

INTERNATIONAL JOURNAL OF LAW
MANAGEMENT & HUMANITIES

[ISSN 2581-5369]

Volume 4 | Issue 3

2021

© 2021 *International Journal of Law Management & Humanities*

Follow this and additional works at: <https://www.ijlmh.com/>

Under the aegis of VidhiAagaz – Inking Your Brain (<https://www.vidhiaagaz.com>)

This Article is brought to you for “free” and “open access” by the International Journal of Law Management & Humanities at VidhiAagaz. It has been accepted for inclusion in International Journal of Law Management & Humanities after due review.

In case of **any suggestion or complaint**, please contact Gyan@vidhiaagaz.com.

To submit your Manuscript for Publication at **International Journal of Law Management & Humanities**, kindly email your Manuscript at submission@ijlmh.com.

International Water Law: An Overview

PALAK KATTA¹

ABSTRACT

Water is fundamental for life and the economy. Water Law is indispensable although not sufficient to assure a rational use of water. Today the main problem is the scarcity of clean water due to population growth that accompanies intensive agricultural and industrial utilization. From a historical and comparative perspective, it becomes evident that the focus of regulation is moving slowly but clearly from different water uses to the water resource itself. Water Law is evolving more and more into a part of environmental law under the leading principle of sustainability. International freshwaters have been a source of contention between states. Such conflict arises from both peoples' utter reliance on water and the subsequent interdependence of co-basin states, as well as a degree of historical confusion about the relevant principles of international law in this region. This is due to the fact that states only temporarily or partially exercise effective control over certain waters as they flow through or along with their territory and therefore, each co-basin state's utilization or development of a shared water resource naturally influences the quantity and quality of water available to the low- or nearby basin states. International watercourse has timely been effective in managing and controlling the transboundary water though it is a bit fragmented, as there is no institution with undisputed power to enforce its rules.

Keywords: *Water, International Water Law, Principles, Conventions.*

I. INTRODUCTION

Water is fundamental for life and the economy. Water Law is indispensable although not sufficient to assure a rational use of water. Today the main problem is the scarcity of clean water due to population growth that accompanies intensive agricultural and industrial utilization. From a historical and comparative perspective, it becomes evident that the focus of regulation is moving slowly but clearly from different water uses to the water resource itself. Water Law is evolving more and more into a part of environmental law under the leading principle of sustainability². This is true for both national and international law and indicates

¹ Author is a student at Unitedworld School of Law, Karnavati University, India.

² Farrajota, Maria Manuel, International Cooperation on Water Resources, in: Dellapenna, Joseph W./ Gupta Joyeeta (ed.), The Evolution of the Law and Politics of Water, 2009, 337, 339; Mager, Ute, Die Entwicklung des Wasserwirtschaftsrechts – Referenzgebiet für ein materiell-rechtlich fundiertes internationales Verwaltungsrecht,

that rational water law must be compatible on all levels of regulation, as flowing water does not stop at political borders.

Throughout history, international freshwaters have been a source of contention between states. Such conflict arises from both peoples' utter reliance on water and the subsequent interdependence of co-basin states, as well as a degree of historical confusion about the relevant principles of international law in this region. This is due to the fact that states only temporarily or partially exercise effective control over certain waters as they flow through or along with their territory and therefore, each co-basin state's utilization or development of a shared water resource naturally influences the quantity and quality of water available to the low- or nearby basin states.

One of the most complex problems facing the global community is the sustainable use of freshwater resources worldwide. Climate change, population growth, and urbanization are exacerbating increasing demand and declining efficiency. These forces will bring about a 'perfect storm' of food, energy, and water scarcity. Water shortages, droughts, and floods have already affected many developing and developed countries worldwide.

With more than 270 major watercourses and around 300 aquifers shared by two or more states, cooperation among the riparian countries to better manage water resources and the environments in these basins is becoming imperative as the pressure on water resources is increasing due to the intensifying global changes. Not only do transboundary waters constitute an immensely important source of fresh water for the world's population; they also entail a complex element of geopolitical risk, making transboundary freshwater governance even more multi-faceted. While the potential disputes over shared water resources may not have led to outright conflict, it nevertheless has been used as a political tool or even a military target. Furthermore, even without the imminent threat of 'water wars', the disruptive socio-economic and environmental impacts of the global water crisis are immense.³

International watercourse has timely been effective in managing and controlling the transboundary water though it is a bit fragmented, as there is no institution with undisputed power to enforce its rules.

