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Human Right to Water in the Helmand Basin: Setting a Path for the Conflict Settlement between Afghanistan and Iran

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There is a long-standing dispute between Iran and Afghanistan over the Helmand River. In recent years, between 2002 and 2013, the access to water of the population living in the river basin in Iran has been adversely affected. As the human right to water is recognized at the international level, this paper aims to study the national implementation of the human right to water in both countries. It analyzes Afghanistan’s and Iran’s legislation, regulation, adopted strategies and policies at the national level. It further assesses if there is an extraterritorial obligation for both countries to respect, protect, and fulfill the human right to water. Finally, it proposes solutions that would contribute to the fulfillment of the human right to water.

Keywords: transboundary watercourses; human right to water; Iran; Afghanistan; Helmand River

1. Introduction

The challenge of transboundary waters, including rivers and lakes, is the complication of their management, especially concerning the exploitation and utilization of shared water sources by riparian states. Unilateral action by one riparian state on shared water sources concerning the water utilization and exploitation, may affect other riparian states negatively. It may affect not only the water quality and quantity but also the accessibility and availability of water resources. This indeed, directly relates to the populations in neighboring countries.1 Furthermore, various demands for water and the unbalanced distribution of water resources have led to conflicts and disagreements among governments.2 Water conflicts can be divided into three categories: hydrosphere, economic, and political. There are intense potential conflicts concerning the shared water utilization, and prioritizing the realization of different water needs including human needs, political needs, and also the ecosystem’s needs for water.3 Various demands for water and even the unbalanced distribution of water resources in different regions have led to conflicts and disagreements among governments.

The dispute between Iran and Afghanistan on the allocation of the water of the Helmand Rivers is a long-standing one requiring further study so as to assess the human right to water of people living in the river basin. As can be seen in the next sections, the history of disputes between Iran and Afghanistan dates back to the 1900s, and it has yet to be resolved. The problem has increased in severity due to the conflict between the interests of the countries and the lack of an efficient system for monitoring and evaluating policies.4 As the two countries have never reached a conclusion on the proper management of the River, the human right to water of people living in the river basin in Iran as the downstream country could be adversely affected.

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1 Sabine Schulze, ‘Public participation in the governance of transboundary water resources – Mechanisms provided by river basin organizations’ (2012) L’Europe en Formation 3, 50.
2 William J.Cosgrove, ‘Water security and peace: A synthesis of studies prepared under the PCCP–Water for Peace process’ (2001–2003) Technical Documents in Hydrology, n 29, 3 <http://amudaryabasin.net/sites/amudaryabasin.net/files/resources/Water%20Security%20and%20Peace.%20A%20Synthesis%20of%20Studies%20Prepared%20under%20the%20PCCP,%20Water%20for%20Peace%20Process.pdf> accessed 03 October 2020.
3 Ibid.
4 Nahid Islam, ‘The law of non-navigational uses of International watercourses’ (2010) Kluwer law International.
The modern management of transboundary watercourses is a sensitive political issue among the riparian states. Most states, especially developing countries, have appropriate policy for water utilization, but they have difficulties following and applying this policy correctly. In other words, the state’s problems are not due to incorrect or ill-suited policy, but rather because of improper policy implementation. As in the case study between Iran and Afghanistan, this problem is tangible, as it arises because of the conflict between the interests of countries and the lack of an effective and efficient system to monitor and evaluate these policies. In essence, unsatisfactory policy implementation has caused the state’s security problems. Formerly defined by the growth of infrastructure development projects, security (including economic security) has evolved to include national socio-economic development. Nahid Islam, prominent expert in the field of international water law, pointed out the change that has taken place regarding the concept of security. In conclusion, in international transboundary water agreements, besides the principles of international water law, it is essential to consider perspectives of rights like international human rights (HR) law and international environmental law to give these agreements proper weight. Taking into consideration phenomena such as population growth and the subsequent increase in utilization of water resources, water pollution, climate change, and other factors, water scarcity has changed to be of global concern.

Considering the forefront role of the local government in the full realization of the human right to water in its jurisdiction, this research intends to study the role of the governments of Iran and Afghanistan in order to ensure the protection of the human right to water of people who are dependent on the water of the Helmand River. It deals with the main question ‘to what extent have Afghanistan and Iran’s governments fulfilled the human right to water of local people in the Helmand basin?’ For this purpose, it is essential to study whether the governments of Iran and Afghanistan adopted sufficient laws and regulations.

1.1. History

Iran and Afghanistan share several transboundary rivers. So as to jointly govern them, Iran has established a series of transboundary water agreements with its neighboring countries. The most critical of these agreements are the Iran–USSR Caspian Sea Agreement (1921), Harrirud, Atrak, Caspian Sea Agreement (1926), Aras and Atrak Agreement (1957), Atrak, Aras and Harirud Agreement (1957), Iran and Afghanistan Agreement (1950 and 1973), Iran and Iraq Agreement (1975), Iran and Turkey (1955), Iran and Turkmenistan (1991 and 2005). While 47 per cent of the surface water in Afghanistan flows to its neighboring countries, the only transboundary water agreement that Afghanistan has with its neighbors is the Helmand Water Agreement with Iran (1950 and 1973).

The United Nations Convention on the Law of the Non-navigational Uses of International Watercourses (UNWC) was adopted in 1997 and entered into force in 2014 upon receiving its 35th ratification. The Iran is one of the states that voted in favor of the convention. Afghanistan was an absent from the vote. Neither state are party to the UNWC, and therefore are not obligated by it.

1.2. Shared water resources of the Helmand Basin

The Helmand River, also known as the Hirmand River, forms part of the Afghan-Iran border. The median annual water output of the Helmand River is 2200 million cubic meters. The Helmand River rises in the
Hindu Kush Mountains in Afghanistan. The River rises in the Sia Koh and Parwan (Paghman) Mountains, which are located northwest of Kabul and crosses to the southwest, where it goes to the Sistan Delta. The Sistan Delta is divided into four lakes: Hamouni Saberi, Hamouni Puzak, Hamouni Shapour (Godizere), and Hamouni Helmand.

