therefore start "horse-trading" with the supplies of the eastern rivers. [iii] to use the Tipton study and [iv] to start work on other aspects of the Indus Basin dispute, such as the canals and cost, leaving the principle of division until later"³⁵⁵ On May 26 1956 , the World Bank tried to safeguard Pakistan's concerns and issued another Aide Memoire ,³⁵⁶ according to which:

The Bank [would continue] to hold the view that the division of the waters contemplated by the Bank Proposal of February 1954 [afforded] the best prospects for a settlement of the Indus Waters question; that out of the flow-cum-storage potential of the rivers allocated to them, India and Pakistan could each develop very substantial irrigation uses, additional to those that they now [enjoyed]; and that no insuperable engineering difficulties [were] likely to arise in either country in constructing the physical works necessary to develop these additional supplies. The works would, however, be costly; and their financing would present a serious financial problem.³⁵⁷

In response, Pakistan tried to persuade the World Bank to finance the most essential storage facilities sidelined by the 1954 plan, which was in need of an amendment in light of the 1956 aide memories.³⁵⁸

After a long discussion under World Bank supervision between 1 April 1955 to 31 March 1960, many ad hoc agreements were signed to settle the dispute, except for the period from 1 October 1957 to 30th September 1958,³⁵⁹ during which the parties were unable to agree.

³⁵⁴ IBRD-25/3/54 as it cited in Undala Alam , *Supra note* 171, at 179.

³⁵⁵ Undala Alam , *Supra note* 171, at 181.

³⁵⁶ Tufail Jawed, *Supra note* 325, at 40

³⁵⁷ IBRD-21/5/56 as cited in Undala Alam , *Supra note* 171, at 194.

³⁵⁸ Raja Nazakat, *Supra note* 255, at 101.

³⁵⁹ Raja Nazakat, *Id.*, at 101.

According to these agreements, India agreed to provide Pakistan with water for a specified period and specific quantity in a year.³⁶⁰

4. Using the carrot and stick approach to put permanent basis over river waters management :

The third technique the World Bank was used to the carrot and stick approach to lead parties to accept gains and losses. Before beginning the mediation process, both India and Pakistan found themselves having no common ground to safeguard the water supplies from the Sutlej River.³⁶¹ They found that the Delhi Agreement did not promote any solution to the dispute;³⁶² it was only a mere “acknowledgement that there was a dispute in which both sides had legitimate claims”³⁶³ Due to this fact, Pakistan feared from any abuse of its existing status as a downstream, so it breached the Delhi Agreement.³⁶⁴ In response, India described this action as a unilateral termination of the agreement.³⁶⁵ To protect their interests, as there was not enough funding means for any suitable irrigation project, both countries approached the World Bank to fund an irrigation project on this river. Only then, the World Bank understand that Pakistan and India might accept its good offices and it was good time to send Lilienthal`s recommendation to both parties. This was a good time for the Pakistani side, as it was motivated by a desire to secure agreements that ensured water supply to its existing usage.³⁶⁶ It was also a good time for the Indian party, as it was also motivated by its desire to secure its need from water for development by signing an agreement based on equitable apportionment of the waters.³⁶⁷ In response, the World Bank refused to finance the development projects of either state, due to the political tension existing between them; however, the Bank was more interested in funding India`s Project.³⁶⁸ The World Bank wrote to Prime Ministers Liaquat Ali Khan and Nehru to accept the good offices of the Bank in light of the Lilienthal proposal and to accept funding for their integrated infrastructure. According to the World Bank proposal:

- (a) The Bank and Pakistan agreed on the system of replacement works to be constructed in Pakistan, one of the purposes of this system to be the feeding of the canals which were dependent on the eastern rivers with waters of the

³⁶⁰ Raja Nazakat, *Id*, at 101.

³⁶¹ Manav Bhatnagar, *Reconsidering the Indus Waters Treaty*, 22 Tul. Envtl. L.J. 274 (2009)

³⁶² Manav Bhatnagar, *Id*.

³⁶³ Manav Bhatnagar, *Id*

³⁶⁴ Manav Bhatnagar, *Id*

³⁶⁵ Manav Bhatnagar, *Supra note 361*.

³⁶⁶ Jeremy Allouche, *Supra note 236*, at 231.

³⁶⁷ Jeremy Allouche, *Supra note 236*, at 231.

³⁶⁸ Kathleen Hogan , *Supra note 234*, at 99-100.

western rivers. India would have no part in the conception, construction or the administration of the replacement works in Pakistan. (b) The Bank and India agreed on the financial participation of India in the works to be constructed in Pakistan. (c) The transition period was set at ten years. The Indian Union accepted this on the condition that she would progressively withdraw the waters of the eastern rivers for use in India. The Bank also agreed to provide foreign exchange to India for the construction of the reservoir to be constructed on the Beas. (d) The transition period could be extended at the request of Pakistan by one to three years. The annual financial contribution by India was to be reduced in proportion to the period thus extended. (e) Pakistan accepted certain uses by India in the upper reaches of the western rivers before they entered into Pakistan.³⁶⁹

In fact, India gained more legitimacy to its perspective with the interference of the World Bank, as it continued controlling the eastern rivers, while Pakistan controlled the western rivers. However, both countries received over 1000 million US dollars in 1960 as a form of financial aid for irrigation projects.³⁷⁰ These projects were based on a comprehensive unified plan aiming to safeguarding long-term water supply.³⁷¹ Moreover, the World Bank offered economic incentives to Pakistan by agreeing to finance new projects to afford waters to Pakistan through suitable funds and technical know-how by the negotiators to realize its present position and requirements.³⁷² The plan not only promised to help fit in the construction of the distribution system and the linking of canals, but also a much needed electricity supply for its future.³⁷³ This plan is considered the basis for the 1960 Indus River Agreement.

E. Outcomes:

The World Bank succeeded in resolving this dispute over managing one shared river. It also succeeded in leading the parties to conclude a permanent treaty in the 1960 Indus Treaty which has survived spite of bitter political relations including three armed conflicts between the two countries.³⁷⁴ This treaty is considered to be a remarkable example of the successful resolution of conflict and a landmark in the role of the World Bank as an international mediator.³⁷⁵

³⁶⁹IBRD-8/5/54 as cited in Tufail Jawed, *Supra note 325*, at 43

³⁷⁰ Undala Alam, *Supra note 249*, at 346-347

³⁷¹ Undala Alam, *Supra note 249*, at 346-347

³⁷² Raja Nazakat, *Supra note 255*, at 95 ; Neda Zawahri, *Supra note 172*, at 295.

³⁷³ Raja Nazakat, *Supra note 255*, at 101.

³⁷⁴ Raja Nazakat, *Supra note 255*, at 7.

³⁷⁵ Mikiyasu Nakayama, *Success and Failures of International Organizations in Dealing With International Waters*, 13 *Int'l J. Water Res. Develop.*, 368 (1997), available at <http://dx.doi.org/10.1080/07900629749737>

In fact, the mechanism for distributing water in this dispute shows a practical compatibility between the substantive and procedural rules of international customary law in settling water disputes. Although the actual allocation of water was not equal - 80 % for Pakistan and 20 % for India-, this distribution was deemed equitable based on needs, prior use, and other considerations. The World Bank reached such a determination after establishing a committee of engineers from both countries and demanding action plans from the parties. Then, the Bank proposed its own plan and narrowed the gap between the perspectives of the two states. The Bank based new principles, at this time equitable utilization and no significant harm through its intervention which become the main pillar in settling water disputes.

The Bank also succeeded in maintaining such a distribution by relaxing the tension between the riparian states and encouraging interdependence which demanded active cooperation. The World Bank succeeded in doing so by pursuing two strategies. The first strategy was to lead the parties to conclude an agreement which imposed interdependent and interrelated commitments. Although, the Indus treaty allocated the waters of the river between the two states, the treaty lead the parties to depend on each other in developing the river and satisfying their own needs. According to article III of the treaty and Annexures E and C, India can use the western tributaries in generating hydropower, satisfying its own water needs for agriculture, developing the tributaries for navigation, and the floating of timber and fishing.³⁷⁶ On the other hand, according to article II, Annexure B, Pakistan has the right to use the eastern tributaries given to India.³⁷⁷ Pakistan also depended on India for the delivery of hydrological and metrological data. However, according to article IV / 4,5, 8 , India depends on Pakistan to dismiss its agriculture run off and any excess, flood or unused water. To illustrate, if Pakistan refuses to accept water from India, it can result in flooding in upstream “India”.³⁷⁸ This cooperative relationship has contributed to a massive infrastructure development in the Indus River Valley. For example, this is seen in the construction of link of canals, barrages, and new

³⁷⁶ Neda Zawahri, *Designing river commissions to implement treaties and manage water disputes: the story of the Joint Water Committee and Permanent Indus Commission*, 33*Water Int'l*, 467(2008).

³⁷⁷ Neda Zawahri, *Supra note 376*, at 467.