Talking about international water law, one must start by knowing international law.

ZaöRV 70 (2010), 789, 816.

³ McIntyre, Owen. (2010). *International Water Law: Concepts, Evolution and Development*.

(A) Objectives

- To explore the meaning and origin of the International Water Law
- To know the principles and treaties governing it

(B) Hypothesis

It has been hypothesized that:

Water is fundamental for life and the economy. Water Law is evolving more and more into a part of environmental law under the leading principle of sustainability and international freshwaters have been a source of contention between states.

(C) Research Questions

- What is the meaning of International Water Law and how it evolved?
- What are the principles and conventions governing it?

(D) Coverage and Scope

The report covers only International Water law and not International Law in general.

(E) Research Methodology and Limitation

The study conducted in the project is doctrinal in nature. Primary sources such as statutes and cases are used. Secondary sources such as websites, journals, and articles are used.

Its limitations are-

- 1) The study is not empirical in nature. There is no field study or practical study.

II. INTERNATIONAL LAW: WHAT IT IS AND HOW IT WORKS?

International law is a system of treaties and agreements between nations governing the way in which nations deal with other nations, other nations' citizens, and businesses. Typically, international law falls into two groups. Private international law addresses issues between private organizations, such as individuals or companies, with important links to more than one country. For example, litigation against U.S. Company Union Carbide resulting from toxic gas leaks in Bhopal, India from industrial facilities is considered private international law.

The relationships between nations are the subject of "public international law." These include international standards of conduct, sea law, economic law, diplomatic law, environmental law, human rights, and humanitarian law. In a number of treaties, certain principles of public international law are written or 'codified,' but other principles are not written in any place. These are considered as "normal" laws and nations do little to agree with them.

As much of international law is regulated by treaties, the application of the law is normally a matter for each country. Some international organizations, however, implement these treaties. It is no longer accurate to view international law as simply a collection of rules; rather, it is a rapidly developing complex of rules and influential—though not directly binding—principles, practices, and assertions coupled with increasingly sophisticated structures and processes. In its broadest sense, international law provides normative guidelines as well as methods, mechanisms, and a common conceptual language to international actors—i.e., primarily sovereign states but also increasingly international organizations and some individuals. The range of subjects and actors directly concerned with international law has widened considerably, moving beyond the classical questions of war, peace, and diplomacy to include human rights, economic and trade issues, space law, and international organizations. Although international law is a legal order and not an ethical one, it has been influenced significantly by ethical principles and concerns, particularly in the sphere of human rights.⁴

The implications for a state that breaches an international law provision are dealt with under the aegis of the state's accountability. To qualify, two conditions must be met deeming a state's behaviour to be illegal. To begin, it must be an action or omission that is attributable to the state (i.e. committed by the state apparatus: organs, officials, etc.).

Second, this conduct must constitute a breach of a rule of international law. Thus, the alleged violation must be determined to be: (i) committed by a state, and, (ii) break an identifiable rule of international law. The remedies available to the state(s) whose rights have been violated include, inter alia, an order for cessation of the wrongful conduct, guarantees by the state in breach of non-repetition of the wrongful acts, satisfaction (apology, exemplary damages), restitution, and compensation. Thus, where one state has denied another state its equitable and reasonable utilization of a transboundary watercourse, the former will be liable to remedy the wrongful conduct.

The pacific settlement of disputes has been enshrined in the United Nations Charter as one of the main goals of the United Nations, which was created following the Second World War. The principal UN organs – the General Assembly, the Security Council, and the International Court of Justice (ICJ) in particular – are each entrusted with various dispute avoidance/settlement duties and functions, powers that they use regularly to “maintain the peace.”

⁴ Shaw, Malcolm. "International law". *Encyclopedia Britannica*, 13 Nov. 2019, <https://www.britannica.com/topic/international-law>. accessed 15 May 2021

III. INTERNATIONAL WATER LAW

International water law (also known as international watercourse law, international law of water resources) is a term used to identify those legal rules that regulate the use of water resources shared by two or more countries. The primary role of international water law is to determine a state's entitlement to the benefits of the watercourse (substantive rules) and to establish certain requirements for states' behaviour while developing the resource (procedural rules)⁵. You enter international waters or the high sea as you cross 24 nautical miles from a country's coastline. This is where maritime law begins to blur and become perplexing.

