

PAK-AFGHAN WATER DISPUTE: AN ANALYSIS

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ABSTRACT:

Due to their food and electricity requirements, freshwater has become extremely important for the living conditions of nations and sub-nations alike. At the same time, changing climate is negatively affecting its requirement through heat waves, groundwater osmotic pressure and glacier melting. As a colonial identity and being outmoded, water resources between Pakistan and Afghanistan did lack lengthy-term sustainable development. It may not trigger blatant aggression, but it is vulnerable to conflicts between and within. This document examines the threats our western neighbor presented to our water sources and discusses the related institutional framework of their leadership. It examines appropriate ideas, laws, and norms to discover Afghanistan and Pakistan's current policy regime. Finally, the paper aims reinforcing hydro-diplomacy for a stable environment in the region.

KEYWORDS: Pakistan, Afghanistan, Water Dispute, hydro-diplomacy. hydro-diplomacy

INTRODUCTION: Pakistan is in the middle of a new international management structure shaped by and constructed around the Sustainable Development Goals decided upon by the United Nations. Those objectives are more nuanced and optimistic than their Millennium Development Goals forerunner. Such a global governance character gives credibility to multinational policies pursued and placed on nation states in the garb of a common world development agenda. Ecosystem conservation and maintenance, one of the concepts of global leadership, and water is unquestionably essential to the ecosystem. In the global political map, it is neither easy to access, nor evenly spread. It is resistant to national borders, shuns the generalisation of laws and has spread categorization among institutions. Nevertheless, the globalist agenda opposes the modern nation-state concept and its focus on autonomy, freedom, and ego-sufficiency. This term tension conveys that relations between countries over shared resources, particularly water, may become stressful and conflictual (Wolf et al., 2005). Water governance is therefore difficult and complicated, as stakes in it are inelastic, distributive and predicated on states ' survival. Clash is likely to arise and worsen in resource shortages and institutional inability to handle it; and particularly where regimes are destroyed by political reform and institutions are misgoverned. (Giordano et al., 2005) Water in Pakistan is a strategic asset. Caused by climate change, declining rainfall and populace growth, tensions over existing water supplies and their use will be intensified. Clashes may occur internally between provinces or among competitive sector consumers within a province. This is not a misconception because globally, the water problem has triggered conflicts among various wetland states in the Aral Sea Basin, the Neretva and Trebisjnica River Basins, African Nile Basin, Middle East Tigris and Euphrates, South America Parana Basin, and India and Bangladesh Ganges Basin. Therefore, water governance becomes crucial concern for Pakistan's needs; and for a sustainable, harmonious, and safe ecosystem in the area. It calls for dialog between interested parties, for concessions and for agreement. Pakistan has experienced with India and is well conscious that ' water is the most major challenge for the global

community.'(Wouter, 2013) Ever-increasing water shortage, severe floods and drought situations are trying to destabilize Pakistan's natural waterways. (Sayama et al., 2012) On the other side, the consequences of global climate change are threatening the lives of millions of people connected to the Kabul River in Afghanistan. (Fuchinoute et al.,2002) The Kabul River in Afghanistan moves towards the Indus River and is a power source and drainage in Pakistan's Khyber Pakhtunkhwa province. It spreads through nine provinces in Afghanistan supporting 25 million living standards. For nearly 7 million Afghans and Pakistanis it is the only means of drinking water. (Ramachandran, 2018)

Pakistan occupies an unique place in the top and bottom riparian river flow at Kabul River. Environment variance and increased demand for water make the situation multidimensional for both wetland countries while the lack of any water agreement between the two makes it insecure. Until now, both states have used water according to their requirements. Yet Afghanistan is now preparing unilaterally to build dams on the river Kabul, the first being the' Shahtoot Dam' with India's help. (Ramachandran, 2018) This has the ability to negatively affect lower wetland Pakistan. It is therefore of greatest importance to resolve the matter by honoring historic privileges and by reaching at solutions for mutually beneficial-sharing for both nations.