³⁷⁸ Neda Zawahri, *Supra note 376*, at 467.

reservoirs to replace the waters of the Beas , Sultej, and Ravi Rivers which were allocated by the treaty to India.³⁷⁹

The second strategy of the World Bank was to enact articles in the treaty that obligate the parties to establish a commission. This commission is to facilitate direct communication which helps in exchanging hydrological data and scheduling work maintenance. It also facilitates regular meeting which smooth negotiations on how the parties can implement treaties and discuss construction projects. In addition, it helps in monitoring the existing use by the riparian states confirming the accuracy of exchanged data. Moreover, it considers an effective mechanism in settling disputes over managing the river. For example, this Commission in 1965 succeeded in releasing the tension between the two states during their war over Kashmir³⁸⁰ because of the nature of the obligation which had been imposed on the two states and the role of the Commission in resolving conflicts. Also, this Commission succeeded in negotiating many issues between the two states from 1970 to 2007. For example, it negotiated the amount of agricultural lands which are irrigated from the western tributaries and negotiated the nature of flood warning devices that are directed towards Pakistan.³⁸¹

In fact, the World Bank succeeded in its role because it put the interest of the two parties in full view; also, its impartiality and neutrality exercised its role leading the parties to sign and accept the outcomes of its intervention. For example, the World Bank failed as a mediator in solving India`s and Bangladesh`s dispute over the Ganges River because its approach in solving the dispute was the same as Bangladesh.³⁸²

To sum up, the World Bank succeeded in its role because it had the expertise, trust, and funds to finance any solution that would have been difficult because of a lack of funding. In addition, the World Bank played a great role in narrowing the gap between the disputants over the utilization of the Indus River and its tributaries.

³⁷⁹ James Wescoat, Sarah Halvorson and Daanish Mustafa , *Water Management in the Indus Basin of Pakistan: A Half-century Perspective*, 16 *Water Res. Develp.*,395, 396 (, 2000).

³⁸⁰ For details; Neda. Zawahri, *Supra note 172*, at 299.

³⁸¹ For details; Neda Zawhri, *Supra note 172*, at 300 – 302.

³⁸² Mikiyasu Nakayama, *Supra note 375*, at 378.

V. Mediation as a peaceful mean in settling the Renaissance Dam dispute :

In this chapter, I will evaluate mediation as a peaceful means in settling the dispute between Egypt and Ethiopia over the construction of the Renaissance dam. For the purpose of the evaluation, I will analyze the various different reasons that led to this dispute, and I will explain the negotiation process. Then, I will explore the possible obstacles, which may face mediation as a peaceful means in settling this dispute. After such, I will recommend a possible solution. During this process, I will take into my consideration the facts, the reasons for the dispute, and the relationship between these two countries.

A. General features of the Nile River:

The Nile River is considered the longest river in the world; it is of 6,825 Kilometers long. Its catchment basin covers 3,390,000 square kilometers, and its basin includes eleven states. Eight states are upstream countries: Ethiopia, Burundi, the Democratic Republic of Congo, Kenya , Rwanda , Uganda , Tanzania , and Eriteria; three states are downstream countries: Egypt , Sudan , and South Sudan. Five of these countries are the poorest countries in the world. The two main sources of water of the Nile River are rainflow in the Ethiopian Highlands and equatorial lakes such as Lake Victoria. The two main tributaries are the White River and the Blue River, the White River rises from the Great Lakes Region in central Africa with the most distant source in central Burundi, while the Blue River starts at Lake Tana in Ethiopia and flows into the Sudan from the southeast. Both rivers come together near the Sudanese capital of Khartoum to form the main Nile River.³⁸³

B. Reasons for conflict between Egypt and Ethiopia:

The dispute between Egypt and Ethiopia over construction of the dam can be traced to the features of the dam which involve physical risks to Egypt, the conflict of interest over the project

³⁸³Christina Carroll, *Supra note 14*, at 272 ; Scott McKenzie, *Supra note 14*, at 573; Food and Agriculture Organization (FAO) , *Information Products for Nile Basin Water Resources Management*, <http://www.fao.org/nr/water/faonile/nbs/nileystem.htm>, Accessed on 3/4/2014; Emmanuel Kazimbazi ,*The Impact of Colonial Agreements on the Regulation of the Waters of the Nile River* , 35 *Water Int'l Res.*, 719 (2010), Available at <http://www.tandfonline.com.library.aucegypt.edu:2048/doi/pdf/10.1080/02508060.2010.533642> , accessed on 3/4/2014.

itself, and water scarcity. Actually, the dispute is complicated by the factual and legal circumstances surrounding this dispute, which I will discuss.

1.The feature of the dam involves risks to Egypt:

The Dam is constructed over the Blue Nile River, which represents 59 to 68 percent of the annual water contribution to the Nile River, which flows to the downstream countries, Egypt and Sudan.³⁸⁴ According to the Ethiopian Government, this Dam is being constructed to generate electricity, estimated at 6,000 MW with the expected average energy production of more than 15,000 GWh.³⁸⁵ According to the announcement of the Ethiopian Government, “- [t]he project comprises of mainly ;-Roller Compacted Concrete RCC Dam, Saddle Dam , Two Power houses , a 500 KV switch yard and a spill way.”³⁸⁶To that end, a reservoir will be constructed with a capacity of about 74 Billion Cubic Meters (BCM) at the full supply level, out of 200 BCM of the water available in the Nile River that is directed to downstream countries.³⁸⁷ It covers an area of 1.680 square kilometers of forest in Northwest Ethiopia with a depth of 15 m.³⁸⁸ The International River Networks ³⁸⁹ state that the area of the reservoir is about four times the size of Cairo.³⁹⁰ The volume of the reservoir is twice that of Lake Tana which is considered the largest lake in Ethiopia and source of the Blue River.³⁹¹ In addition, Egypt has a concern on the first filling.³⁹²Consequently, Egypt claims that if the reservoir is constructed with this feature, Egypt

³⁸⁴Jennifer Veilleux , *The Human Security Dimensions of Dam Development: The Grand Ethiopian Renaissance Dam*, 15 *Global Dialogue*, 4 (2013), Available at http://www.transboundarywaters.orst.edu/publications/publications/Veilleux_GLOBAL%20DIALOGUE_V15_GERD.pdf, Accessed on 1/4/2014; Elias Stebek, *Supra note 66*, at 34.

³⁸⁵The Environmental Protection Authority of Federal Democratic Republic of Ethiopia, *the United Nations Conference on Sustainable Development (Rio + 20), National Report of Ethiopia*, 47 (2012), Available at <http://web.mit.edu/12.000/www/m2017/pdfs/ethiopia/UN.pdf>, Accessed on 1/4/2014.

³⁸⁶Ethiopian Electric Power Corporation, *Grand Ethiopian Renaissance Dam Project* , 2 (2012), Available at http://www.hidasse.gov.et/c/document_library/get_file?p_l_id=11731&folderId=11740&name=DLFE-202.pdf, Accessed on 1/4/2014.

³⁸⁷Shams Al Din Al Hajjaji. *The Long Empty Canyon: A Study of the Old/New Legal Problems of the Nile Basin.2 J. Water Res. Ocean Sc.* 146 (2013), Available at <http://article.sciencepublishinggroup.com/pdf/10.11648.j.wros.20130205.22.pdf>, Accessed on 1/4/2014

³⁸⁸For details about the features of this project , Ethiopian Electric Power Corporation, *Supra note 385*.

³⁸⁹The International River Network is a Non-Governmental Organization (NGO), its aim is “to protect the World’s rivers from destructive dams and amplify the voices of dam – affected communities.” International Rivers Network, *History and Accomplishments*, available at <http://www.internationalrivers.org/history-accomplishments>, Accessed on 1/ 4/ 2014.

³⁹⁰The International River Network, *The Grand Ethiopian Renaissance Dam Fact Sheet*, available at <https://www.internationalrivers.org/resources/the-grand-ethiopian-renaissance-dam-fact-sheet-8213>

³⁹¹Jennifer Veilleux , *Supra note 384* , at 5.

³⁹² I will elaborate this concern explicitly later in negotiation development.

will incur significant harm. For instance, the Dam will reduce the average water that flows to the High Aswan Dam to a maximum of 47 % during years of drought.³⁹³ Consequently, its ability to produce electricity will decrease. The massive weight of water and sediments in the dam's reservoir may cause earthquakes because the nature of the soil is fragile in this place.³⁹⁴ Also, any structural failure in the dam means catastrophe for Egypt because floods could be result affect Egyptian High Dam.³⁹⁵ However, Ethiopia argues that such Dam helps to achieve sustainable development and announced that the project will be completed by July 2017.³⁹⁶ As a result, a dispute was flared up about the features of such a project between Egypt and Ethiopia.

2.Conflicts of interest over this project:

Indeed, there is a conflict of interest over this project because Ethiopia considers this project necessary for development. Egypt also needs the water for life and development describing it as a national security. The project reflects the Ethiopian government's ambitions to transform the economy, develop the country, eradicate poverty, and achieve the UN Millennium Development Goals (MDGs).