International Water Law comprises customary law, framework treaties with a universal scope of application, regional framework treaties, and regional or bi-national water law treaties for specific water resources. International Water Law, regardless of its source, shares the weaknesses of all international law: There is no institution with undisputed power to enforce its rules. Ultimately, the enforcement is a question of self-commitment or power. Furthermore, the content and scope of international customary law rules are often a matter of dispute.⁶

While originally merely concerned with boundary delimitation and navigation, current international water law relates to a wider range of challenges – including development needs (e.g., poverty alleviation), ecosystem services, and the growing number of uncertainties (e.g., global climate change and migration).

Despite these specific weaknesses, international water law is indispensable for the management of international water resources. This is also true for customary law rules as over a third of the more than 200 international river basins are not covered by any international agreement⁷. Moreover, the principles of customary water law constitute important arguments in water diplomacy. The binding character and reliability of a treaty regarding water use and/or protection of a specific water resource depend – in addition to the interests and the commitment of the parties – on the preciseness of the mutual obligations, on the institutional coverage of the implementation and enforcement of the obligations as well as on the existence of control and dispute settlement mechanisms.

The development of international water law is inseparable from the development of

⁵ Sergei Vinogradov, Patricia Wouters, and Patricia Jones, 'The Role of International Water Law' <https://groundwaterportal.net/sites/default/files/Transforming%20Potential%20Conflict%20into%20Cooperation%20Potential%20-%20The%20Role%20of%20International%20Water%20Law.pdf> accessed 19 May 2021

⁶ Jägerskog, Anders, *Why states cooperate over shared water: The water negotiations in the Jordan River Basin*, 2003, 90.

⁷ Draper, Stephen E. (ed.), *Sharing Water in Times of Scarcity. Guidelines and Procedures in the Development of Effective Agreements to Share Water Across Political Boundaries*, 2006, Preface, VI.

international law in general. Such fundamental principles and basic concepts as the sovereign equality of states, non-interference in matters of exclusive national jurisdiction, responsibility for the breach of state's international obligations, and peaceful settlement of international disputes equally apply in the area governed by international water law. At the same time, this relatively independent branch of international law has developed its own principles and norms specifically tailored to regulate states' conduct in a rather distinct field: the utilization of transboundary water resources. The basic rules are: the right to use waters of the transboundary watercourse located in the territory of the state ("equitable and reasonable utilization"), and a correlative duty to ensure similar rights are enjoyed by co-basin states.⁸

IV. PRINCIPLES OF INTERNATIONAL WATER LAW

Article 38 (1) of the 1946 Statute of the International Court of Justice (ICJ) is generally recognised as a statement of the sources of international law. Article 38 (1.a) requires the court to apply international conventions, whether general or particular, expressly recognised by the contesting states. Article 38 (1.b) requires the court to apply international customs as evidence of general practice accepted as law. Article 38 (1.c) requires the court to apply the general principles of law recognised by civilized nations. This section summarises some important customary and general principles of international law applicable to transboundary water resources management that are accepted globally and incorporated in modern international conventions, agreements, and treaties.⁹

1. Principle of equitable and reasonable utilization

This user-oriented principle is a sub-set of the theory of limited territorial sovereignty. It entitles each basin state to a reasonable and equitable share of water resources for beneficial uses within its own territory (Article IV of the Helsinki Rules 1966 and Article 5 of the UN Watercourses Convention, 1997). Equitable and reasonable utilisation rests on a foundation of shared sovereignty, equality of rights and it does not necessarily mean equal share of waters.

In determining equitable and reasonable share relevant factors, such as the geography of the basin, hydrology of the basin, population dependent on the waters, economic and social needs, existing utilisation of waters, potential needs in future, climatic and ecological factors to a natural character and availability of other resources should be taken into account (Article V of the Helsinki Rules, Article 6 of the UN Watercourses Convention and Article 13 of the Berlin

⁸ Supra, note 6.

⁹ Rahaman, M.M. (2009) 'Principles of international water law: creating effective transboundary water resources management', *Int. J. Sustainable Society*, Vol. 1, No. 3, pp.207–223.

Rules). It entails a balance of interests that accommodates the needs and uses of each riparian state. This principle has substantial support in state practice, judicial decisions, and international codifications¹⁰.