1.3. The importance of the Helmand River to Afghanistan and Iran
Throughout history, there has always been a strong link between socio-economic development and the stability of various groups of people with the availability of water, reliability of the provision of water services, and water supply. In the case of Iran and Afghanistan, the River has provided water for agriculture for over 5000 years and has sustained the cultural and natural life of the region. In Afghanistan, 90 per cent of the surface-water resources flowing through Afghanistan are transboundary waters, which, in most cases, Afghanistan as the upstream state. In addition to the Helmand River basin, Afghanistan has three more large river basins, including the Amu Darya basin, Western river basin, and Kabul/Indus basin. In total this country has 75 billion cubic meters of water resources, which potentially 55 BCM thereof is surface water, and 20 BCM is groundwater. The Helmand River supplies water for farmers and the production of agricultural products and hydroelectric power. More than 93 per cent of the total volume of water consumption is used for irrigation. The survival of wildlife and ecosystems in the Hamoun wetlands depend on the River. As stated by the Afghanistan National Development Strategy for Security, Governance, Economic Growth, and Poverty Reduction in 2008–2013: ‘the River plays a role in the reduction of poverty, inequality, and absolute and relative poverty’.
economic and social growth, and the provision of adequate drinking water.23 Concerning the proportion of the Helmand River water supply used by Afghanistan, there is a scarcity of reliable hydrologic and water quality data and information.24

The importance of this River to Iran is undeniable. Water security in the eastern Sistan and Baluchestan province constitutes one of the Iranian government’s concerns since the only water resource in the main cities of the province is the Helmand River.25 More than 400,000 people live in the Sistan and Baluchestan province, whose water is supplied by the River through Chahmine reservoirs.26 This River protects the region by generating continuous agricultural production, increased income for farmers, preventing farmer’s migration to cities, the mortality of livestock and wildlife, and access to sanitation and food.27 Due to the River, the region has become rich in terms of biodiversity, ecological interactions and wetland systems.28 The lack of sufficient water in the region, directly and indirectly, affects aspects of human lives such as decreasing agricultural production, lowering income for farmers, increasing farmer’s migration to cities, increasing the cost of water, sanitation, and food, increasing desertification and sandstorms in the region, soil erosion, mortality of livestock and wildlife and others.29 The people living in River’s basin include Baluchi and Sistani tribes and also the semi-nomadic Sayyad hunter-gatherers.30 Their lives, economy, and livelihood strongly depend on the Helmand River’s water.31

The next part of this paper will examine the recognition of the right to water as a human right in the constitutional and domestic laws of Iran and Afghanistan, because the constitutional and domestic laws of the countries are the only sources in which the right to water can emerge and require fulfillment by them. On the one hand, there are some sources used by the courts for their interpretations of fundamental rights based on their constitutional laws. The International Union for the Conservation of Nature has declared that the human right to health and the clean environment includes the explicit and implicit recognition of the human right to water, recognizing in regulations or the constitutional rules of fifty different nations.32 Among the countries around the world, there are only a few that have recognized the human right to water in their national constitutions.33

2. Legal framework in Iran’s domestic law
2.1. Constitution

In the Constitution of Iran, the human right to water is not explicitly recognized. Article 45 stipulates the application of public law over water, seas and lakes because it recognizes them as public goods.34 Several issues, including water security, sustainable development, and integrated water management, conflicts in the private ownership and public interest, and the impracticality of the market mechanism in water privat-
zation, all justify the involvement of the government in the management of water resources and the application of public law over this shared resource.35

2.2. Charter on Citizens’ Rights
In 2016, a landmark Charter on Citizens’ Rights was adopted and signed under Article 134 of the Constitution by the President, Hassan Rohani. According to Article 134, the president is authorized to adopt necessary provisions and to determine the programs of the government and implements the laws.36 Article 2 of the Charter recognizes the human right to the enjoyment of a decent life and necessities thereof. Access to clean water is regarded as one of the requirements of having a decent life for Iranian citizens.37 Under section XXI, which deals with the right to a healthy environment and sustainable development, Article 113 recognizes the human right to a healthy and clean environment that is free of water pollution.38

2.3. Fair Distribution of Water Act
Another relevant law is the Fair Distribution of Water Act, adopted in 1983. It is mainly concerned with water resources, management and protection. This act includes different chapters, including the public and national ownership of water, groundwater, surface water, duties and authorities and protection of water installations. This Act entitles the Ministry of Energy to performing toward the determination of river basins, wetlands, public canals (art 2(a)), the management of groundwater resources (art 4), and wells.

According to Article 5, digging wells in non-forbidden areas and water consumption thereof for domestic use, sanitation, and drinking are admissible daily only up to 25 m³ and with the permission of the Ministry of Energy. In the present Act, ‘reasonable’ consumption will be determined according to the needs of the consumer, and with the respect of public needs and facilities in a specific time and particular place.39

2.4. Civil Code
In the Civil Code, the regulator implicitly provides for the right to drinking water in Article 149 and 150. It states that anyone is allowed to use unclaimed waters for drinking consumption.