The Ethiopian Government considers this project as part of a broader scheme to expand its hydroelectric power capacity³⁹⁷ and the means to achieve sustainable development. The population is expected to reach 107 million in 2025.³⁹⁸ And, five million Ethiopians currently need food aid, while 14 million other Ethiopian citizens rely on handouts.³⁹⁹ To demonstrate, the agriculture sector is over 40 percent of Ethiopia's GDP and has earnings of 90 % of Ethiopia's

³⁹³Mina Samaan, *The Win-Win-Win Scenario in the Blue Nile's Hydropolitical Game: Application on the Grand Ethiopian Renaissance Dam*, Braunschweig University of Technology, 15 (2014), Available at <http://ulrich-menzel.de/forschungsberichte/Blaue%20Reihe113.pdf>

³⁹⁴Mina Samaan, *Supra note 393*, at 15.

³⁹⁵Mina Samaan, *Supra note 393*, at 15.

³⁹⁶Water Technology, *Grand Ethiopian Renaissance Dam Project, Benishangul – Gumuz, Ethiopia*, available at, <http://www.water-technology.net/projects/grand-ethiopian-renaissance-dam-africa/>, Accessed on 8/4/2016.

³⁹⁷Micheal Hammd , *The Grand Ethiopian Renaissance and the Blue Nile: Implications for Transboundary Water Governance*, *Global Water Forum* , Available at <http://www.globalwaterforum.org/2013/02/18/the-grand-ethiopian-renaissance-dam-and-the-blue-nile-implications-for-transboundary-water-governance/comment-page-1/>, Accessed on 1/4/2014.

³⁹⁸Fasil Amdetsion, *Scrutinizing the Scorpion Problematique : Arguments in Favor of the Continued Relevance of International Law and a Multidisciplinary Approach to Resolving the Nile Dispute*, 44 *Tex. Int'l L. J.* 19 (2009).

³⁹⁹Fasil Amdetsion, *Supra note 398*.

foreign currency.⁴⁰⁰ After the construction of the Dam, the cultivated area will increase by 500,000 hectares and will provide water for irrigation during the drought seasons by controlling the flow of water.⁴⁰¹ Thus, such a Dam is the means by which the Ethiopian government can combat poverty, and provide food to its citizens. According to the official website of the Ethiopian Electric Power Cooperation (EEPCO), this project will provide numerous job opportunities for Ethiopian citizens; for instance, the project will provide an opportunity to have a fishery resulting from the reservoir.⁴⁰² Another benefit to Ethiopia from the construction of the Dam is the opportunity for an estimated 50 percent of the Ethiopian citizens to have access to clean and cheap electricity.⁴⁰³ Furthermore, it will increase the flow of foreign currency, which is estimated to be 27 million dollars a day revenue⁴⁰⁴ by exporting produced electricity to its neighbors like Kenya, Djibouti, Sudan and South Sudan, who suffer from electricity shortages.⁴⁰⁵ In general, after the construction of the Dam, Ethiopia will be the second highest generator of power in Africa after the Democratic Republic of the Congo.⁴⁰⁶ Consequently, the Ethiopian government considers this project as essential for national security.

On the other side, Egypt is completely dependent on the Nile River. It has provided 90 % of Egyptian freshwater resources since ancient times, and 90 percent of its population live currently along its banks.⁴⁰⁷ Egypt suffers from high population growth; it is estimated to be 120 to 150 million by 2050.⁴⁰⁸ In fact, the Nile River is very important for agriculture and hydroelectrical power. In terms of agriculture, 85 percent out of 55.5 bcm reaching Egypt is used in irrigating 3.42 million hectares of Egypt crop Lands.⁴⁰⁹ The agricultural activities provide employment for 35 percent of the labour force and contribute up to 13.5 per cent of the country's

⁴⁰⁰ Afro – Middle East Centre, *The Grand Ethiopian Renaissance Dam : Significance and Consequences* , 2013 , Available at , <http://www.amec.org.za/articles-presentations/north-africa/419-the-grand-ethiopian-renaissance-dam-significance-and-consequences>, Accessed on 1/4/2014.

⁴⁰¹ Afro – Middle East Centre, *Supra note 400*.

⁴⁰² Ethiopian Electric Power Cooperation, *About Grand Ethiopian Renaissance Dam*, Available at <http://www.eepco.gov.et/abouttheproject.php?pid=1&pcatid=2>, Accessed on 3/4/2014.

⁴⁰³ Afro – Middle East Centre, *Supra note 400*.

⁴⁰⁴ Afro – Middle East Centre, *Supra note 400*.

⁴⁰⁵ Afro – Middle East Centre, *Supra note 400*.

⁴⁰⁶ Afro – Middle East Centre, *Supra note 400*.

⁴⁰⁷ Scott McKenzie, *Supra note 14*, at 571.

⁴⁰⁸ The Egyptian Ministry of Water Resources and Irrigation, *Water Scarcity in Egypt*, 2 (2014), Available at http://www.mfa.gov.eg/SiteCollectionDocuments/Egypt%20Water%20Resources%20Paper_2014.pdf Accessed on 13/4/2014.

⁴⁰⁹ Poolad Karimi and David Molden , *Nile Basin Farming Systems and Productivity*, *International Water Management Institute*, Available at <http://www.iwmi.cgiar.org/Publications/Books/PDF/H045315.pdf> , Accessed on 13/4/2014; The Egyptian Ministry of Water Resources and Irrigation, *Supra note 408*.

GDP.⁴¹⁰ However, according to a new report issued by the Ministry of Water Resources and Irrigation, agriculture makes up 40 percent of country's GDP.⁴¹¹ As for hydroelectric power, according to the Egyptian Electricity Holding Company's 2012 report, freshwater coming from the Nile River, contributes up to 8.2 percent of generated power, while the thermal power contributes 90 percent.⁴¹² Due to the Egyptian reliance on the thermal power will decrease because of the shortage of fuel;⁴¹³ as a result, Egypt will directly rely on water, wind, and sun to generate electricity. Consequently, any shortage in water supply will lead to critical problems for the Egyptian government, especially as water availability in Egypt is below the water poverty line.⁴¹⁴ Indeed, by 2017, Egypt will need more than 20 bcm.⁴¹⁵ Because of these facts, the Nile River is essential for Egypt. It is what led Anwar El Sadat to claim in 1979 that "the only matter that could take Egypt to war again is water."⁴¹⁶ Even during Morsi's presidency, this statement was repeated by politicians during their meetings with him.

3. Scarcity of water in the Nile River:

One of the major reasons for the dispute is the scarcity of water in the Nile River which increases the complexity of the dispute. It is based on two factors, the amount of water in the Nile River is limited in comparison to the demands of people for the water itself and hydroelectric power, and climate change has decreased the amount of water available. The Nile River has only 6.5 percent of water, compared to the Congo River and 3 percent of the Amazon River, the second longest river in the world.⁴¹⁷ The reason is because the flow of the Nile River is highly variable from season to season, and there is no tributary or in flow for the last 3,000 Kilometers before its draining in the Mediterranean Sea.⁴¹⁸ Furthermore, the population of the

⁴¹⁰Poolad Karimi and David Molden, *Supra note 409*; Jeffrey Azarva, *Supra note 14*, at 462.

⁴¹¹The Egyptian Ministry of Water Resources and Irrigation, *Supra note 408*.

⁴¹²The Egyptian Electricity Holding Company, *The Egyptian Electricity Holding Company Annual Report 2011-2012*, 17 (2012), Available at http://www.moee.gov.eg/english_new/EEHC_Rep/2011-2012.pdf, Accessed on 13/4/2014.

⁴¹³Ahramonline, *Winter Electricity Blackouts Return to Egypt*, Available on <http://english.ahram.org.eg/NewsContent/3/12/92970/Business/Economy/Winter-electricity-black-outs-return-to-Egypt.aspx>, Accessed on 31/4/2014.

⁴¹⁴Jeffrey Azarva, *Supra note 14*, at 458.

⁴¹⁵Fasil Amdetsion, *Supra note 398*.

⁴¹⁶ Fasil Amdetsion, *Supra note 398*; Christopher Kukk and David Deese, *At the Water's Edge: Regional Conflict and Cooperation Over Freshwater*, 1 UCLA J. Int'l L. & Foreign Aff. 42 (1997).

⁴¹⁷Scott McKenzie, *Supra note 14*, at 573.

⁴¹⁸Christina Carroll, *Supra note 14*, at 272.