This paper discusses the challenges presented by its western neighbor to Pakistan's water sources, and discusses Afghanistan and Pakistan's related institutional and constitutional framework. This discusses related hypotheses, rules, and conventions to expose Afghanistan and Pakistan's current water policy system. The paper ended by proposing a way forward for sustainable water management to guarantee a protected ecosystem in the region.

Governance of trans-frontier water : Water governance has become a commonplace of today's world as it has 263 transboundary river basins. Those basins own about 60 per cent of the fresh water and occupy 46 per cent of the ground on earth. (Ramachandran, 2018) That's not all. There are more than 600 transboundary reservoirs for over 2 billion people worldwide. (Eckstein, 2015) 39 states have more than 90% of their land within transboundary river basins, and 30 countries lie completely within one or more of these watersheds. (Puri et al., 2010) Nineteen states share the Danube; eleven share the Nile. Rivers and lake basins, that are portion of two or more states, sustain 40 per cent of the Earth's population (Earthscan, 2010). Flow of water reveals authority and predominance issues. Its leadership and management is compounded where countries start sharing governance organs. Number of studies have examined and emphasized the intricacy of the region of transboundary water governance. Biswas analyzed the magnitude and delivery problems, the intricacies of managment and the role of international organizations with regard to Bhutan, Nepal, Bangladesh and India. (Biswas, 2011) Jana Karajan et al. (Janakarajan et al., 2006) Viewed a "modality of cooperation and compromise that could contribute to alter," while Wolf (Wolf, 2007) saw water as a way of creating certainty and participating in collaboration. Malhottra(Malhotra, 2010) noted that "the concern with water is not that water problems disrupt political matters, but that complex political issues create it intractable for the tiniest water issues between states." Assessing transboundary diplomacy, Kliot et al(Kliot et al., 2001) analyzed legal principles, conferences and

agreements in the evolutionary organizational structure of twelve river basins and found scarcity of water resources, to be accountable for water dispute, diverse population and poor management. Accordingly, the frequency of collaborative activities between wetland countries doubled comparison with disputes between 1945 and 2008 as reported by UNECE / UNESCO. (Kliot et al., 2001) Collaboration paths between riparian countries were water quality and quantity, economic growth, hydroelectric power, and combined management; although 90 percent of water clashes were water quantity and water systems. (Gander, 2013) There are many ideas as to how the transboundary governance of water can be formed. The paper looks at Gander theories / ideals, summed up as below: (Kliot et al., 2001)

Theory of Harmon, or Universal Sovereignty: Starting to emerge from the United States and Mexico, it demands the total freedom of a wetland state, often the highest riparian, to use the waters flow through its jurisdiction, irrespective of the impact of its acts on other wetland states. Direct contradiction to existing international water law, it is not widely followed and accepted.

^{a.} **Territorial sovereignty or total credibility of the river:** Here the lower wetland country has the right to full flow of natural water and intervention with the upward state's natural flow must be by the agreement of the downstream riparian(Rahaman, 2009) "whatever the priority." (Barandat & Kaplan, 1998) Unlike total territorial integrity, it provides an downstream wetland with practically any quantity of water it wishes, without accountability.

C. Limited Autonomy of Territories: Here every wetland has the right of using a fair quantity of water with "sustainable allocation"(International Law Association, 1956) or" fairer settlement of conflicting Countries ' interests"(McCaffrey, 2007) or "equal utilization." (Dellapenna, 1999) This is a middle path which gives equity to all wetland states and is most widely accepted in international conflicts. This values water use in such a way as not to affect anyone. This has been made the basis of modern international water law, in accordance with other standards and legal standards such as advance consultation, notice, collaboration and agreements in accordance with the law.

d. **Interest group.:**This theory recognizes a wetland communalism of interest between countries, considering the whole basin of the river as an economic entity. Being an expansion of Specific Territorial Autonomy, it goes beyond that by vesting in a collective entity the water rights. Majority of countries do not tolerate this doctrine. As they believe this concept compels them to reach a deal. Moreover, it is the most suitable rule that ignores nationalism and independence, and the conflicting claims of the various wetland countries.