3. Legal framework in Afghanistan’s domestic law
3.1. Constitution
In the Constitution of Afghanistan, the human right to water is not explicitly recognized. Article 9 of the Afghan Constitution emphasizes the importance of proper management of natural resources, including water. It obliges the government to take the necessary measures to preserve and improve forests and the environment. In sum, there are two primary sources of water law in Afghanistan: The Civil Code and Water Act.40

3.2. Civil Code
Afghanistan’s Civil Code explicitly states that seawater and its tributaries are public property.41 Everyone has the right to irrigate their private lands, including trees and fields, unless this is against the public interest or specific laws. This law does not specify what kind of use is against, or in accordance with, the public interest. Only the principle of non-harm to public interests is mentioned.42

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35 Ali Akbar Jafari Nadoushan, Omid Shirzad, ‘Structure and jurisdiction of semi-judicial bodies in Iran’s water law’ (2019). Administrative Law Journal, spring issue. <http://qjal.smtc.ac.ir/article-1-374-fa.pdf>. accessed 3 October 2020.
36 Iranian Constitutional Law 134; ‘The leadership of the Council of Ministers is assigned to the President of the Republic who supervises the functions of the ministers; and by adopting necessary provisions coordinates the decisions made by the ministers and the Government Council; and with the cooperation of the ministers determines the programs of the government and implements the laws.’
37 Ibid, Article 2: ‘Citizens have the right to enjoy a decent life and necessities thereof, such as clean water, adequate food, promotion of health, environment, appropriate medical treatment, access to medicines, and medical, medicinal and health equipment, supplies and services in compliance with current standards of science and national standards, and safe and sustainable environmental conditions.’
38 <http://president.ir/en/96865> accessed 3 October 2020.
39 Fair distribution of Water Act 18(2).
40 United Nations Assistance Mission in Afghanistan, ‘Water Law, Assessing the Legal Framework for Agricultural Water in Afghanistan’ (2016), 6.
41 Afghanistan Civil Code 2347.
42 Ibid.
3.3. Water Act

The Water Act, like the Constitution and civil law, explicitly refers to public ownership of water and the Afghan people’s property of water. According to this Act and following custom, water can be used to meet various needs, including drinking water, human needs, agriculture, industry, energy production and so on. In the use of water resources, priority is given to drinking water and the daily needs of the people. Water should be free of charge; however, the water service provider may charge water users for drinking water supply and sanitation services. And in general, the government must protect and manage water as a natural resource.43

The Water Act of Afghanistan mentions that priority in water allocation must be given to the right to water for personal and domestic uses. Except for this case in the legal system of Iran and Afghanistan, there is no explicit provision regarding the right to safe drinking water and sanitation, but from the general provisions of various laws, it can be concluded that both governments are obliged to provide safe drinking water and sanitation.

4. Policy and strategy in Iran

The fulfillment of the human right to water and the complete realization of sustainable development, as well as sustainable and affordable access to water and sanitation, will not be guaranteed only through the adoption of a legislative framework. In principle, national governments should strengthen the implementation of their comprehensive policies and strategies.

The Iranian government adopted the law on the Sixth five-year Economic, Cultural and Social development plan, applicable until 2022, by the Head of the State in 2017. Under Article 2(a) of the Plan, water is one of the main issues that the government is required to deal with by conducting relevant projects. The government has several challenges to overcome, including a water availability crisis, the realization of the right to water, political and environmental sustainability, the increasing production of the agricultural sector, the uneven balance of groundwater resources, and the enhancement of water resource exploitation. According to this document, the government should adopt measures such as a non-refundable financial contribution, the development of innovative irrigation mechanisms, the use of dams to create new reservoirs, and the management of in water consumption in order to guarantee access to water, specifically drinking water. Further, Article 36(a) requires the government to guarantee the access of southern regions to drinking water by proposing the establishment of desalination plants as the solution.

Iran has started the integration of sustainability in its strategies since 1995 by establishing a National Committee for sustainable development. The striking improvement of Iran towards sustainable development is in the area of health and education.44 In 2016 periodical conferences were held with the presence of ministers, high delegates of executive bodies, entities, and institutions. Finally, the central responsible bodies for each of the 17 goals of sustainable development were determined.45 They are in charge of coordination and cooperation with relevant beneficiaries and reporting regarding appropriate Goals.46 For the achievement of access to water, sustainable management, and sanitation for all, the Ministry of Energy is the responsible body. It has to cooperate with the Ministry of Health, Ministry of Agriculture, and Ministry of the Interior as well as the Department of the Environment.47

5. Extraterritorial obligations of Iran and Afghanistan regarding human right to water according to the International Water Law principles

In the dispute between Iran and Afghanistan, physical accessibility to water, among significant elements of the right to water, meaning accessibility, quality, and quantity,48 has become more affected.49 Therefore, the lack of access to water of the people of Sistan and Baluchestan could result in the violation of the human
rights of people living in the river basin in Iran by reducing the volume of water flowing to them according to the agreement between the parties.50

During 2001–2002 Iran raised its complaint letter ‘regarding an alleged blockage of the Helmand waters at Kajaki dam’ to Afghanistan, which was circulated on the 21 September 2001 as part of an agenda item of the General Assembly Security Council.51,52 Between 2002 and 2013, Iranian officials repeatedly referred to the Afghan government’s commitment to supply shared water resources under the 1973 Treaty.53 As mentioned before, the rural people of Sistan and Baluchestan are receive their drinking water from the series of canals that divert water from the Sistan River basin into the Chahnimeh storage reservoir system.54

Iran and Afghanistan recently negotiated this conflict in June 2019 in Kabul, Afghanistan. Afghanistan insisted on increasing the production of agricultural products and hydroelectric power to boost the economy.55 The two countries signed an agreement regarding the installment of measurement devices on the River to implement the 1973 Agreement. According to the president of the Helmand Water Commissary, the purpose of this agreement was the proper management of the River water, and creating awareness within both States of the exact amount of water.56

It has been suggested that, due to the nature of water and its necessity for human survival, that the human right to water may impose obligations for the fulfillment of the human rights of the citizens of the downstream or the upstream countries.57 As emphasized in documents such as the Mar del Plata Statement (1977) and the UN Declaration of Right to Development (1986), in water utilization of shared water resources, priority should be given to the realization of basic human needs and ecological reserves.58 The expansion of the concept to basic water needs for ecosystem functions was reaffirmed during the Earth Summit in Rio de Janeiro in 1992.59