The ICJ's 1997 decision concerning the Gabčíkovo-Naymaros Project endorsed the theory of equitable and reasonable utilisation that was incorporated in Article 5 of the UN Watercourses Convention. This principle is incorporated in 1966 Helsinki Rules (Articles IV, V, VII, X, XXIX [4]), 1997 UN Watercourses Convention (Articles 5, 6, 7, 15, 16, 17, 19), 1995 SADC protocol on shared watercourse systems (Article 2), 2002 Sava River Basin Agreement (Articles 7–9), 1996 Mahakali River Treaty (Articles 3, 7, 8, 9), 1995 Mekong Agreement (Articles 4–6, 26), 2004 Berlin Rules (Articles 10.1, 12, 13, 14, 16) and 1992 UNECE Water Convention (Article 2.2c).

2. Obligation not to cause significant harm

This principle is also a part of the theory of limited territorial sovereignty. According to this principle, no state in an international drainage basin is allowed to use the watercourses in their territory in a way that would cause significant harm to other basin states or to their environment, including harm to human health or safety, to the use of the waters for beneficial purposes or to the living organisms of the watercourse systems. This principle is widely recognised by international water and environmental law¹¹.

However, the question remains on the definition or extent of the word 'significant' and how to define 'harm' as a 'significant harm'. This principle is incorporated in most modern international water conventions, treaties, and agreements. It is now considered as part of the customary international law¹²

This principle is incorporated in 1966 Helsinki Rules (Articles V, X, XI, XXIX [2]), 1997 UN Watercourses Convention (Articles 7, 10, 12, 15, 16, 17, 19, 20, 21.2, 22, 26.2, 27, 28.1, 28.3), 1995 SADC protocol on shared watercourse systems (Article 2), 2002 Sava River Basin Agreement (Articles 2, 9), 1996 Mahakali River Treaty (Articles 7, 8, 9), 1995 Mekong Agreement (Articles 3, 7, 8), 2004 Berlin Rules (Articles 8, 10.2, 16) and 1992 UNECE Water Convention (Articles 2.1, 2.3, 2.4, 3). This principle is also acknowledged by modern

¹⁰ Birnie, P. and Boyle, A. (2002) *International Law and the Environment*. New York, NY: Oxford University Press.

¹¹ Khalid, A.R.M. (2004) 'The Interlinking of rivers project in India and international water law: an overview', *Chinese Journal of International Law*, Vol. 3, pp.553–570.

¹² Eckstein, G. (2002) 'Development of international water law and the UN watercourse convention', in A. Turton and R. Henwood (Eds), *Hydropolitics in the Developing World: A Southern African Perspective*. South Africa: African Water Issues Research Unit, pp.81–96.

international environmental conventions and declarations, e.g. 1972 Stockholm Declaration of the UN Conference on Human Environment (Principles 21, 22), 1992 Rio Declaration on Environment and Development (Principles 2, 4, 13, 24) and 1992 Convention on Biological Diversity (Article 3).

3. Principles of notification, consultation and negotiation

Any riparian state in an international watercourse has the right to advance notice, consultation and bargaining in situations where another riparian's planned use of a shared watercourse can endanger its rights or interests.

Article 3 of the International Law Association's (ILA) Complementary rules applicable to international resources (adopted at the 62nd conference held at Seoul in 1986) states that-

“when a basin State proposes to undertake, or to permit the undertaking of, a project that may substantially affect the interests of any co-basin State, it shall give such State or States notice of the project. The notice shall include information, data and specifications adequate for assessment of the effects of the project”¹³.

These principles are incorporated in most modern international water conventions, treaties and agreements, e.g. 1966 Helsinki Rules (XXIX [2], XXIX [3], XXIX [4], XXX, XXXI), 1997 UN Watercourses Convention (Articles 3.5, 6.2, 11–19, 24.1, 26.2, 28, 30), 1960 Indus Waters Treaty (Articles VII [2], VIII), 1995 SADC protocol on shared watercourse systems (Articles 2.9, 2.10), 2002 Sava River Basin Agreement (Parts Three and Four, Article 22), 1996 Mahakali River Treaty (Articles 6, 9), 1995 Mekong Agreement (Articles 5, 10, 11, 24), 2004 Berlin Rules (Chapter XI, Articles 57, 58, 59, 60) and 1992 UNECE Water Convention (Article 10). These principles are also acknowledged by modern international environmental conventions and declarations, e.g. 1992 Rio Declaration on Environment and Development (Principles 18, 19) and the 1992 Convention on Biological Diversity (Article 27.1).