Transboundary Water Covenants: There are nearly 300 global watercourse management agreements. (Kliot et al., 2001) Since 1948 Universe has did suffer 37 water disputes, and 295 water contracts have been reached between participants during the same era. Notwithstanding all this, 66 percent of the world's Transboundary Rivers still lack a collaborative management framework (Sanchez and Roberts, 2014). Many international treaties and deals are under the umbrella of the U.N. A further important component of water law is the (ILA), which has expressed various statements on foreign law. Pakistan and Afghanistan are signatories to most of the Conventions, so including those in this paper

is not possible. Assuming the most concrete concepts of international water law, the follows are defined as important in Pakistan and Afghanistan's point of view:

^{a.} **Declaration 1911 in Madrid:** It prevents the arbitrary modification of a river basin without consideration of the interests of the lower wetland and allows for decision-making and/or advice by a collective water board. It also addresses the rehabilitation of existing facilities and the need to build new facilities in state territories(United Nations Environment Analysis, 2016).

b. **Helsinki Rules for the Use of International Rivers Waters 1966**: These are based on "Equitable Utilization" theory and emphasis on usage rather than sharing. This ensures that a basin state has a right to those waters " advantageous purposes' and encourages the shared control of specific river basins. The rising water resources are now posing a serious threat to this legislation. The problems of environment and human rights have also crossed over into the waters of the planet, which are constantly discussed through its supplementary laws.

c. **1997 United Nations Convention on the Law of the Anti-navigational Use of Global Watercourses:** This is the standard law that governs transboundary waters. It copes with water usage, the obligation to set up a structure for water exchange of information and the advancement of mechanisms for water dispute resolution.

Rule on Water sources at Berlin Conference 2004: The events and legislative changes since the Helsinki Rules are included in these regulations. They provide for the management of transboundary droughts. An essential component of these rules is that they enable people impacted by mutual waters to become participants to water shared proceedings. (Aziz, 2016)

The first international water agreement was signed in 2500 BC between two Sumerian city states of Lagash and Umma over the Tigris River to resolve the water share dispute. (Aziz, 2016) From 805 AD to 1984, more than 3600 agreements have been concluded, although the bulk of the agreements were linked to delimitation and transportation. Since the last century, though, the primary focus of water agreements has moved to water resource usage, advancement, and preservation. Hence nations have legal water contracts between them despite conflicts on other problems. Treaties on the exchanging of the Jordan River between Israel and Jordan in 1995, (Transboundary Water, 2008)Ganges Water Sharing Treaty signed in 1996 between India and Bangladesh, Bhutan and India, And the Indian-Pakistan Indus Water Agreement, (UN Water, 2008) are instances of this water collaboration.

Water Governance between Pakistan and Afghanistan: Waters in Afghanistan. Afghanistan has a total water resource of 61 million acres (MAF). Salman et al.,2018) It has one of the lowest amounts of storing water per person in any nation in the world. Afghanistan has 3.65 AF per capita in terms of yearly water availability which places it ahead of Pakistan (0.97 AF) and Iran (1.13 AF). (Salman and Niazi, 2016) Afghanistan uses only one-third of its water. Around 85 percent of the water used comes from streams, and the rest comes from alluvial underground water and springs. (Qureshi, 2002) Rivers in Afghanistan are nourished by Hindukush rain fall and melting ice. 1.8 Water is given on 7.9 million hectares of farmland, and only 27% of the populous has access to clean water.