Article 21(2) of the 1994 International Law Commission Draft Articles60 mentions the duties of watercourse States to prevent, reduce, and control the pollution, or significant harm to other watercourse States or their environment. Article 10(2) states that, in case of conflict in prioritizing uses of transboundary water resources, the priority should be given to ‘ensuring all peoples access to safe and sufficient water supplies, as set out in Chapter 18 of Agenda 21.’61

Article 14 of the Berlin Rules, which in some ways reflect customary international law,62 states: ‘1. in determining an equitable and reasonable use, States shall first allocate waters to satisfy vital human needs. 2. No other use or category of uses shall have an inherent preference over any other use or category of uses.’63 In other words, the priority should always be given to the factors that are the most relevant to meeting vital human needs in the riparian states and the physical and geographical characteristics of the drainage basin.64

50 Takele Sobока Bulto, ‘Towards Rights-Duties congruence: Extraterritorial application of the human right to water in the African Human Rights system’ (2011), 29 Neth.Q.Hum.Rts.491, 500.
51 Bill Samii, ‘Iran/Afghanistan: Still No Resolution for Century-Old Water Dispute, Radio Free Europe Radio Liberty’ (2005) <https://www.rferl.org/a/1061209.html> accessed 3 October 2020.
52 Thomas et al. (n. 17).
53 Ibid.
54 UN Development Programme I. R. Iran, ‘Restoration and sustainable use of the shared Sistan Basin, A Baseline Situation Analysis’ (2005).<http://www.ir.undp.org/content/dam/iran/docs/News/2014/March%202014/Towards%20a%20solution%20for%20Iran%27s%20dying%20wetlands/Hamoun%20Wetland/Hamoun%20Wetland%20Baseline%20Situation%20Analysis%20005.pdf> accessed 4 October 2020.
55 Bulto (n. 50).
56 <https://www.tasnimnews.com/fa/news/1398/03/24/2031278/%D8%AE%D9%84%D8%B7-%D9%85> accessed 3 October 2020.
57 Bret C. Birdsong, ‘Mapping the human right to water on the Colorado River’ (2011), J.J.48 Williamette L.Rev.117, University of Nevada.
58 United Nations Conference on Environment & Development Rio de Janeiro, Brazil, (n. 47).
59 Peter H. Gleick, The World’s Water 2000–2001: The Biennial Report on Freshwater Resources, 2000–2001, Island Press, 10.
60 Draft articles on the law of the non-navigational uses of international watercourses and commentaries thereto and resolution on transboundary confined groundwater (1994), 121. <http://legal.un.org/ilc/texts/instruments/english/commentaries/8_3_1994.pdf> accessed 4 October 2020.
61 Owen McIntyre, ‘Environmental Protection of International Watercourses Under International law’ (2007), Ashgate Publishing Limited, 163.
62 International Law Association Berlin Conference (2004), Water Resources Law. <http://waterbeyondborders.net/wp-content/uploads/2018/06/Berlin-International-Water-Rules-2004.pdf> accessed 3 October 2020.
63 Ibid.
64 Owen McIntyre, Utilization and Environmental Protection of Shared International Freshwater Resources – the meaning and role of ‘equity’ in international water law (2013) 38(2) Water International, 42.
In this regard, there are criteria for assessing and prioritizing the basic human needs of the dependent population and prioritizing the economic and social needs of the transboundary water states, which is the degree of economic dependency on the waters of particular transboundary waters.65 These criteria have been mentioned explicitly in Principle V(b) of the 1956 International Law Association's Statement of Principles Resolution of Dubrovnik. It says: ‘the States upon an international river should in reaching agreements...and settling disputes, weigh the benefit to one State against the injury done to another through a particular use of the water. For this purpose, the extent of the dependence of each state upon the waters of that river’ should be taken into account.66

The Sub-Commission on the Promotion and Protection of Human Rights in its Guidelines mentions that the priority in water allocation and utilization should be given to water resources which are necessary to realize basic human needs that include preventing starvation, disease, and other obligations of each of the Covenant rights,67 as well as providing adequate food, the right to earn a living through work, for disadvantaged farmers and other vulnerable groups.68

In case of international watercourses, as actions or inactions of one state over the transboundary water in its territory could result in the violation of the human right to water in other riparian states69 there is a challenge whether one state is obliged to respect the human right to water in another country.

There are no legal provisions regarding state responsibility for their extraterritorial actions and subsequent human right to water violations in the legal framework governing the Helmand River. However, according to the duty to respect those rights and because of the de jure or de facto control over the water by the co-riparian states, all the river basin states will be held accountable for any action resulting in the human rights violations of other riparian states’ citizens.70 This obligation of cooperation and assistance for the universal respect and observance of human rights is recognized in Article 56 of the UN Charter.

Also, the Universal Declaration of Human Rights (Article 22 and 28) and International Covenant on Economic, Social, and Cultural Rights (Article 2(1)) emphasize the importance of cooperation for the protection of human rights. The Committee on Economic Social and Cultural Rights explains that ‘international cooperation for development and the realization of economic, social, and cultural rights is an obligation of all states.’71 In its last General Comment, it is stated that the International Covenant on Economic, Social and Cultural Rights determines that all state parties have an international obligation to take joint and separate actions to achieve human rights towards other countries and to individuals located outside of their territory.72

Furthermore, it states: ‘to comply with the international obligations concerning the right to water, state parties have to respect the enjoyment of the right in other countries. Any activity within the state party’s jurisdiction should not deprive another country of the ability to realize the right to water for persons in its jurisdiction.’73 States must prevent their citizens and companies from violating the right to water for individuals and communities in other countries. Ultimately, states should facilitate the realization of the right to water in other countries.74

The legal framework in international law regarding the extraterritorial obligations of states to the human right to water is based on the principles of equitable and reasonable use, no-harm, duty to consult, and information exchange.