Nile Basin is increasing rapidly; according to the Nile Basin Initiative (NBI),⁴¹⁹ the population of Nile countries in 2012 is estimated with to be 437 million, with 238 million residing in the Nile Basin.⁴²⁰ In the next 25 years, the population of the Nile basins is expected to reach 600 million people.⁴²¹ In addition to population growth, more than half of the Nile Basin countries get 90 % of their electricity from hydropower.⁴²² This means that the percentage of water loss increases due to water storage in the reservoirs. Climate change also increases the probability of water scarcity.⁴²³ In addition to population growth, more than half of the Nile Basin countries get 90 % of their electricity from hydropower.⁴²⁴ This means that the percentage of water loss increases due to water storage in the reservoirs. Climate change also increases the probability of water scarcity.⁴²⁵

C. Legal dilemma behind the construction of the Dam:

Both Egypt and Ethiopia have different legal perspectives towards managing the Nile River. Egypt insists on its historical and acquired right which is its consent on any project that may affect the flow of the Nile River.⁴²⁶ Egypt insists on its receiving fixed amount of water of 55.5 bcm by virtue of the 1959 agreement.⁴²⁷

Egypt argues that it has a historical right to veto power on rejecting any proposed planned measure.⁴²⁸ Egypt argues that upstream countries should obtain its consent to construct any water project.⁴²⁹ It bases its argument on numerous agreements which were signed during

⁴¹⁹The Nile Basin Initiative “is an intergovernmental partnership of ten Nile riparian countries that is seeking to manage and develop the common Nile water resources in a cooperative manner and promote regional peace and security.” The Nile Basin Initiative , *State of the Nile River Basin* , 18 (2012), Available at <http://www.cedare.int/namcow/attachments/article/141/State%20of%20the%20Nile%20River%20Basin.pdf> , Accessed on 3/4/2014

⁴²⁰ The Nile Basin Initiative, *Supra note 419*, at 100

⁴²¹ Scott McKenzie, *Supra note 14* , at 576.

⁴²² Scott McKenzie, *Supra note 14*, at 575.

⁴²³ Micheal Hammnd , *Supra note 397*.

⁴²⁴ Scott McKenzie, *Supra note 14* , at 575.

⁴²⁵ Micheal Hammnd , *Supra note 397*.

⁴²⁶ A list of conventions that concluded over managing the Nile River is summarized by Dante Capohera, *Legal Aspects of Transboundary River Basins in the Middle East: : the Al Asi (Orontes), the Jordan, and the Nile*, 33 Nat. Resources J. 657(1993).

⁴²⁷ Agreement between the Republic of the Sudan and the United Arab Republic of Egypt for the Full Utilization of the Nile Waters, Cairo, 8 Nov., 1959, 453 UNTS 66 (1963).

⁴²⁸ Mohamed Shawki , *Equitable and Reasonable Utilization of International River in the UN Convention with a Particular Reference to the Nile River, African Perspective, Egyptian State Information Center*, 27 (2013), available at <http://www.sis.gov.eg/newvvr/afaken39/5.pdf>.

⁴²⁹ Mohamed Shawki , *Supra note 428*.

the colonial era with the Basin States. These agreements gave Egypt a veto power over the utilization of the Nile River.⁴³⁰ For example, in 1891,⁴³¹ the government of Great Britain, as a representative of Egypt, and Italy signed the Protocol of the Demarcation of their Respective Spheres of Influence in East Africa; by virtue of this protocol, Italy agreed not to construct on the Atbara River any irrigation or other construction that would modify or affect its flow into the Nile which is directed to Egypt.⁴³² And, in 1902,⁴³³ the King of Great Britain Edward VII acting for Egypt and Sudan and the Ethiopian Emperor Menelik II and Italy signed a treaty regarding the Blue Nile, Lake Tana, and the Sobat River during their determination of the boundaries between Ethiopia and Sudan called “ the Delimitation of the Frontier between Ethiopia and Sudan.”⁴³⁴ By virtue of this agreement, Ethiopia agreed not to construct any dams over Nile River without obtaining the consent of Great Britain.⁴³⁵

Further, in 1925,⁴³⁶ in exchanged notes between Great Britain acting for Egypt and Sudan and Italy to support Italy in constructing a railroad from Eriteria to the Italian Somali and passing through Ethiopia and the vicinity of Addis Ababa, Italy agreed on the “prior hydraulic rights”⁴³⁷ of Egypt over the Blue Nile and White Nile or their tributaries.⁴³⁸ In 1929,⁴³⁹ Great Britain acting for Sudan, Uganda, Kenya, and Tanzanika exchanged notes with Egypt⁴⁴⁰ assuring not to “infringe Egypt`s natural and historical rights in the waters of the Nile and its requirement of

⁴³⁰ An analysis for these agreements , Jutta Brunnee and Stephen Toope , *Supra note 17*, at 122; Mohamed Shawki , *Supra note 428*, at 27.

⁴³¹ Protocols Between the Governments of Great Britain and Italy, for the Demarcation of Their Respective Spheres of Influence in Eastern Africa, Protocol No. 2, Apr. 15, 1891, Italy-Gr. Brit., para. 3, Brit. & For. State Papers 83, at 2 1.

⁴³² Christina Carroll, *Supra note 14* , at 277; Mohamed Shawki , *Supra note 428*, at 27.

⁴³³ Treaty between Great Britain and Ethiopia, and between Great Britain, Italy and Ethiopia, relative to the frontiers between Anglo-Egyptian Soudan, Ethiopia, and Erythraea, Addis Ababa, 15 May, 1902, available at <http://faolex.fao.org/watertreaties/index.htm>

⁴³⁴ Christina Carroll, *Supra note 14* , at 277; Mohamed Shawki , *Supra note 428*, at 27.

⁴³⁵ Jeffrey Azarva, *Supra note 14* , at 466; Mohamed Shawki , *Supra note 428*, at 27.

⁴³⁶ Exchange of Notes between the United Kingdom and Italy respecting Concessions for a Barrage at Lake Tsana and railway across Abyssinia from Eritrea to Italian Somali Land, Rome, 20 December, 1925, 50 LNTS 282.

⁴³⁷ Okidi, *Review of Treaties on Consumptive Utilization of Waters of Lake Victoria and Nile Drainage System*, 22 Nat. Resources J. 170 (1982); Mohamed Shawki , *Supra note 428*, at 27.

⁴³⁸ Christina Carroll, *Supra note 14* , at 280; Jeffrey Azarva, *Supra note 14*, at 466.

⁴³⁹ Exchange of Notes between His Majesty`s Government in the United Kingdom and the Egyptian Government in regard to the use of the Waters of the Nile River for Irrigation purposes, Cairo, May 7, 1929, available at <http://faolex.fao.org/watertreaties/index.htm>

⁴⁴⁰ For details about this agreement , Batstone, *The Utilization of the Nile Waters*, 8 Int'l & Comp. L.Q. 526 (1959).

agricultural extension.”⁴⁴¹ By virtue of these exchanged notes, Egypt prevented the Ethiopian authority from building a dam on the Lake Tana in 1935.⁴⁴² In 1959, because of the excessive need of Egypt for development, especially after its independence from Britain, and need to provide water for agriculture, and its plan to build the Aswan Dam, Egypt concluded an agreement with Sudan to obtain its approval on the Aswan Dam. By virtue of this agreement, both Egypt and Sudan agreed to allocate the flow of water on their territories. Egypt had a fixed amount of water estimated to be 55.5 bcm ,and Sudan has the right to have 18.5 bcm as long as the Nile yield remains the same.⁴⁴³

Egypt also argues that this veto power is approved by Ethiopia after its independence.⁴⁴⁴ On July 1st 1993, Ethiopia agreed with Egypt to cooperate in utilizing the Nile River based on the rules and principles of international law, Article 4 in the Convention Framework for General Cooperation between the Arab Republic of Egypt and Ethiopia.⁴⁴⁵ The significance of this Convention, in my view, is the agreement with Ethiopia not to initiate any project related to the Nile River. Moreover, by virtue of this convention, Ethiopia agreed not to undertake any project for development without Egyptian consent and cooperation on the project.

Egypt argues that all these agreements which were signed during colonial era are still valid,⁴⁴⁶ and any unilateral termination threatens its acquired right. Egypt asserts that the principles of the international customary law impose on the states obligation to respect their signed treaties and interpretation should be done in good faith. This compulsory nature can be understood within Articles 11 and 12 of the 1978 Vienna Convention on Succession of States in

⁴⁴¹ Christina Carroll, *Supra note 14* , at 277 ; Derje Mekonnen, *From Tenuous Legal Arguments to Scrutinizing and Benefits Sharing: Hegemonic Obstinacy – The Stumbling Block against Resolution of the Nile Waters Question*, 4 Mizan L. Rev. 238(2010); Mohamed Shawki , *Supra note 428*,at 27; Mosaad Shetewy, *Legal Commitments Regulating the Establishment of Water Projects on International Rivers Application Study over the Nile Basin* , *African Perspective, Egyptian State Information Center*, 34 (2013), available at <http://www.sis.gov.eg/newvr/afaken39/6.pdf>.

⁴⁴² Shams Al Din Al Hajjaji. *Supra note 387* , at 146.

⁴⁴³ Christina Carroll, *Supra note 14* , at 277; Derje Mekonnen, *Supra note 441*, at 241.

⁴⁴⁴ Ahmed Abulwafa, *Commitment of International Conventions on the Nile River, African Perspective, Egyptian State Information Center*, at 8-11 (2013).

⁴⁴⁵ Food and Agriculture Organization of the United Nation (FAO), *Framework for General Cooperation between the Arab Republic of Egypt and Ethiopia*, 1993. Available at <http://www.fao.org/docrep/w7414b/w7414b0p.htm#TopOfPage>

⁴⁴⁶ Ahmed Abulwafa, *Supra note 444*, at 7; Mohamed Shawki , *Supra note 428*, at 25.