4. Principles of cooperation and information exchange

It is a responsibility for each riparian state of an international watercourse to cooperate and exchange data and information regarding the state of the watercourse as well as present and future planned uses along the watercourse¹⁴. These principles are recommended by the 1966 Helsinki Rules (Articles XXIX, XXXI) while Articles 8 and 9 of the 1997 UN Watercourses Convention make these an obligation.

¹³ Manner, E.H. and Metsälampi, V-M. (1988) *The Work of the International Law Association on the Law of International Water Resources*. Finland: Finnish Branch of International Law Association.

¹⁴ *Supra*, note 9.

5. Peaceful settlement of disputes

This theory states that all states in an international watercourse should work together to find a solution. In the event that the parties involved are unable to reach an understanding by negotiation, the conflicts will be resolved through peaceful means.

Most modern international water conventions, treaties, and agreements incorporated this principle, e.g. 1966 Helsinki Rules (Articles XXVI–XXXVII), 1997 UN Watercourses Convention (Article 33), 1960 Indus Waters Treaty (Article IX, Annexure F, G), 1995 SADC protocol on shared watercourse systems (Article 7), 2002 Sava River Basin Agreement (Articles 1, 22–24, Annex II), 1996 Mahakali River Treaty (Articles 9, 11), 1995 Mekong Agreement (Articles 18.C, 24.F, 34, 35), 2004 Berlin Rules (Articles 72–73) and 1992 UNECE Water Convention (Article 22, Annex IV). This principle is also acknowledged by modern international environmental conventions and declarations, e.g. 1992 Rio Declaration on Environment and Development (Principle 26) and 1992 Convention on Biological Diversity (Article 27, Annex II).

V. ANALYSIS OF THE INTERNATIONAL WATER LAW

The process of evolution and codification of international water law related to navigational purposes commenced with the adoption of the Act of the Congress of Vienna in 1815¹⁵. From a global point of view, the 1868 Mannheim Convention on navigation on the Rhine among Belgium, France, Germany and The Netherlands is one of the major multilateral treaties related to water¹⁶.

This convention adopted the recommendations of the 1815 Congress of Vienna and the 1831 Convention of Mainz. The key principles of this convention were the obligation of the member states to maintain the Rhine river waterway and ensuring freedom of navigation along the Rhine¹⁷. The Convention and Statute on the Régime of Navigable Waterways of International Concern, widely known as the Barcelona Convention, was adopted in Barcelona on 20th April 1921. These early conventions, however, dealt with navigational uses of transboundary watercourses. Subsequent rapid industrialisation and increased demands for water resources propelled innovation in the law that is applicable to the non-navigational water uses, such as

¹⁵ Salman, M.A.S. and Uprety, K. (2002) Conflict and Cooperation on South Asia's International Rivers: A Legal Perspective. Washington, DC: The World Bank.

¹⁶ Hughes, D. (1992) Environmental Law (2nd ed.). London, UK: Butterworths.

¹⁷ CCNR (2007) Official Website of the Central Commission for Navigation on the Rhine <http://www.ccr-zkr.org/> accessed 20 May 2021

flood control, hydropower development, water quality management and water allocation¹⁸.

Therefore, non-navigational rules have become eminent in subsequent state practice and water conventions. This section scrutinizes the Helsinki Rules (1966), UN Watercourses Convention (1997) and Berlin Rules (2004) in order to find out to what extent principles related to transboundary water resources are incorporated in modern international conventions.

(A) The Helsinki rules on the uses of the waters of international rivers (1966)

The Helsinki Rules on the Uses of the Waters of International Rivers is an international guideline regulating how rivers and their connected groundwaters that cross national boundaries may be used, adopted by the International Law Association (ILA) at the 52nd conference in Helsinki, Finland in August 1966. In spite of its adoption by the ILA, there is no mechanism in place that enforces the rules¹⁹. This document is widely known as the Helsinki Rules and, over the years, it has become widely acknowledged as basis for negotiation among riparian states over shared waters.

Applicable to all drainage basins that cross national boundaries, except where other agreement between bordering nations exists, the Helsinki Rules assert the rights of all bordering nations to an equitable share in the water resources, with reasonable consideration of such factors as past customary usages of the resource and balancing variant needs and demands of the bordering nations. It also mandates protection of the resource by bordering nations with respect to water pollution in Chapter 3 (Articles IX to XI) and sets forth recommendations for resolving disputes over the usage of such watercourses.