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65 Owen, (n.61).
66 International Law Association Statement of Principles, Resolution of Dubrovnik (1956), 241–243. <https://www.internationalwaterlaw.org/documents/intldocs/ILA/ILA-Resolution_of_Dubrovnik1956.pdf> accessed 3 October 2020.
67 General Comment No. 15: The Right to Water (2003), E/C.12/2002/11, para 6. <https://www.refworld.org/pdfid/4538838d11.pdf> accessed 3 October 2020.
68 UNCHR (Sub-Commission), ‘Report by Special Rapporteur, El Hadji Guissé (2005) UN DocE/CN.4/Sub 2/2005/25.
69 Jimena Murillo Chavarro, ‘Extraterritorial Obligations to Ensure the Enjoyment of the Human Right to Water in a Transboundary Context’ (2015), 9 Hum. Rts. & Int’l Legal Discourse, 90.
70 Bulto (n. 50)
71 Fons Coomans, The Extraterritorial Scope of the International Covenant on Economic, Social and Cultural Rights in the work of the United Nations Committee on Economic, Social and Cultural Rights (2011), Human Rights Law Review 11, Published by Oxford University Press, 4.
72 Jimena Murillo Chavarro, ‘Extraterritorial Obligations to Ensure the Enjoyment of the Human Right to Water in a Transboundary Context’ (2015), 9 Hum. Rts. & Int’l Legal Discourse, 90.
73 UN Committee on Economic Social and Cultural Rights (CESCR), General Comment 15, The Right to Water (2002) (E/C.12/2002/11) para 2.
74 Ibid.
5.1. Equitable and reasonable use

According to the principle of equitable utilization, each riparian state has a right within its territory to use shared watercourses reasonably and equitably. The International Law Commission and the Sixth Committee of the General Assembly state that the principle of equitable and reasonable utilization of shared watercourses by riparian states is based on the balance of the interests of the countries that share international watercourses exploiting those waters. Factors for equitable and reasonable utilization include the social and economic needs of the watercourse States; the population dependent on the watercourse; the existing and potential uses of the waters; the efficiency of actual or planned utilization; the effects on other watercourse States; the availability of alternative sources; and certain physical geographical characteristics of the watercourse; sustainability and avoidance of ecological harm. Two factors for the fulfillment of the principle of equitable and reasonable use were determined by the International Court of Justice in the Pulp Mills case. They include the ‘balance between Parties’ rights and needs to use the river for economic and commercial activities on the one hand, and the obligation to protect it from any damage to the environment that may be caused by such activities on the other. In Article 5 of the Helmand Treaty, Afghanistan committed itself not to take any action ‘to deprive Iran totally or partially of its water right to the water of the Helmand River.’ Afghanistan is currently working on the planning and designing of the third phase of the Kamal Khan dam, and the second phase of the Kajaki Dam on the Helmand River, which would result in Iran’s access to the water resources of the Helmand River.

5.2. No-Harm principle

The no-harm principle is another customary international principle, requiring States ‘not to cause significant harm’ to other States. It is codified in different international water conventions, treaties, agreements, and other instruments. According to these instruments States have the sovereign right to exploit their resources in accordance with their environmental policies, the United Nations Charter, and the principles of international law. States are responsible to ensure that activities within their jurisdiction do not cause harm to the environment of countries or areas outside their national jurisdiction. In the case of Iran and

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75 Bernard J. Wohlwend, ‘Equitable Utilization and the Allocation of Water Rights to Shared Water Resources’. <http://www.aida-waterlaw.org/PDF/EQUITABLE.PDF> accessed 3 October 2020.
76 Ellen Hey, ‘The Regime for the Exploitation of Transboundary Marine Fisheries Resources’ (1989), Kluwer Academic Publishers, London, 39.
77 UN Convention on the Law of the Non-Navigational Uses of International Watercourses, (adopted in 1997 entered into force on 17 August 2014) 49 (A/51/49), the Helsinki Rules on the Uses of the Waters of International Rivers (adopted in 1966), and the Berlin Rules on Water Resources (adopted in 2004).
78 UN Convention on the Law of the Non-Navigational Uses of International Watercourses, (adopted in 1997 entered into force on 17 August 2014), Fifty-first Session, Supplement No. 49 (A/51/49).
79 Pulp Mills (Argentina v. Uruguay) (Merits), (2010) ICJ Rep 2010.
80 Ibid.
81 The Afghan-Iranian Helmand-River Water Treaty (Afghanistan-Iran) (13 March 1973). <http://www.fao.org/faolex/results/details/en/c/LEX-FAOC174405/> accessed 4 October 2020.
82 Wadsam, ‘Completion of Kamal Khan dam in Nimroz province’<https://wadsam.com/afghan-business-news/completion-of-kamal-khan-dam-in-nimroz-province-232/> accessed 4 October 2020.
83 Zarmina Mohammadi, ‘Work on 2nd Phase of Kajaki Dam to Begin Soon: DABS’. <https://www.tolonews.com/business/work-2nd-phase-kajaki-dam-begin-soon-dabs> accessed 4 October 2020.
84 Muhammad Mizanur Rahman, ‘Principles of international water law: creating effective transboundary water resources management’ (2009), 1(3) Int. J. Sustainable Society.
85 UN Convention on the Law of the Non-Navigational Uses of International Watercourses Articles: 7, 10, 12, 15, 16, 17, 19, 20, 21.2, 22, 26.2, 27, 28.1, and 28.3 of the; Articles, the Helsinki Rules (1966V, X, XI, XXIX [2]); Southern African development community protocol on shared watercourse systems (1995) Article 2; Sava River Basin Agreement (adopted in 2002)Articles 2.9; Mahakali River Treaty (adopted in 1996) Articles: 7, 8, and 9; Mekong Agreement (adopted in 1995) Articles: 3, 7, and 8; the Berlin Rules (2004) Articles: 8, 10.2, and 16.
86 UNGA, UN conferences on the Human environment (adopted in 1972) A/RES/2994 Principle; UN Declaration on Environment and Development (adopted in 1992) A/CONF.151/26 (vol. I), 31 ILM 874 (1992) Principle 2.