Respect of Treaties.⁴⁴⁷ According to these articles, treaties on border or regional as well as geographical conditions shall not be affected by the succession of state and shall apply on successor state.⁴⁴⁸ Thus, the colonial treaties cannot be cancelled or amended unless the concerned state approves on such.⁴⁴⁹ According to the ICJ on its judgment in the case *Hungary-Slovakia* ,⁴⁵⁰ the regional treaties cannot be breached as a result of international inheritance; in addition, it may raise the state responsibility.⁴⁵¹ To illustrate, such international treaties are inherited from the predecessor to the successor state and cannot be breached.⁴⁵² These colonial treaties are obligatory on Egypt and Ethiopia as they ratified the 1978 Vienna Convention on 17th of July 1986, and on 28th of May 1980 respectively without any reservation.⁴⁵³

Egypt argued that these colonial treaties promote protection of its acquired right on utilizing the Nile River for a long time ago.⁴⁵⁴ It contented that it has established its prosperities on the banks of the Nile River since ancient times,⁴⁵⁵ and it is completely dependent on the Nile River.⁴⁵⁶ Egypt assured that it exercises its historical right and its utilization from water for a long time without objection from any riparian country; as a result, upstream countries oppose its utilization.⁴⁵⁷ This argument is concluded from the ICJ in its judgment on a Fisheries case between United Kingdom V. Norway. According to the court, it stated:

The general toleration of foreign States with regard to the Norwegian practice is an unchallenged fact. For a period of more than sixty years the United Kingdom Government itself in no way contested it ... the method of straight lines, established in the Norwegian system, was imposed by the peculiar

⁴⁴⁷ Ahmed Abulwafa, *Supra note 444*. at 8; The Vienna Convention on Succession of States in respect of Treaties, UN Doc. A/CONF.80/31 (1978); Mohamed Shawki , *Supra note 428*, at 25.

⁴⁴⁸ Ahmed Abulwafa, *Supra note 444*, at 8; The Vienna Convention on Succession of States in respect of Treaties, *Supra note 447*.

⁴⁴⁹ Mohamed Shawki , *Supra note 428*, at 25.

⁴⁵⁰ For details; Judgment in Case Concerning *the Gabcikovo-Nagyymaros Project*, *Supra note 25*. at 37.

⁴⁵¹ Mohamed Shawki , *Supra note 428*, at 25; Judgment in Case Concerning *the Gabcikovo-Nagyymaros Project*, *Supra note 25*, at 38, para. 46.

⁴⁵² Mohamed Shawki , *Supra note 428*, at 26.

⁴⁵³ It entered in force on 6th November 1996 in accordance with article 49 (1); For details for its status; United Nation Treaties Database, available at https://treaties.un.org/pages/ViewDetails.aspx?src=IND&mtdsg_no=XXIII-2&chapter=23&lang=en.

⁴⁵⁴ Ahmed Abulwafa, *Supra note 444*. at 8-11; Ibrahim Al Anani, *Dispute Settlement on International River Uses Nile River as an Example , African Perspective, Egyptian State Information Center*, 15-20 (2013), available at <http://www.sis.gov.eg/newvtr/afaken39/4.pdf>; Mohamed Shawki , *Supra note 428*, at 28.; Mofeed Shehab, *Legal Aspects on Ethiopian Dam*, 63 J. Middle East , 81 (2014).

⁴⁵⁵ Mohamed Shawki , *Supra note 428*, at 22.

⁴⁵⁶ Ahmed Abulwafa, *Supra note 444*. at 8-11.

⁴⁵⁷ Mofeed Shehab, *Supra note 454*.

geography of the Norwegian coast ; that even before the dispute arose, this method had been consolidated by a constant and sufficiently long practice, in the face of which the attitude of governments bears witness to the fact that they did not consider it to be contrary to international law.⁴⁵⁸

Egypt asserted that this acquired right is considered its existing usage which is one of the criteria to measure the equitable utilization of water;⁴⁵⁹ in addition, the customary international water law imposes other principles that protect its right.⁴⁶⁰ In fact, this law imposed on basin states to use water in an equitable and reasonable manner without causing significant harm to each other. This is achieved by notifying the planned measure and the consent of the affected state.⁴⁶¹ In fact, any project undertaken by the upstream countries, especially Ethiopia, will affect the interest of Egypt and may cause significant harm.⁴⁶² Egypt argues that significant harm can be caused if there is interference or prevention of the equitable utilization;⁴⁶³ this analysis is also included in the ILA`s commentary on the 1966 Helsinki rules.⁴⁶⁴ Factually, Egypt is completely dependent on the Nile River;⁴⁶⁵ as a result, any interference to Egypt`s usage affect the human needs of its population for water which has priority over any other uses.⁴⁶⁶

On the other hand, Ethiopia argues that all colonial agreements are not valid⁴⁶⁷ because Ethiopia signed under political and military power and not under freewill.⁴⁶⁸ Ethiopia insisted that all previous exchanges and agreements, excepting the Convention of 1993, did not represent any obligation on its part.⁴⁶⁹ Ethiopia argues that the convention of 1902 between Great Britain and Ethiopia was never ratified,⁴⁷⁰ and the 1925 and 1929 notes exchanged between Egypt and Great Britain, signed them alone with the colonist.⁴⁷¹ Also, these agreement deny the natural right of

⁴⁵⁸ The Fisheries Case (*United Kingdom v. Norway*), Judgment, Dec. 18, 1951, I.C.J. Reports (1951) 26, 27.

⁴⁵⁹ See page ; Ibrahim Al Anani, *Supra* note 454, at 17-18; Hossam Elemam, *Cooperative Management of Transboundary Waters between the Rule of Law and State Sovereignty, African Perspective, Egyptian State Information Center, African Perspective, Egyptian State Information Center*,55 (2013), available at <http://www.sis.gov.eg/newvtr/afaken39/10.pdf>.

⁴⁶⁰ See page ; Ibrahim Al Anani, *Supra* note 454, at 17-18; Hossam Elemam, *Supra* note 459, at 55.

⁴⁶¹ Mosaad Shetewy, *Supra* note 441, at 30; Hossam Elemam, *Supra* note 459, at 56.

⁴⁶² Ahmed Abulwafa, *Supra* note 444, at 8-11; Hossam Elemam, *Supra* note 459, at 54.

⁴⁶³ Ahmed Abulwafa, *Supra* note 444. at 10; Mohamed Shawki , *Supra* note 428, at 24; Mosaad Shetewy, *Supra* note 441, at 29.

⁴⁶⁴ The International Law Association, *Supra* note 48 , at 14.

⁴⁶⁵ Ahmed Abulwafa, *Supra* note 444. at 8-11.

⁴⁶⁶ Mohamed Shawki , *Supra* note 428, at 24.

⁴⁶⁷ Yacob Arsano, *Supra* note 15, at 97.

⁴⁶⁸ Musa Abseno, *Supra* note 20 ,at 37

⁴⁶⁹ Yosef Yacob, *Supra* note 23, at 290; Yacob Arsano, *Supra* note 15, at 2; Musa Abseno, *Supra* note 20,at 37.

⁴⁷⁰ Musa Abseno, *Supra* note 20, at 38.

⁴⁷¹ Yosef Yacob, *Supra* note 23, at 290.

upstream countries especially Ethiopia; however, Egypt demands its natural and acquired right.⁴⁷² According to the Ethiopian argument, Egypt only benefits from these agreements.⁴⁷³ Ethiopia considers those agreements as not reflecting their need for development.⁴⁷⁴ It argues that it's a vital need for development⁴⁷⁵ and is not the same during colonial arena which is considered as a *rebus sic* status. As a result, Ethiopia has a right to terminate all these agreements.⁴⁷⁶ Ethiopia argues that as a sovereign state, it cannot accept colonial agreement.⁴⁷⁷ and it has a right to exploit its natural resources. It argues that its vital need for water is *jus cogens* principle which precede any agreement.⁴⁷⁸

Concerning the 1959 agreement, Ethiopia claims that both Egypt and Sudan did not have the right to allocate any share of water without the consent of other riparian countries⁴⁷⁹ although there is no harm to them.⁴⁸⁰ In addition, Ethiopia argues that it expressed many times its objection and reservation to this agreement.⁴⁸¹ Ethiopia declared at that time also that it is a sovereign state and it has its right to use its water resources.⁴⁸²

Ethiopia argues that equitable utilization does not mean an equal portion of water.⁴⁸³ It argues that Egypt has no right to oppose any water project on Blue River unless it cause significant harm.⁴⁸⁴ Ethiopia argues that the project will not cause significant harm;⁴⁸⁵ however, it benefits upstream and downstream countries.⁴⁸⁶ Actually, the main problem to Egypt and Sudan is related to their misuse of river water and climate change.⁴⁸⁷ Although Ethiopia is the

⁴⁷² Yacob Arsano, *Supra* note 15, at 98 and 104; Musa Abseno, *Supra* note 20, at 37.

⁴⁷³ Yacob Arsano, *Supra* note 15, at 98.