(Qureshi, 2002) It has five large river basins, of which four are Transboundary Rivers: Kabul / Indus River, Amu Darya, Helmand River, Harirud, and Murghab Basin. They are shared by Pakistan, Iran, Tajikistan, Uzbekistan, Turkmenistan and others. Only Hellmand has a water management treaty which Afghanistan shares with Iran.

Afghanistan contributes a significant portion of Pakistan's water utilization. River Kabul supplies 16-17 percent of Pakistan's water supply. (Malyar, 2016) Besides the major Kabul stream, its major rivers, such as Kurram, flow from Paktia, Afghanistan to former (FATA), Shimal from Khost Afghanistan to North Waziristan in Pakistan. Gomall from Ghazni flows to South Waziristan agency in Afghanistan. Several other transboundary tributaries of the Kabul River form a delta in the province of Balochistan in Pakistan. (UNEP, 2009) 37 per cent of the population of Afghanistan resides in the basin of the Kabul River and is the most populous basin. (Mustaf, 2016) The Kabul River offers about 26 per cent of the water resources provided in Afghanistan. (MiCT, 2015) It is very important to the living standards of millions of people in Afghanistan and the same. The province of KP is completely dependent on Kabul River water and its tributaries(Lashkaripour and Hussaini, 2008).

The Kunar River is Kabul River's main tributary, starting in Chitral, Pakistan and joining Afghanistan's Kabul River. This enables Pakistan's water rights special because of both its upstream as well as downstream location. Kabul basin funds more than 300,000 hectares of heavily irrigated zones, such as more than 50,000 hectares in Pakistan. Afghanistan now plans to rehabilitate its watering use more waters of the Kabul River. That, together with climatological changes, rising requirements and safety issues, makes the water situation extremely complicated. Over the past decade, both states have sometimes tried to reach a contract on Kabul River, but they have not succeeded due to distrust.

Water Governance-Afghanistan: In 2009, Afghanistan's water law was accepted to improve the economy and safeguard the rights of water consumers (Article 1 of the law). This reflects a practical approach to control of water resources, with the idea of Integrated Water Resources Management. It foresees the creation of (RBAs), River Basin Councils, Water User Associations (WUA) and Sub-Basin Councils. This recognizes 11 different agencies which have water management duties. Nevertheless, the sole focus of the law on transboundary management is reflected in very general terms under Article 8, which states that' Management and preparation of transboundary waters between Afghanistan and its neighbors is the duty of the Ministry of Energy and Water with treaties of the Ministry of Foreign relations, the interior ministry and the frontier and tribal ministry. The law also generates institutional tensions as it copies some ministry-to-minister activity. For example, it is uncomfortable to set up WUAs by the Ministry of Energy and Water, and Ministry of Farming, Drainage, and Livestock Irrigation Associations. The Law has a Dispute Resolution chapter where it authorizes WUAs ' Head Water Masters (MiraabBashi), Water Masters (Mirrab), Sub-Basin Council, and River Basin Council to overcome any conflict concerning water. However, that dispute settlement process is for domestic purposes only. Afghanistan's Water Law splits responsibility for the plan,

managerial staff and advancement of water resources between different agencies. Relevant agencies in the water sector then follow:

a. Supreme Land & Water Board.

It was originally known as the Supreme Water Affairs and Management Council in 2005, renamed the Supreme Water Council in 2010, and finally the existing name in 2015. The representatives are primarily appointed by the President and are in charge of the total water resources planning organization. There is, moreover, lil concrete evidence to indicate it fulfills its coordinating role. (King and Sturtewagen, 2010)

b. Energy, and Water Ministry

This is the primary entity accountable for the water resources plan, procurement and advancement (Article 8). It also deals with transboundary water resources technical details.

c. Ministry of Agriculture, Live-stock and Irrigation. It is responsible for developing irrigation systems, supervising the fair distribution of water within irrigation channels, building diversion dams, managing catchments, establishing irrigation associations and promoting suitable irrigation technologies (Article 11).

d. Urban Development Affairs Ministry. It deals with the policymaking and urban water supply and sewage legislation.

e. Afghanistan Corporation for Urban Water Supply and Sewage. It is responsible for the growth, administration and maintenance of water supply and sewage systems in urban areas.

f. Ministry of Rural Development and Rehabilitation. It works on development projects rural water supply, sewage, minor-scale irrigation and rural mini-hydropower.