The Helsinki rules consist of 37 articles spread over 6 chapters.²⁰

Chapter 2, Article 4 states: "Each basin State is entitled, within its territory, to a reasonable and equitable share in the beneficial uses of the waters of an international drainage basin".

Article XI binds the responsible state to cease wrongful conduct and compensate the injured co-basin state for the injury, in case of the violation of the rule stated in paragraph 1(a) of Article X. Thus, any kind of human conduct that causes water pollution falls in the boundary of the 'not to cause significant harm' principle. However, controversy remains, as the term 'substantial injury' is not clearly defined. In addition, 'injury' does not always necessarily equate with 'harm' and 'substantial' does not always equate with 'significant'.

¹⁸ Biswas, A.K. (1999) 'Management of international rivers: opportunities and constraints', Water Resources Development, Vol. 15, pp.429-441.

¹⁹ Browne, Anthony (2003-08-19). "Water wars, water wars, everywhere..." *The Times*. Accessed 20 May 2021

²⁰ The Helsinki Rules on the Uses of the Waters of International Rivers, UNESCO.

Articles XXVI–XXXVII of the Helsinki Rules deal with the procedures for the prevention and settlement of disputes. The key objective is to prevent or settle disputes by peaceful means (Article XXVII). Paragraph 1 of Article XXIX recommends each basin state to furnish relevant available information to the other basin states concerning the waters of a drainage basin within its territory.

The Helsinki Rules were later supplemented by the ILA's subsequent resolutions. Recently, the Helsinki Rules and subsequent resolutions have been revised by the ILA's 2004 Berlin Rules. While the Helsinki Rules are relatively important in the development of international water law, it is worth mentioning that they were drafted by the ILA, a professional organization, and hold no official status internationally²¹. The work of ILA has always been regarded as inspirational and not as hard and fast rules for state conduct. But although they are unofficial we should accord them great value because subsequent modern bilateral and regional treaties have tended to adopt the guidelines provided by the Helsinki Rules. Over the years, these guidelines have played a significant role in the development and codification of international water law²².

Nevertheless, despite their soundness and applicability, the Helsinki Rules and their supplementary declarations have enjoyed little recognition as the official codification of international water law. To overcome this indefiniteness, in 1970, the UN General Assembly commissioned the International Law Commission (ILC) to draft a set of articles to govern non-navigational uses of transboundary waters. Operating under the UN, the work of ILC is highly regarded as an official codification of international water law. After 21 years of extensive work, in 1991, the ILC prepared the draft text of the UN Watercourses Convention.

(B) UN convention on non-navigational uses of international watercourses (1997)

After considerable discussion during 1991–1997 on the ILC's draft, on 21st May 1997, the UN General Assembly adopted the Convention on Non-Navigational Uses of International Watercourses, widely known as the UN Watercourses Convention. This Convention codified the principles of sharing international watercourses building on the 1966 Helsinki Rules²³.

The UN Watercourses Convention is an international treaty, adopted by the United Nations on 21 May 1997, pertaining to the uses and conservation of all waters that cross international boundaries, including both surface and groundwater. "Mindful of increasing demands for water

²¹ *Supra*, note 17.

²² *Supra*, note 11.

²³ United Nations Development Programme (UNDP) (2006) Human Development Report 2006. New York, NY: UNDP.

and the impact of human behavior", the UN drafted the document to help conserve and manage water resources for present and future generations. From the time of its drafting, the Convention took more than 17 years to enter into force on 17 August 2014²⁴. With the treaty having been ratified by just 36 states, the majority of countries, especially the key ones, remain outside its scope. The convention, however, is regarded as an important step in establishing international law governing water.²⁵

The International Law Commission (ILC) was requested by the United Nations in 1970 to prepare viable international guidelines for water use comparable to The Helsinki Rules on the Uses of the Waters of International Rivers, which had been approved by the International Law Association in 1966 but which failed to address aquifers that were not connected to a drainage basin²⁶. After the ILC completed its project in 1994, the UN Sixth Committee drafted the Convention on the Law of Non-Navigational Uses of International Watercourses based on their proposal²⁷.