⁴⁷⁴ Christina Carroll, *Supra* note 14, at 277.

⁴⁷⁵ Yacob Arsano, *Supra* note 15, at 3.

⁴⁷⁶ Yosef Yacob, *Supra* note 23, at 333.

⁴⁷⁷ Yosef Yacob, *Supra* note 23, at 329.

⁴⁷⁸ Yosef Yacob, *Supra* note 23, at 329.

⁴⁷⁹ Yosef Yacob, *Supra* note 23, at 290; Yacob Arsano, *Supra* note 15, at 2; *Knife Abraham, Imbalance in Water Allocation Stability and Collaboration within the Nile Basin, African Technology Policy Studies*, 8 (2006), available at

https://www.academia.edu/3037420/Imbalance_in_Water_Allocation_Stability_and_Collaboration_Within_the_Nile_Basin.; Yacob Arsano, *Supra* note 15, at 99-102.

⁴⁸⁰ Yosef Yacob, *Supra* note 23, at 290.

⁴⁸¹ Yosef Yacob, *Supra* note 23, at 337; Yacob Arsano, *Supra* note 15, at 99-102.

⁴⁸² Yacob Arsano, *Supra* Note 15, at 100.

⁴⁸³ Yosef Yacob, *Supra* note 23, at 341.

⁴⁸⁴ Yosef Yacob, *Supra* note 23, at 341.

⁴⁸⁵ Yacob Arsano, *Supra* note 15, at 4.

⁴⁸⁶ Yacob Arsano, *Supra* note 15, at 2

⁴⁸⁷ Yacob Arsano, *Supra* note 15, at 4

source of water to Blue River, it never claimed monopoly over it. However, its utilization limited compared to Egypt usage. Also, Egypt tries to maintain *status quo* over Ethiopia by colonial agreements.

Both countries - Egypt and Ethiopia - abstained from voting on the 1997 U.N. Covenant on the Law of Non- Navigational Uses of International Watercourses. Egypt insisted on its historical right, and its usage of the Nile River being equitable because it has no other source of fresh water. Moreover, it considers any changes to the current flow as causing significant harm. Ethiopia considers equitable use depending on the size of the population which is relatively high, and it has the right to use its natural source in development. Moreover, for Ethiopia, the no harm principle applies only to exceeding equitable usage levels.⁴⁸⁸

To understand more about their insistence on their legal argument, Egypt refused to sign the Agreement on the Nile River Cooperative Framework (CFA). Upstream countries refused to integrate the duty to notify by the planned measure in this treaty upon Ethiopia's request.⁴⁸⁹ Moreover, the upstream countries refused to integrate the historical and natural right of Egypt over the Nile River as a support to Ethiopia.⁴⁹⁰ Also, the upstream countries reject the Egyptian request concerning any amendment to the agreement being accepted by the consensus, or a majority that includes both Egypt and Sudan.⁴⁹¹ As a result, Egypt refused to sign this treaty because the upstream countries Ethiopia, Rwanda, Tanzania, Uganda, and Burundi signed without completing the negotiation with Egypt and Sudan over these issues. Sudan refused because the 1959 treaty stated that Egypt and Sudan should have the same vision concerning the utilization of the Nile River.

D. Negotiation development:

The negotiation process between Egypt and Ethiopia is a reflection of their different perspectives on the impact of the Dam. During the negotiation process from 2011 to 2016, the main struggle is how to prove the impact of the Dam on Egypt to determine whether the Dam causes significant harm to Egypt or not. This problem is related to fact -finding. To elaborate, after

⁴⁸⁸ Christina Carroll, *Supra* note 14 , at 289.

⁴⁸⁹ Salman Salman, *The Nile Basin Cooperative Framework Agreement: a peacefully unfolding African spring?* , 38 *Water Int'l* , 22 (2013), DOI: 10.1080/02508060.2013.744273

⁴⁹⁰ Jeffrey Azarva, *Supra* note 14, at 488.

⁴⁹¹ Salman Salman, *Supra* note 489 , at 24.

several official diplomatic meetings between Egyptian, Sudanese and Ethiopian governments in September 2011,⁴⁹² Egypt, Ethiopia and Sudan agreed to establish a committee named the International Panel of Experts (IPOE). This Committee is composed of two national members from Egypt, Sudan, and Ethiopia in addition to four international experts.⁴⁹³ The main aim of this Committee is to explore the effects of the GERDP on downstream countries and any associated benefits to be expected.⁴⁹⁴ By the end of May 2013, the final report of this Committee was issued.⁴⁹⁵

Actually, the Committee failed to determine the impact of the GERD because the Ethiopian government did not have enough information.⁴⁹⁶ According to the report, Ethiopia sent the primary design which is changed during actual work.⁴⁹⁷ To illustrate, the feature of the Saddle Dam was changed from a rockfill dam with a central clay core to a rockfill dam with a bituminous surface sealing.⁴⁹⁸ Also, the Committee realized that the level of security regarding the Dam is not good for construction fearing from soil sliding;⁴⁹⁹ as a result, the structure of the dam should be further studied and clarified.⁵⁰⁰ Basing on geotechnical and geological finding, the committee noted that the interaction between the Dam, abutments and excavation of the power house is unclear and needs further studies.⁵⁰¹ The Committee elaborated that the structure of the Dam does not take into account the effect of climate change⁵⁰² and the estimated amount water which may losses by evaporation.⁵⁰³ Further, there was a possible harm to Egypt because of its demand for water especially for hydropower generation.⁵⁰⁴ According to the report, the

⁴⁹² Micheal Hammnd , *Supra* note 397.

⁴⁹³ Micheal Hammnd , *Supra* note 397.

⁴⁹⁴ The Egyptian Ministry of Foreign Affairs, *Egypt's Perspective towards the Ethiopian Grand Renaissance Dam Project (GERDP), 1 (2014)* Available at <http://www.mfa.gov.eg/English/Minister/Articles/Pages/ArticleInterviewDetails.aspx?Source=6781921f-3993-444a-859e-ee26ce851de8&articleID=6cf56d4e-8921-4ccc-92ac-6b921a5386e1> , Accessed on 13/4/2014.

⁴⁹⁵ For details, International Panel of Experts, Grand Ethiopian Renaissance Dam Project, Final Report, Available at http://www.internationalrivers.org/files/attached-files/international_panel_of_experts_for_ethiopian_renaissance_dam_final_report_1.pdf

⁴⁹⁶ *Id.*

⁴⁹⁷ For details, International Panel of Experts, *Supra* note 495, at 21.

⁴⁹⁸ For details, *Id.*, at 22.

⁴⁹⁹ For details, International Panel of Experts, *Id.*, at 34

⁵⁰⁰ For details, International Panel of Experts, *Id.*, at 23

⁵⁰¹ For details, International Panel of Experts, *Id.*

⁵⁰² For details, International Panel of Experts, *Id.*, at 36.

⁵⁰³ For details, International Panel of Experts, *Id.*, at 23

⁵⁰⁴ The Egyptian Ministry of Foreign Affairs, *Supra* note 494, at 1-4.

capacity of the Aswan Dam will be affected by 6 % due to the general lower water level for a minimum of 15 years.⁵⁰⁵

As a response, Egypt demanded that Ethiopia update its studies on the structural integrity of the Dam and give it detailed plans for the Dam,⁵⁰⁶ while Ethiopia argued that the Committee did not find any significant harm to Egypt.⁵⁰⁷ Between February to March 2015, the tripartite committee which includes from Egypt, Ethiopia, and Sudan received several offers from international firms to assess the possible effect of the Dam, and agreed on an offer from a French and Dutch consulting firm.⁵⁰⁸ However, the Dutch firm withdrew because of the incomplete studies concerning the construction of the Dam and conflict on how to assess the Dam.⁵⁰⁹ From November 2013 to January 2014, the three countries continued in their discussion to establish another Committee to follow up on the implementation of the IPOE's recommendation.⁵¹⁰ During this discussion, Egypt proposed including international experts and to follow up the construction of the dam, but Ethiopia rejected this suggestion to escape from any international obligation.⁵¹¹ During this period, the parties allowed the participation of another French office instead of the Dutch firm which withdrew from assessing the impact of the Dam on downstream countries. Also, the parties announced that the French firm would begin its assessment February 2016.⁵¹² However, the Egyptian officials are skeptical and announced "we are still facing a great dilemma to comply with the studies' recommendation, which may be difficult to implement after the Dam is complete and operating"⁵¹³

During negotiations, Egypt has tried to eliminate any threat to its national security and national interest. Furthermore, it has tried to safeguard its acquired and historical right. After the

⁵⁰⁵ For details, International Panel of Experts, *Supra note 495*, at 36.

⁵⁰⁶ Mina Samaan, *Supra note 393*, at 9, 10.