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Afghanistan, the Government of Afghanistan, despite Goldsmith arbitration in 1886, attempted to divert the direction of the Helmand River, aiming at the development of the agricultural sector and hydroelectric power generation. In this arbitration it is stated that: ‘...no works are to be carried out on either side calculated to interfere with the requisite supply of water for irrigation on the banks of the Helmand.’

Between 1947 and 1957, Afghanistan built dams, including Diversion Dam of Boghra, the channel of Boghra, Kajaki Reservoir Dam, Arghandab Dam, and several canals of Hughian Kamrargh, Akhtechi, Gohargan, Joylo, and Archisarvari. Since the Helmand plays a vital role in the stability of Sistanany, disruption in Helmand’s water flow would cause severe harm or irreparable losses to Iran.

5.3. Duty to consult and information exchange

In the absence of any agreement on the use of a shared watercourse, the principle of ‘Duty to Consult and Information exchange’ consists of a procedural obligation that requires a State to consult with the injured states if the former has caused harm to other riparian States in the course of utilizing a watercourse. This obligation requires the provision of prior notification and information exchange related to the schematication and implementation of new measures on transboundary waters. Watercourse States, based on article 30 of the 1997 UN Watercourses Convention, have the obligation of ‘exchange of data and information, notification, communication, consultations, and negotiations, through any indirect procedure accepted by them.’ The UN General Assembly Resolution No. 3129, and Article 3 of the Charter of Economic Rights and Duties of States on Cooperation about Natural Resources shared by two or more countries refer to this obligation too.

The duty to consult with other riparian states regarding activities conducted on the shared watercourses will emerge in three cases: 1. one of the riparian states decides on a project that may affect the quantity and quality of the amount of water flow to other riparian states, 2. an emergency happens in one of the riparian state’s territory and may result in injury to another riparian state, 3. activities on the shared watercourse in one of the riparian states may result in serious effect to another riparian state’s interests. According to this principle ‘shared ownership, however, would limit state’s freedom to negotiate on such criteria and procedures by imposing consensus among all basin states as a precondition for the development of the basin.’

The 1973 Iran-Afghanistan Agreement does not mention the duty to consult and to regularly exchange data and information. This obligation is based on the general obligation to cooperate in Article 8 of the 1997 UNWC, which is related to watercourse issues, such as hydrological, ecological nature, and water quality.

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61 Hussein Bandani, 'Assessment of Alam’s dynasty role in the formation of Gold Smith’s and McMahon’s arbitration in Sistan region’ (2015) 6(5) International Journal of Scientific & Engineering Research. ‘The matter of division of the water of Helmand and the way of it’s using in delta region has been one of the important factors in the territorial dispute between Iran and Afghanistan in Sistan after Gold Smith’s arbitration. Although the two countries agreed to mark the boundary lines attempting to end the territorial issues but in spite of numerous meetings, the matter of water division and the right of using it remained unsolved and was as the main problem between the two countries. The main problem was that the rulers of Afghanistan considered the river of Helmand as an internal river of their country and preserved the right of using the water of this river for themselves at any way. This has been pointed to this prospective in McMahon’s note in September 29, 1904 that the Afghan government doesn’t accept the water dispute and believed that there was not a dispute about water. Because of its geographical location, they believed it was only Afghanistan which was the owner of all of Helmand. With such a view, the rulers of Afghanistan not only denied the people’s right of Sistan of Iran for using the water of Helmand who their life was dependent on it but also they didn’t respect the agreements about the Border Rivers.’

62 Reza Mousazadeh, Morteza Abbasi-zadeh, legal aspects of Exploitation of Hirmand Border River by Iran and Afghanistan, (2016) Central Asia and Caucasus Quarterly, No. 93, 174–175. <http://ca.ipisjournals.ir/article_24259.html> The Helsinki Rules, 1966. Ibid.

63 <https://oregondigital.org/downloads/oregondigital:df70rv74s> accessed 3 October 2020.

64 Mousazadeh et al. (N. 88).

65 Ibid.

66 Joseph Dellapenna, ‘The customary International Law of Transboundary fresh waters’ (2001) 1(3/4) Int. J. Global Environmental Issues 281.

67 UN Convention on the Law of the Non-Navigational Uses of International Watercourses Article 30.

68 UN Charter of Economic Rights and Duties of States on cooperation about natural resources shared by two or more countries (1974) 3281(xxix) A/RES/29/3281. Article 3: ‘In the exploitation of natural resources shared by two or more countries, each State must co-operate on the basis of a system of information and prior consultations in order to achieve optimum use of such resources without causing damage to the legitimate interest of others.’

69 Attila Tanzi, Owen McIntyre, Alexandros Koliopoulos, Alistair Rieu-Clarke, Rémy Kinna, ‘The UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes: Its Contribution to International Water Cooperation’ (2015) Hoteli Publishing 518.

70 Terje Tvedt, Owen McIntyre, Tadesse Kasse Woldesadik, ‘A History of Water: Sovereignty and International Water Law’ (2015) Series III, vol 2, I.B. Tauris, 223–224.

71 Ibid.
If one of the watercourse states request from another state to provide and collect data or information, it should collect data, information, and do the best endeavor to fulfill requests of the requesting states. Watercourse States should cooperate by considering factors such as sovereign equality, territorial integrity, mutual benefit, good faith, and assessment of the other state’s needs, the possibilities of this cooperation and to create opportunities for regulation of the flow of the waters of an international watercourse. In the current case, it seems that Afghanistan has an obligation to share the exact regional data on the number of rainfalls and river discharge with Iran.

6. Solution
In this section, some solutions are proposed to contribute to the achievement of the human right to water of those who are affected by the current situation. To resolve the conflict over the water of the Helmand River, Iran and Afghanistan could rely on the principle of minimum environmental flow stated in some international treaties such as the Mekong Cooperation Agreement in 1995. There are lots of international treaties concerning minimum flow. In some of these treaties, states agree to join treaties to decrease harm and to increase benefits.