The document sought to impose upon UN member states an obligation to consider the impact of their actions on other states with an interest in a water resource and to equitably share the resource, mindful of variant factors such as population size and availability of other resources. Each member state that shares in a resource are required to provide information to other sharing states about the condition of the watercourse and about their planned uses for it, allowing sufficient time for other sharing states to study the use and object of the use is perceived to be harmful. The document permits a state with an urgent need to immediately utilize a watercourse, providing that it notifies sharing states both of the use and the urgency. In the event that use is perceived to be harmful, it requires member states to negotiate a mutually acceptable solution, appealing for arbitration as necessary to uninvolved states or international organizations such as the International Court of Justice.

The treaty also requires states to take reasonable steps to control the damage, such as caused by pollution or the introduction of species not native to the watercourse, and imposes an obligation on states that damage a shared water resource to take steps to remedy the damage or

²⁴ Current Status of Convention, United Nations, accessed 19 May 2021

²⁵ Raj, Krishna; Salman, Salman M.A. (1999). "International Groundwater Law and the World Bank Policy for Projects on Transboundary Groundwater". In Salman, Salman M. A. (ed.). *Groundwater: Legal and Policy Perspectives : Proceedings of a World Bank Seminar*. World Bank Publications. p. 173.

²⁶ McCaffrey, Stephen M. (1999). "International Groundwater Law: Evolution and Context". In Salman, Salman M. A. (ed.). *Groundwater: Legal and Policy Perspectives : Proceedings of a World Bank Seminar*. World Bank Publications. p. 152.

²⁷ McCaffrey, Stephen. "Chapter 2: The UN Convention on the Law of Non-Navigational Uses of International Watercourses" (PDF). United Nations Economic Commission for Europe. p. 17

to compensate sharing states for the loss. It includes provisions for managing natural damage to waterways, such as caused by drought or erosion, and mandated that sharing states notify others immediately of emergency conditions related to the watercourse that may affect them, such as flooding or waterborne diseases.

(C) The Berlin rules on water resources (2004)

On 21 August 2004, the Berlin Rules on water resources were approved in ILA's 71st conference held in Berlin. Unlike the Helsinki Rules and UN Watercourses Convention, the Berlin Rules include not only the development of important bodies of international environmental law but also international human rights law and the humanitarian rights law relating to war and armed conflict²⁸. The Helsinki Rules and UN Watercourses Convention emphasise the right of each basin state to reasonable and equitable share. On the other hand, Berlin Rules obliges each basin state in an international drainage basin to manage water inequitable and reasonable manner.

The document requires that nations take appropriate steps to sustain and manage water resources, in conjunction with other resources, and minimize environmental harm. In addition to setting out various regulations for nations to follow with respect to water within their boundaries and water they may share, it regulates behavior in wartime, including damage to water installations such as dams and dikes. Nations are not permitted to take action that may result in a shortage of life-sustaining water for civilians unless a nation being invaded is compelled by military emergency to disable its own water supply, or that may cause undue ecological damage. Poisoning water necessary for survival is in all cases forbidden.

The Berlin Rules on Water Resources provides that nations must enforce their provisions through local legislation and also submit to international review as necessary to ensure that they are compliant.

VI. CONCLUSION

International water law is a part of international law and along with its general principles provides more specific rules, which have their origins in both international custom and treaty law. If properly managed water serves as a tool for sustainable development, peacebuilding, and preventive diplomacy. Water can have an overreaching value capable of uniting conflicting interests and promoting consensus-building among countries and societies.

²⁸ Salman, M.A.S. (2007a) 'The helsinki rules, the UN watercourses convention and the berlin rules: perspectives on international water law', *Water Resources Development*, Vol. 23, pp.625–640.

The study summarised in this project reveals that the principle of equitable and reasonable utilisation, obligation not to cause significant harm, principles of cooperation, information exchange, notification, consultation, and peaceful settlement of disputes are widely acknowledged by modern international water conventions, agreements, and treaties. These principles form the basis of the 1966 Helsinki Rules on the Uses of the Waters of International Rivers, the 1997 UN Convention on Non-Navigational Uses of International Watercourses and the 2004 Berlin Rules on Water Resources. These internationally accepted principles could serve as the guiding principles and provide a framework for further dialogue among the riparian states of shared watercourses for creating effective transboundary water resources management and hence, promoting sustainable development.