⁵⁰⁷ Ministry of Ethiopian Foreign Affairs, *The International Panel of Experts' report on the Grand Ethiopian Renaissance Dam*, Available at <https://zenileabbay.wordpress.com/2013/06/17/the-international-panel-of-experts-report-on-the-grand-ethiopian-renaissance-dam/>

⁵⁰⁸ Daily News, Renaissance Dam talks end without agreement, Available at <http://www.dailynewsegypt.com/2015/12/13/renaissance-dam-talks-end-without-agreement/>

⁵⁰⁹ Felge Guibon International (FGI), *Egypt- Ethiopia Dam Dispute Remain Threatening*, Available at <http://www.guihon.org/721/egypt-ethiopia-dam-dispute-remain-threatening/>

⁵¹⁰ Mina Samaan, *Supra note 393*, at 11.

⁵¹¹ Mina Samaan, *Supra note 393*, at 11.

⁵¹² Ayah Aman, *Potential Solutions to Egypt-Ethiopia Dam Dispute Remain Murky*, Al-Monitor News, 2016, Available at <http://www.al-monitor.com/pulse/originals/2016/01/egypt-ethiopia-renaissance-dam-dispute-negotiations.html#>

⁵¹³ Ayah Aman, *Id.*

Committee issued its report, Egypt proposed conducting a transboundary social, economic and environmental assessment.⁵¹⁴ It called on Ethiopia to sign the document Principles of Confidence Building .⁵¹⁵ On March 23, 2015, the presidents of the three states signed an agreement based on several principles. These principles are typically imposed by the International Customary Law on Water Disputes, for example the duty of equitable and reasonable utilization, the existing usage, not to cause significant harm, the right to sustainable development, and to cooperate in good faith.⁵¹⁶ Egypt incorporated also some principles that are closely related to the operation and construction of the Dam. For example, the Dam is to generate electricity only,⁵¹⁷ and the downstream countries Egypt and Sudan have priority to purchase this electricity.⁵¹⁸ Egypt insists also on incorporating an article on Ethiopia based on accepting the final report of the Technical National Committee (TNC) of the joint studies recommended by IPOE.⁵¹⁹ Further, Egypt integrated an article that Ethiopia should cooperate in the first filling and annual operation of the Dam.⁵²⁰ On December 2015, the foreign ministers of the three states met to discuss ways to speed up the required assessment of the Dam which was recommended by the IPOE in May 2013.⁵²¹ In this meeting, Egypt proposed a number of items which can be considered as a basis for settling this dispute. Ethiopia increases the number of gates that control the flow of waters.⁵²² The reason is because Egypt needs to secure the entire daily flow in case of any malfunction or the need to maintain the main gates.⁵²³ Another proposal is the period of filling the reservoir of the dam may increase up to 11 years or the amount of stored water decreasing from 74 bcm to 50 bcm.⁵²⁴

⁵¹⁴ Mina Samaan, *Supra note 393, at 11*.

⁵¹⁵ Mina Samaan, *Supra note 393, at 11*

⁵¹⁶ Articles II, III, IV, For details of this agreement, Agreement on Declaration of Principles between The Arab Republic of Egypt, The Federal Democratic Republic of Ethiopia And The Republic of the Sudan On The Grand Ethiopian Renaissance Dam Project (GERDP), *Supra note 138*.

⁵¹⁷ Article II, *Supra note 138*

⁵¹⁸ Article VI, *Supra note 138*

⁵¹⁹ Article VII, *Supra note 138*

⁵²⁰ Article V, *Supra note 138*

⁵²¹ Ayah Aman, *supra note 512*

⁵²² Ayah Aman, *Id.*

⁵²³ Ayah Aman, *Id.*

⁵²⁴ Ayah Aman, *Id.*

On the counter part, during the negotiation, Ethiopia tried to impose on Egypt a *status quo* by justifying its argument on national sovereignty. It began when Ethiopia announced that it would construct the Dam without prior notification or consent of downstream countries especially Egypt. During the work of the IPOE, it refused to submit the actual design of the dam to the Committee.⁵²⁵ Ethiopia said that any further studies wanted by the Egyptian Government could be undertaken by Ethiopia.⁵²⁶ Ethiopia feared that Egypt may go to war; as a result, it increased its military budget after the revolution of 30 June 2013.⁵²⁷ On June 2014, in a unilateral action, Ethiopia changed the course of Blue Nile.⁵²⁸ In violation of the 2015 agreement, on January 2016, the Ethiopian Ministry of Water Irrigation and Electricity announced unilaterally that the reservoir would begin to store at least 3 billion cubic meters to test the safety of the dam, and refused all Egyptian proposals suggested during the December 2015 meeting.⁵²⁹ He announced also that only two water outlet would provide suitable water to Egypt and Sudan.⁵³⁰ He also declared that the structural design of the Dam would not be changed under any circumstances.⁵³¹ Moreover, Ethiopia refused to give Egypt the detailed plans for signing the Nile Basin's Cooperative Framework which does not include the notification of the planned measure.⁵³² On the same date in December 2015, Ethiopia decided to continue constructing the dam and diverted the Blue Nile in unilateral action.⁵³³ It also announced that the dam would begin to operate in 2017.

During negotiations, Sudan has no clear position. At the beginning of the dispute, it announced that the construction of the Dam would cause it significant harm,⁵³⁴ as a result, it participated in the tributary committee. During negotiations, Ethiopia and Sudan signed a military cooperation agreement;⁵³⁵ equally important, on December 4, 2013, Sudan accepted the

⁵²⁵ For details, International Panel of Experts, *Supra note 495*, at 21.

⁵²⁶ Mina Samaan, *Supra note 393*, at 11.

⁵²⁷ Afro – Middle East Centre, *Supra note 400*.

⁵²⁸ World Bulletin, *Sudan reaffirms support for Ethiopia dam project*, 2014, Available at, <http://www.worldbulletin.net/grand-renaissance-dam/138657/sudan-reaffirms-support-for-ethiopia-dam-project>

⁵²⁹ Ayah Aman, *Supra note 512*.

⁵³⁰ Ayah Aman, *Supra note 512*.

⁵³¹ Ayah Aman, *Supra note 512*.

⁵³² Mina Samaan, *Supra note 393*, at 9, 10.

⁵³³ Mina Samaan, *Supra note 393*, at 10.

⁵³⁴ Construction Review Online, *Egypt and Sudan Hold Discussion on Ethiopian Renaissance Dam*, available at <http://constructionreviewonline.com/2016/04/egypt-sudan-hold-discussion-on-ethiopian-renaissance-dam/>.

⁵³⁵ Fahmy Geodee, *Sudan and obvious things*, Available at <http://www.ahram.org.eg/News/11152/11/277353/%D8%A7%D9%84%D8%A7%D8%B9%D9%85%D8%AF%D8%A9%D8%A7%D9%84%D8%B3%D9%88%D8%AF%D8%A7%D9%86->

construction of the Dam because it would benefit from the electricity generated,⁵³⁶ in violation of the 1959 treaty. On February 18, 2014, the Foreign Minister of Sudan announced that Sudan was a neutral party in this negotiation.⁵³⁷ However, on June 2014, it accepted the Ethiopian decision to change the course of the Blue Nile.⁵³⁸

In fact, the circumstance that surround the negotiation process is similar to that between India and Pakistan before the intervention of the World Bank. In the India and Pakistan dispute, the two parties insisted on their water usage without taking into account the interest of the other party. Both states signed the Delhi Agreement; however, neither India nor Pakistan respected the agreement because of the absence of a fact- finding process. Concerning the Egyptian and Ethiopian dispute, although the parties signed an agreement to settle this dispute, the main conflict remained unsettled. Egypt insists on its historical right. While, Ethiopia is not convinced by the duty of notification of planned measures and cooperation to narrow the gap. Each party insists on its interest without taking into consideration the interests of the other party. Both Egypt and Ethiopia compete with each other on the utilization of the water of the Nile River; thus, settling this dispute is very important to the stability of the region. Also, the two parties ignore the creation of South Sudan and its independence from Sudan. South Sudan becomes a independent downstream country that has natural right from the entire flow of the Nile River. In fact, its creation may raise several question towards the historical and acquired right of Egypt; also, it will create more pressure on the utilization of the Nile River.⁵³⁹ In fact, this argument leads us to the outcome of this dispute. To illustrate, does mediation settle the Egyptian and Ethiopian water dispute.

E.Outcomes:

Egypt and Ethiopia have the will to cooperate because they understand the consequences of violating international water law; however, the two counties have differences because a conflict

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⁵³⁶ Mina Samaan, *Supra note 393, at 12.*

⁵³⁷ Mina Samaan, *Supra note 393, at 12.*

⁵³⁸ World Bulletin, *Sudan reaffirms support for Ethiopia dam project*, 2014, Avliable at,

<http://www.worldbulletin.net/grand-renaissance-dam/138657/sudan-reaffirms-support-for-ethiopia-dam-project>

⁵³⁹ Farah Hegazy, *Cooperation Over Water in the Eastern Nile Basin: Obstacles & Opportunities*, A Thesis in Partial fulfillment of the Requirements for the Master of Environmental Management degree in the Nicholas School of the Environment of , Duke University, 40 - 44 (2011).

of interest and their political insistence on imposing a different *status quo*. They have tried to justify their political view by legalizing it. Although Egypt and Ethiopia signed the 2015 agreement which integrated most of the principles imposed by the customary international water law, they continue to insist on their position. Ethiopia insists that it has absolute territorial sovereignty in constructing the water project.⁵⁴⁰ According to Ana Cascao , “Ethiopia’s major goal is a change of *status quo*”⁵⁴¹ This can be seen in its continuation to construct the Dam without any consent from Egypt although it declared that the construction of this Dam can cause significant harm to Egypt. On the other hand, Egypt insists on its historical right and it never called on Ethiopia to complete their negotiation over the CFA agreement.