Diverse Institutions: Other departments, such as Ministry of Mines, deal with land and groundwater safety from pollution; National Environmental Protection Agency is responsible for monitoring environmental activities such water quality. Transboundary water bodies are the Ministry of Foreign Affairs, the Ministry of Forest and Tribal Affairs and Ministry of Interior.

In 1921, Afghanistan concluded transboundary contracts with UK (Kabul River Basin), in 1973 with Iran (Helmand River Basin), in 1873, in 1946 and in 1958 with Russia (Amudarya River Basin). In 2014 (MoU) was signed with Tajikistan on the hydrological data exchange related to the Panj-Amudarya River Basin. It describes the scope of notifications regarding dangerous and extreme hydro-meteorological events, data provision channels of communication, and resolving disputes systems. Another MoU for the extensive execution of the 1973 Helmand Water Treaty was agreed to sign with Iran in 2016 on transboundary waters. Efforts are being made to include Afghanistan in the organizations that control the Amu River and the Aral Sea Save International Fund. For the future, twenty-nine big, small and medium dams have been declared by the Afghan government. (Lashkaripour and Hussaini, 2008) This raises questions about Pakistan and its uncertainty over transboundary waters. She also plans to create a hydroelectric dam of 1500 Megawatts on the Kunar River but evidently it has been canceled due to regional political situation.

The Waters of Pakistan: Water is a comfort blanket for Pakistan's agricultural society. Even the supply of drinking water dipped between 1995 and 1999.48 By 2025, Pakistan is probable to become a water-scarce state and "No one in Pakistan will be resistant to this shortages, either from the north with its more than 5,000 ice caps, or from the south with its' hyper deserts."' The current freshwater widely available per capita in Pakistan is around 0.97 AF per annum. On the other side, Pakistan receives 145 MAF of water annually but only saves 13.7 MAF. This requires 40 MAF of water. Pakistan's irrigation system includes three channels, nineteen dams, twelve inter-river canals, forty-five individual canals, and more than 122,268 watercourses. Indus River Basin covers an area of more than ninetyone (91) million hectares and includes Indus River and its 27 tributaries, Jhelum, Chenab, Ravi, Sutlej and Beas tributaries. (Hanasz, 2011) Almost all of Pakistan's agricultural belt is situated in this Basin. Within Pakistan, some 31 million hectares of this basin consume 65% of its water source. (Thoma, 2014)The drying up of the Indus Delta has resulted in declines in the coastal environment and a sea invasion of up to 150 miles. (UNAMA, 2016) Under such conditions, further weight is given to the minimal renewal period of surface water supplies (lakes and rivers). It's not just population increase or poor management; the minimal holding capacity and faster runoff result in floods and lower water reserves. In fact, the accelerated rate of urbanization and industrialisation raises concerns of water shortages and its management. Governance of Water-Pakistan. The current statutory structure does not provide a structured water strategy to combine both water production and water management. As per a study by the International Water Management Institute, "Pakistan's regulatory regime is an excellent product of widely accepted practices, largely based on usual procedures principles. (Packer, 2016). State laws include the 1976 Territorial Water and Maritime Zones Act, Indus River System Authority Ordinance 1992, the 1910 Electricity Act and the 1965 Electricity Control Regulations. There is Punjab Canal and Sewage Act 1873, Sindh Irrigation Act 1879 and the Canal and Sewage Act 1873 of (Khyber Pakhtunkhwa) in Provinces.