Modern water law and legislation have to ensure sustainable resource allocation and management. For this purpose, the legislator has to take into account not only the political and cultural background and the economic needs but also the natural laws that govern the natural resource water. Data collection and monitoring are essential. Planning, as well as instruments and procedures for adaption, are indispensable. The water law on all levels still requires significant improvement.

VII. BIBLIOGRAPHY

- Farrajota, Maria Manuel, International Cooperation on Water Resources, in: Dellapenna, Joseph W./ Gupta Joyeeta (ed.), *The Evolution of the Law and Politics of Water*, 2009, 337, 339; Mager, Ute, Die Entwicklung des Wasserwirtschaftsrechts – Referenzgebiet für ein materiell-rechtlich fundiertes internationales Verwaltungsrecht, *ZaöRV* 70 (2010), 789, 816.
- McIntyre, Owen. (2010). *International Water Law: Concepts, Evolution and Development*.
- Shaw, Malcolm. "International law". *Encyclopedia Britannica*, 13 Nov. 2019, <https://www.britannica.com/topic/international-law>. accessed 15 May 2021
- Sergei Vinogradov, Patricia Wouters, and Patricia Jones, 'The Role of International Water Law' <https://groundwaterportal.net/sites/default/files/Transforming%20Potential%20Conflict%20into%20Cooperation%20Potential%20-%20The%20Role%20of%20International%20Water%20Law.pdf> accessed 19 May 2021
- Jägerskog, Anders, *Why states cooperate over shared water: The water negotiations in the Jordan River Basin*, 2003, 90.
- Draper, Stephen E. (ed.), *Sharing Water in Times of Scarcity. Guidelines and Procedures in the Development of Effective Agreements to Share Water Across Political Boundaries*, 2006, Preface, VI.
- Rahaman, M.M. (2009) 'Principles of international water law: creating effective transboundary water resources management', *Int. J. Sustainable Society*, Vol. 1, No. 3, pp.207–223.
- Birnie, P. and Boyle, A. (2002) *International Law and the Environment*. New York, NY: Oxford University Press.
- Khalid, A.R.M. (2004) 'The Interlinking of rivers project in India and international water law: an overview', *Chinese Journal of International Law*, Vol. 3, pp.553–570.
- Eckstein, G. (2002) 'Development of international water law and the UN watercourse convention', in A. Turton and R. Henwood (Eds), *Hydropolitics in the Developing World: A Southern African Perspective*. South Africa: African Water Issues Research Unit, pp.81–96.

- Manner, E.H. and Metsälampi, V-M. (1988) *The Work of the International Law Association on the Law of International Water Resources*. Finland: Finnish Branch of International Law Association.
- Salman, M.A.S. and Uprety, K. (2002) *Conflict and Cooperation on South Asia's International Rivers: A Legal Perspective*. Washington, DC: The World Bank.
- Hughes, D. (1992) *Environmental Law* (2nd ed.). London, UK: Butterworths.
- CCNR (2007) Official Website of the Central Commission for Navigation on the Rhine. Available at: <http://www.ccr-zkr.org/>
- Biswas, A.K. (1999) 'Management of international rivers: opportunities and constraints', *Water Resources Development*, Vol. 15, pp.429–441.
- *Browne, Anthony (2003-08-19). "Water wars, water wars, everywhere..." The Times.*
- The Helsinki Rules on the Uses of the Waters of International Rivers, UNESCO.
- United Nations Development Programme (UNDP) (2006) *Human Development Report 2006*. New York, NY: UNDP.
- Current Status of Convention, United Nations
- Raj, Krishna; Salman, Salman M.A. (1999). "International Groundwater Law and the World Bank Policy for Projects on Transboundary Groundwater". In Salman, Salman M. A. (ed.). *Groundwater: Legal and Policy Perspectives : Proceedings of a World Bank Seminar*. World Bank Publications. p. 173.
- McCaffrey, Stephen M. (1999). "International Groundwater Law: Evolution and Context". In Salman, Salman M. A. (ed.). *Groundwater: Legal and Policy Perspectives : Proceedings of a World Bank Seminar*. World Bank Publications. p. 152.
- McCaffrey, Stephen. "Chapter 2: The UN Convention on the Law of Non-Navigational Uses of International Watercourses" (PDF). United Nations Economic Commission for Europe. p. 17
- Salman, M.A.S. (2007a) 'The helsinki rules, the UN watercourses convention and the berlin rules: perspectives on international water law', *Water Resources Development*, Vol. 23, pp.625–640