Actually, in my point of view, the main dispute concerns how to prove that the operation of the Dam is an equitable and reasonable utilization of the Blue Nile ,or whether its operation will cause significant harm to downstream countries. Consequently, this dispute is closely related to the evaluation of the impact of the features of the dam. There is a fact finding problem. One reason beyond is the conflict of interest, and the failure to reach an acceptable method for how to assess the dam from the time of signing this agreement till now.⁵⁴² Ethiopia is technically weak to carry out feasibility studies about such a mega project because it faces many technical challenges. One of them is lack of expertise in parallel to its weakness in knowledge about river management which is seen in the IPOE`’s report.⁵⁴³

To be fair, there is an economic problem in the three countries, and they do not have the resources to implement any action plan.⁵⁴⁴ Ethiopia is a poor country that is unable to fund this mega project; at the same time, international organizations refuse to lend it money to construct the Dam because of Egyptian protest. As a result, there have not been full studies about the project which is clear from Ethiopian `’s abstaining from giving Egypt an assessment for the Dam. In fact, Ethiopia has domestic economic and political problems which discourage foreign investment to fund this project. Even, if it received foreign assistance, it still needs to feed its

⁵⁴⁰ Ana Cascao, *Ethiopia–Challenges to Egyptian hegemony in the Nile Basin*, Water Policy 10 Supplement 2, 21 (2008) , Available at <http://web.b.ebscohost.com.libproxy.aucegypt.edu:2048/ehost/pdfviewer/pdfviewer?sid=fb8e62e8-6998-42cc-8029-5f2c80cf5fbd%40sessionmgr120&vid=1&hid=106>

⁵⁴¹ Ana Cascao, *Supra note* 540, at 28.

⁵⁴² The Egyptian Ministry of Water Resources, <http://www.mwri.gov.eg/newsdetails.aspx?NewsId=12755>

⁵⁴³ Ana Cascao, *Supra note* 540 , at 25.

⁵⁴⁴ Christina Carroll, *Supra note* 14 , at 298.

population first.⁵⁴⁵ Equally in importance, Egypt and Sudan are poor countries and not able to help Ethiopia in assessing the Dam especially with the presence of the conflict of interest. To sum up, the three countries face severe challenges in meeting the demands of their population.⁵⁴⁶

This dispute is further complicated because there is no neutral party that is able to narrow the gap between the two states. Sudan is not a neutral party and cannot play a role in resolving this dispute. During the negotiation process on December 4, 2013, Sudan accepted the Dam as it was proposed by Ethiopia.⁵⁴⁷ The reason is that Ethiopia offered economic incentives to Sudan,⁵⁴⁸ for example, the agreement to establish railways projects and free trade zones.⁵⁴⁹ Also, the Sudanese President announced that this Dam would benefit Sudan directly and indirectly because the Dam would supply Sudan with electricity after construction and would increase the capacity of the Sudanese hydropower project. As a result, Sudan is unable to play the role of mediator to narrow the gap between Egypt and Sudan,⁵⁵⁰ especially because of the fact that such acceptance violates its obligation under the 1959 Treaty with Egypt. Consequently, Egypt a mistrust the Sudanese role.

Thus, this dispute cannot be settled by mediation unless these obstacles can be solved through the inclusion of a neutral international organization, for example the World Bank, UNDP, or African Union. In fact, these international organizations have the expertise, trust, funds, and power to narrow the gap between the two states by using different methods.

Taking the World Bank as an example, the World Bank has a considerable expertise in settling water disputes.⁵⁵¹ Its policy is based on the cooperation and goodwill of the riparian state for the efficient utilization and protection of the waterway. It is up to the borrower state to notify the affected state with complete technical information about the funded project within a reasonable period of time. If the interested state does not notify the affected state, the Bank does

⁵⁴⁵ Farah Hegazy, *Supra note 539*, at 40 (2011).

⁵⁴⁶ Mina Samaan, *Supra note 393*, at 20.

⁵⁴⁷ Mina Samaan, *Supra note 393*, at 11.

⁵⁴⁸ Endalcachew Bayeh, *The Role of Ethiopia's Hydro Dam Constructions in Boosting The Horn of Africa Regional Relations, International Journal of Research*, (IJR) Vol-1, Issue-11 283 (2014), available at https://www.researchgate.net/profile/Endalcachew_Bayeh2/publication/270793544_The_Role_of_Ethiopia's_Hydro_Dam_Constructions_in_Boosting_The_Horn_of_Africa_Regional_Relations/links/54b4efc50cf26833efd046b6.pdf

⁵⁴⁹ Mina Samaan, *Supra note 393*, at 12.

⁵⁵⁰ Mina Samaan, *Supra note 393*, at 12.

⁵⁵¹ For details; Salman Salman, *Supra note 112*, at 595- 605.

so on its behalf. If the affected state objected and proved that the funded project can cause significant harm, the Bank establishes a committee to prove such and suggest a technical solution to eliminate such harm. In addition, the Bank tries on its behalf to narrow the gap between the interested and affected state. If the Bank fails in narrowing this gap, the Bank refuses to fund such a project.⁵⁵²

During this process, the Bank plays a neutral and an unbiased role between the parties, and it never interferes in the politics of the states. According to article I of its charter, the Bank has a duty to assist in the reconstruction and development of countries, to promote long – range balanced growth of international trade, to arrange loans, and to conduct its operation according to international investment.⁵⁵³ In fact, one of the World Bank properties, according to article IV section 10, is prohibited from interfering in the politics of any member.⁵⁵⁴ Also, the World Bank has the juridical personality to contract, acquire properties, and institute legal proceedings, according to article VII section 2 of its Charter.⁵⁵⁵ Practically, parties will not fear from its interference because dominant countries like United States, which contributes 27.79% of the total contributions, has only 25% of the voting power to approve a loan to the project.⁵⁵⁶ Practically, the Bank succeeded in the Indus River. Also, the Bank played a great role in launching the Nile Basin Initiative (NBI) in 1999 to enhance cooperation between the basin states⁵⁵⁷ and to establish the Nile Basin Fund to finance water management projects.

Other arguments have risen that the World Bank cannot play such a role in the Egyptian Ethiopian water dispute because the Bank already had failed for 15 years to narrow the gap among the Nile Basin states and lead them to sign the CFA.⁵⁵⁸ Nevertheless, in my opinion, the basis of his argument over CFA is currently diminished because both states Egypt and Ethiopia signed the 2015 agreement which is typically similar in its contents to the CFA and the 1997 UN

⁵⁵² For details; Salman Salman, *Supra* note 112, at 595- 605.

⁵⁵³ World Bank Charter, available at <http://web.worldbank.org/WBSITE/EXTERNAL/EXTABOUTUS/0,,contentMDK:20049557~menuPK:63000601~pagePK:34542~piPK:36600~theSitePK:29708,00.html>; John Knop, *Supra* note 273, at 284- 286.

⁵⁵⁴ *Id.*

⁵⁵⁵ *Id.*

⁵⁵⁶ John Knop, *Supra* note 273, at 286.

⁵⁵⁷ Scott McKenzie, *Supra* note 14, at 584.

⁵⁵⁸ Salman Salman, *Supra* note 489 , at 24.

Convention. Consequently, they do not differ in the CFA objective rules, except the article which is related to the amendment of it.

Actually, the World Bank is an expert in solving water disputes even when complicated ,for example, the Indus dispute because the Bank used different techniques beginning from fact - finding to afford funds as an economic incentive to narrow the gap between the disputants. However, the World Bank will not succeed unless it uses the same techniques that were followed in Indus Dispute and take the underlying reasons for the dispute under its supervision.

VI. Conclusion:

Customary international water law obligates basin states to use river water in an equitable and reasonable manner without causing significant harm to other basin states. These obligations are established by taking into account all of the interests of basin states, and their right to pursue sustainable development. In fact, the substantive rules of Customary international water law complement each other, and are efficient in settling water disputes. It requires that basin states cooperate in good faith. In the event of conflict, they should resolve their disputes by using peaceful means. The main problem in settling water disputes is not related to the rules themselves which are applied; rather, it is related to fact finding, conflicts of interest between the disputants, and the politicizing of the dispute. Due to the problematic nature of water disputes, mediation plays a key role in settling such disputes because the mediator is capable of narrowing the gap between disputants and reducing the tension between them. This role is successful, for example, when a neutral international organization intervenes in the dispute because it has the power, expertise, and funds to settle water disputes even if they are complex. This can be seen in the World Bank's settlement of the Indus River dispute between India and Pakistan. Its absence can be seen in the ongoing dispute between Ethiopia and Egypt on the GERD.