After the Indus Water Treaty, the most vital piece of water legislation was the 1991 Water Allocation Agreement on the Trying to share of Indus Basin Waters between Provinces. It is centred on provincial historical water usage i.e. 47% of Punjab, 42% of Sindh, 8% of KP and 3% of Baluchistan. In 2009, the Water and Power Development Authority (WAPDA) introduced national potable water policy proposing a "incorporated water resource control system." However, there is no system for sharing transboundary aquifers and shared maintenance of watersheds, like exchanging information on real time flows. Many measures that have consequences for water resources in Pakistan include the Pakistan Environmental Protection Act, National Environment Policy, Policy on Drinking Water and Sanitation, National Climate Change Policy and National Policy on Energy Conservation. Several documentation that are not initiatives or conducts but are part of the water sector are the Medium Term Development Framework, 10 Years Viewpoint Plan, Pakistan Water Vision / Action Structure 2025, WAPDA Vision 2025, Pakistan Water Resources Strategy (World Bank), Pakistan Water Resources Strategy Study (Asian Development Bank), Water Resources Technical Committee and WAPDA Report 2010.

(Baloch, 2018) The government has launched a number of water schemes with the support of international donors (World Bank, Asian Development Bank, and UNDP to improve food security, selling water sources, growing agricultural output, sustaining sewage systems, and establishing Farmers ' Organizations etc.

Water agencies and governance in Pakistan are split into federal and provincial levels, involving many major companies in the light of the 1991 Water Agreement. Water stays a regional subject, while the federal govt performs administrative and equitable functions among the provinces. Prominent oversight at federal level is by the Parliamentary Water Resources Committee. The Federal Ministry of Water and Power is the highest federal water governing system, and it regulates the authority for water and power production. System of government is through the 1958 WAPDA Act and the 1992 (IRSA) Act. WAPDA proposes huge storage plants for water, based on IRSA results. Federal Flood Council, and Pakistan Meteorological Department are other related institutions. Within the province the Provincial Drainage Agencies control water flows. Certain important provincial departments include Desalination, Irrigation and Drainage Committees, Departments of Agriculture and Environmental Agencies(CCI, 1991).

Impasse on Water Governance: Instantly after partitioning in 1947, India was able to restore its eastern Punjab and settle over 4 million displaced people by using the waters of the Punjab's Eastern Rivers to develop an agricultural economy. It formed downstream issues for Pakistan to be reliant on those waters. The problem was resolved through World Bank negotiation, which has been a sponsor to various projects in Pakistan and India. It was a carefully designed technical treaty that concentrated on the Indus River system, thus flouting the Kashmir dispute. (Bhutta & Smedema, 2007) The Indus Waters Treaty is the most prominent example of international water cooperation and reflects a classic case of conflicting statements between an upstream and downstream riparian. (Kamal et al., 2014) The importance of the Indus Waters Agreement lies in the fact that water problems were isolated from other controversial issues between Pakistan and India, that encouraged bargaining to take place even during times of political unrest. This arrangement offers guidelines for controlling the waters of the Kabul River between Afghanistan and Pakistan. The farming industry in Afghanistan requires about 16 MAF and has a surplus of around 45 MAF. Before joining the waters of Chitral, Swat and Kunar Rivers, the flow of River Kabul is 14.6 MAF. The flow rises to 17 MAF as Warsak reaches Pakistan. Swat and Rivers Kunar add 2.4 MAF. Pakistan fertilizes 17.2 million hectares of its soil using the drainage of the river Indus. It maintains and controls water through storage and dams that control an annual average flow of approximately 143.1 MAF. (Salman and Niazi et al., 2014) After the development of cultivation facilities under the Indus Basin Treaty, Pakistan was able to boost its irrigated area. On the other side, there is limited potential for drainage in the Kabul basin, hence Afghanistan's demands for hydropower projects are greater. Report by the World Bank in 2013 indicates that the cumulative effect of the proposed dams, viz Shatoot, Gulbahar, Baghdara, Gambiri, Kama and Kunar in the Kabul Basin, would be a decline of only 3 percent in the total water flow to Pakistan. (Adelphi, 2014). The study indicates that such schemes will only alter the flow trend with a rise between January and March and a corresponding decrease between April and June. (Sarfraz, 2013) Nonetheless, the research needs to be reviewed cautiously for any inconsistencies. In 2010 the (IUCN) also carried