In addition, the legal framework governing the Helmand River should be updated to reevaluate each of the basin states’ water needs, rainfalls, drought, and the amount of water supplied by the River in the current situation. In this regard they could be inspired by the Mexico-US case and adopt a mechanism of binational cooperation allowing for the application, extension, elaboration, and modification of treaty provisions. For the implementation of the right to water, the world commission on dams issued social and environmental dam standards that Afghanistan should apply in all levels of dam construction to ensure the accessibility of water for both Iranians and Afghans dependent on the River. They non-exhaustively include rights such as right to culture, the right to participate in decision making, access to justice, the rights of children and the disabled, gender and women’s rights, the right to decision making, and the right to freedom of movement. Referring to various international instruments on access to water, in which access to water is recognized as a human right, Afghanistan, as an upstream country, cannot deny the Iranian people’s right to access safe drinking water. According to the previous duties, legal responsibilities and principles, priority must be given to the right of ‘access to water’ as a fundamental right, and this would include the right to

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98 Ibid.
99 The Convention on the Law of the Non-Navigational Uses of International Watercourses (n. 77).
100 Ettehad (n. 9).
101 See more Treaty between India and Nepal on the Mahakali River (1996), Treaties on the Nile (1929) and (1959) and the Treaty on Sharing of the Ganges Waters at Farakka (1996).
102 Christina Leb, Cooperation in the Law of Trans-Boundary Water Resources (2013) Cambridge University Press 173–174.
103 Nicole T Carter, Clare Ribando Seelke, Stephen P. Mulligan, ‘U.S.-Mexican Water Sharing: Background and Recent Developments’ (2017), Congressional Research Service.
104 Hurwitz, Zachary, ‘Dams standards: a rights-based approach’ (2014) <www.internationalrivers.org> accessed 3 October 2020.
105 See more Treaty between India and Nepal on the Mahakali River (1996), Treaties on the Nile (1929) and (1959) and the Treaty on Sharing of the Ganges Waters at Farakka (1996).
106 The U.N. Convention on the Law of the Non Navigational Uses of International Water Courses (Art. 10), the Geneva Convention in International humanitarian law (Articles 20, 26, 29, and 46), the Stockholm Conference in 1972 (Principle 2), The Mar del Plata Action Plan in 1977 (Resolution II on community water supply), The Convention for the Elimination of Discrimination Against Women(14(2)h)), the Convention on the Rights of the Child (Article 24(2)c), the Dublin Declaration in 1992(4), Agenda 21 of the UN Conference on Environment and Development in Rio de Janeiro in 1992, United Nations Commission on human rights, Sub-Commission on Prevention of Discrimination and Protection of Minorities, fiftieth session, Item 4 of the provisional agenda, E/CN.4/Sub.2/1998/7, 10 June 1998, The Realization of Economic, Social and Cultural Rights, the right of access of everyone to drinking water supply and sanitation services, working paper by Mr. El Hadji Guissé, Special Rapporteur, under Sub-Commission resolution 1997/18, General Assembly Resolution: The right to development, A/RES/54/175 (Article 12), the 1999 Resolution on the Right to Development and the Millennium Declaration in 2000, para 7 of CESCR, General Comment No.15, United Nations Convention on the Rights of Persons with Disabilities(para 26) of Article 28, Report of the UN High Commissioner for Human Rights on the scope and content of the relevant human rights obligations related to equitable access to safe drinking water and sanitation under international human rights instruments, August 2007, Council’s Decision 2/104-Human Rights and Access to Water, 2006, Report of the United Nations High Commissioner for Human Rights on the scope and content of the relevant human rights obligations related to equitable access to safe drinking water and sanitation under international human rights instruments, A/HRC/6/3, 2007, Human Rights Council, Sixth session, Item 2 of the provisional agenda, 26, Human rights and access to safe drinking water and sanitation, Resolution 7/22, Human Rights Council, 3, Promotion and Protection of all human rights, civil, political, economic, social and cultural rights, including the right to development, A/HRC/RES/12/8, 12 October 2009, Human Rights Council, Twelfth session, Agenda Item 3, UNGA, General Assembly Resolution, 64/292, 2010, The human right to water and sanitation, The Human Rights Council Resolution, 15/9, Human rights and access to safe drinking water and sanitation, Human Rights Council, fifteenth session, Agenda Item 3, Promotion and protection of all human rights, civil political, economic, social and cultural rights, including the right to development, Resolution adopted by the Human Rights Council, 16/2.
utilize the river for economic development.\textsuperscript{107} UNWC, Article 10, gives priority to vital human needs. Thus, in the event of conflict concerning the equitable and reasonable utilization of shared water resources, the human right to water may prevail.\textsuperscript{108}

The correct and fair exploitation of international rivers contributes to the economic and social progress of developing countries, which is one of the goals of the United Nations.\textsuperscript{109} In light of this, the following recommendations are suggested:

\begin{itemize}
  \item[a)] The 1973 Agreement between Iran and Afghanistan should be revised or updated. Through this agreement, Iran and Afghanistan established the Helmand River Delta Commission to coordinate the technical procedures for sharing the Helmand River’s water. This Commission, however, has not been successful in its mission. So as to better promote cooperation, Iran and Afghanistan can promote regional data and information sharing.
  \item[b)] Iran and Afghanistan could better promote and improve the water management systems of both countries through increased infrastructure investment.\textsuperscript{110} This could be done, for example, through the construction of canals for more efficient and equal distribution of agricultural water, while also preventing the waste of water.
  \item[c)] Iran and Afghanistan, based on the principle of cooperation and so as to rehabilitate the environment of the Hamoun, should implement integrated water resources management (IWRM). IWRM is a process which promotes the coordinated development and management of water, land and related resources to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems.\textsuperscript{111} As such, by cooperatively implementing IWRM across the basin, these two countries can develop their water resources projects while also taking into consideration the rights of the other state.\textsuperscript{112}
\end{itemize}