out a study of Kabul River's annual and periodic (Rabi and Kharif) flows in order to evaluate variation over time. The probable study of annual water flows was also carried out to determine demographic trends in the flows of the Kabul River. A steep decline in Kabul River's yearly flowing from 28 to 19 MAF was reported, which could have been due to changes in climate. The minimum and maximum average distributions for scientific studies were 11.2 MAF and 34.8 MAF, a ratio of 1:3. (Aziz, 2013). This high amount poses some very critical questions. Whether these differences were due to climate change, water shortages or distraction of further waters for various uses in Afghanistan, must be carefully distinguished. A further essential dynamic is the distinction between the water laws and regulations, i.e. management, in Pakistan and Afghanistan. For instance, the KP Rivers are not controlled by IRSA but by the State, Frontiers and Regions Ministry. Except for IRSA, the FATA drainage agency never offers gov't data on a frequent basis (Ahmad, 2010). Likewise, Pakistan has special water laws (marine, hydel, etc.) whereas Afghanistan lacks the same. Taking into account the need for transboundary water resources, Pakistan created a ninemember technological council for a Water Agreement with Afghanistan in 2003. This failed because Afghanistan was unwilling to share the data on river flows. In 2005, a committee from WAPDA went to visit Khost for the reconstruction of a Shamil / Kaitu hydroelectric power plant. In 2006, an attempt was launched with World Bank support to review a reciprocal agreement. This too came to an end in failure. (MiCT). The Islamabad Declaration became the most hopeful joint statement between the two states, in May 2009. (MiCT) It highlighted regional collaboration in transportation, commerce electricity, farming, workforce development, and boundary management. Although no measure was taken to institutionalize the Kabul River Basin Cooperation Process.

The two countries ' finance ministers met in 2013 to negotiate a combined-power project on Kabul River. The commitment by the Afghanistan-Pakistan Mutual Chambers of commerce to discuss a control-sharing arrangement was followed up in 2014. The World Bank scheduled a meeting between the Pak-Afghan ministries of water and international affairs to examine the building of the two dams on the Kabul River, the Shaal Dam and the Saagay Dam; and for the establishment of data exchange procedures. (Economic Cooperation Conference, 2009) Neither side shared storage nor any other collaborative dam research techniques.

The President of Afghanistan accepted the Extension Policy on Transboundary Waters in October 2015, in order to secure transboundary wetland treaties. Pakistan has also told the World Bank of its willingness to continue the negotiations. A four-year research has identified 3000 glacial lakes, 36 of which have been deemed hazardous. (*MiCT*) The basis for more cooperation on transboundary water resources has been established.

The previous conversation shows discussed stakes between the two states, the impasse that follows but the possibilities for collaboration. Moreover, the area's rocky politics continues to remain the impediment to any advancement on water governance. The Indo-Pak conflict over the Indus Water Agreement, in specific India's building of dams in Kashmir, has had spillovers on water policy between Pakistan and Agghanistan (*MiCT*).

The Going Forward: Whereas water conflicts are historical, the shared treaties are likewise. Over the past several decades there have been thirty-seven incidents of violence but at the same time 150 riparian treaties. (King & Sturtewagen, 2010) There is an

immediate need for Afghanistan and Pakistan to establish an effective framework for transboundary water sharing because' South Asian hydropower policy calls for institutional collaboration.' Following water management frameworks, gives instructions for such collaboration:

The matrix TWINS (Transboundary Water Interaction Nexus) recognizes that dispute and collaboration co-exist. Through analyzing the power structures between wetland countries, this model explores how low disparity exists alongside low collaboration with high cooperative or higher conflict. (Chellaney, 2011).