7. Conclusion

The human right to water is recognized at the international level, however, its complete implementation will be achieved only through the conduct of national governments. Therefore, states are obliged to guarantee access to water. States are to comply with this obligation by respecting, protecting, and fulfilling the right. This research intended to study the case of the Helmand River, which is an international watercourse originating in the upstream state Afghanistan, and flowing downstream to Iran. It focused on Iran’s conduct in fulfilling the human right to water. In doing so, it assessed the legislative frameworks so as to determine whether the human right to water was recognized in Afghanistan and Iran’s regulations. In Afghanistan and Iran’s Constitutions, the human right to water was not explicitly identified. However, it obligates the Islamic governments of Afghanistan and Iran to manage public water according to public interests.

The Water Act of Afghanistan, as the only law giving priority to the use of water resources for drinking water and personal and domestic utilization of water, was enacted to ensure, promote and protect the equitable distribution, efficient and sustainable use of water resources.

The Fair distribution of water in Iran determined the responsible state institutions and bodies to ensure the availability of water. In this Act, the reasonable use of water was defined. According to this definition, the reasonable use of water based on time and geographical area may change. In the Civil Code, access to

\textsuperscript{107} Waseem Ahmad Qureshi, ‘Water as A Human Right: A Case Study of the Pakistan-India Water Conflict’ (2017) 5(2) Penn State Journal of Law & International Affairs 385.

\textsuperscript{108} UNWC, (1997). Article 10: ‘1. In the absence of agreement or custom to the contrary, no use of an international watercourse enjoys inherent priority over other uses. 2. In the event of a conflict between uses of an international watercourse, it shall be resolved with reference to Articles 5 to 7, with special regard being given to the requirements of vital human needs.’ <http://legal.un.org/ilc/texts/instruments/english/conventions/8_3_1997.pdf> accessed 4 October 2020.

\textsuperscript{109} UNGA, The Human Right to Water and Sanitation (2010) 64/292 Sixty-fourth session, Agenda item 48, A/RES/64/292, para 1, 2. ‘It calls upon states and international organizations to achieve the human right to access safe, clean, and affordable drinking water and sanitation for all, especially in developing countries through providing financial resources, capacity-building and technology transfer, international assistance, and cooperation.’

\textsuperscript{110} Fatemeh Aman, ‘Water Dispute Escalating between Iran and Afghanistan’ (2016), Atlantic Council, South Asia Center 10. <http://www.css.ethz.ch/content/dam/ethz/special-interest/gess/cis/center-for-securities-studies/resources/docs/Atlantic%20Council-Water%20Dispute.pdf> accessed 3 October 2020.

\textsuperscript{111} Katja Hübschen, ‘Integrated Water Resources Management as a Governance Challenge for Countries of the Middle East with Special Focus on Yemen, Jordan and Syria’ (2011), Logos Verlag Berlin GmbH 18.

\textsuperscript{112} Najafi (N. 8).
water for drinking purposes was recognized. After all, in the Charter of Citizen’s right, access to clean water is recognized as a human right of Iranian citizens.

In sum, although the right to water has not been independently recognized in the domestic laws of the two countries, there is a tendency in this regard at the international level. The acknowledgment of the right to water at the national level is increasing, and even before the adoption of 2010 General Assembly Resolution, UN member states have, at least once, recognized the right to water by their national legislation, treaties, membership in relevant organizations and independent declarations or other instruments.

Further, the national policies of the two countries have been assessed. Iran’s Sixth Five-Year Economic, Cultural, and Social Development Plan requires the government to adopt proper measures in order to overcome the water crisis. The Iranian Ministries of Energy, Health, Interior, Agriculture, and the Department of Environment are the responsible entities for the achievement of access to water and sanitation (Goal 6 of the UN’s SDGs).

Generally, since the Helmand plays a vital role in Sistan and Baluchestan, as a stabilizing factor of the region, any disruption in Helmand’s water flow will lead to severe harm and irreparable losses. By constructing dams on the River, the amount of water is reduced, causing many problems and losses to the human rights of people living in the other state. This naturally leads to issues regarding livelihoods, food, standards of living, etc., limiting Iran’s success in fulfilling its HRs obligations regarding the right to water. Therefore, even the slightest change in the quantity of water in the River can produce severe harms and adverse effects on the lives of the Sistan and Baluchestan’s population and their right to ‘access to water’ for fulfilling their water-related human rights.

McCaffrey has indicated that, the upstream country, even due to the need for water for its economic development, cannot simply stop the flow of water to a lower riparian state, ‘particularly when this could harm the subsistence of people dependent on that water in the lower riparian states.’

Nowadays, governments are committed to adhering to the customary rule of no-harm principle. Any dam operations that lead to a reduction in the water flow and drying up of agricultural lands in downstream states would violate its international obligation under the no harm principle. So, downstream countries or states that have been damaged by an upstream state’s dam operations could trigger state responsibility under international law, based on the customary rule of non-harmful use. In this regard, Afghanistan, as the upstream state, should cooperate with Iran for the allocation of water, avoid any action which causes damage to Iran, respect fair and equitable use of Helmand River, and provide the government of Iran with information regarding its activities regarding the River. The state is required to prevent any actions over the Helmand River, which would prevent the population living in the River basin from having access to water.

Iran and Afghanistan must fulfill their obligations to respect, protect, and fulfill legally binding socio-economic rights in good faith and on a non-discriminatory basis and should meet the right to water by considering the elements of availability, accessibility, affordability, acceptability, and quality in all levels. Through the equitable and reasonable exploitation of international rivers States can contribute to the economic and social progress of developing countries, assisting in the fulfillment of the SDGs.

Competing Interests
The authors have no competing interests to declare.