The Dublin Meeting on Water and the Environment (1992) lays the groundwork of four principles that necessitate the concern of varying temporal and spatial elements of freshwater resources, the awareness of water users ' desires and stakeholder involvement (Savenije and Zaag, 2002)

a. Theoretical models of 'game ' can also be of assistance. Here both sides must distinguish the terms of collaboration and disagreement and settle for the largest shared profits through collaboration through avoiding losses (Qaddumi, 2008).

b. Classical framework in the Temple has three elements. Technological collaboration is fundamental to "administrative pillar." The other two are: "political pillar" for an allowing atmosphere; and "institutional pillar" for the creating/ enforcement and institutional production of legislation. If one pillar damages or falls apart, for example when there is insufficient political will or insufficient legal and institutional agreements.

The Structure for Water Diplomacy (WDF) challenges conventional, techno-centric alternatives. This relies not on zero-sum thought but on systems and value creation. This means that water is a versatile asset, rather than a set one. Peace talks work "as the focal point of diagnosis and intervention." (Islam and Repella, 2015)

Hydro-Diplomacy: One can discern negotiating process or diplomacy as a common factor by heading through the above designs. It involves stakeholder engagement to be maintained by professional diplomats through directly and indirectly networks, because their upmost focus remains on preserving peace and security. The asymmetrical power-sharing between Pakistan and Afghanistan underlines necessity diplomatic tools. Being riparians they remains reluctant to multilateral engagement. (Pohl et al., 2017) While the implications of the strategy of Afghanistan dam remains arguable, a change from electro-centric water management to hydro-diplomacy has to build confidence respectively. Hydro-diplomacy can link existing power structures and channels to make political procedures easier. If an extensive resolution is not feasible, they should strive to achieve a basic political settlement. Afghanistan and Pakistan must exploit the efficiencies between' strong' and' soft' policies, and differentiate between international, growth, and ecological agendas. Due to various socio-political priorities, total fulfillment of both may not occur. Difficulties are not just territorial but lawful and juridical as well. Afghanistan has a weak institutional system, and owing to misdistribution, oppression and wastefulness of water, it may further compound management unpredictability.

Donors facilitated international agreements and set up River Basin Organizations (RBO) to foster regional coordination and minimize dispute over mutual freshwater habitats. Anticooperation going to root disputes receives economic and social costs on states. Water linked socio-economic development and water policy investments can enhance local harmony and integration. Investing in institutions of water resources will nip these disputes in the bud. RBOs such as the Indus Waters Treaty, the Mekong River Commission and the Nile Basin Initiative have been aided by financial assistance from global donors. (Pohl et al., 2017) As a result; hydro-diplomacy related to water leadership will accomplish various goals, such as crisis eradication and resolution, joint development management.

Pakistan and Afghanistan can either carry on "business as usual" in the current climate of mistrust with water being ineffectively did manage with the capability of divisions; or manage and use their water in cooperation with one another. Handling transboundary water will prohibit water crises, enhance nation's security, enhance the atmosphere and build both communities together. Electro-centric water management isn't enough; it requires "hydro-diplomacy" help to flourish.

Conclusion: Transboundary regulation of water is a complicated process with multiple routes, lots of global laws and principles. In order to take any course, natural, social, financial and hydro-political circumstances need to be focused on for shared protection and incorporation of resources. Legal and technical solutions have their importance for cross-border water management, but the same failed in the Pakistan and Afghanistan mimieu. The 1997 UN Conference and the 2004 Berlin Rules give a clear legislative framework for collaboration but the requirements remain political will and confidence. Water historical record between the two states represents that while managing their shared river systems without a settlement or contract, this approach cannot be sustained by financial miseries. Peace is crucial in Afghanistan. Both riparians should actively seek "hydro-diplomacy" to make the peace productive. In the prevalent sense, the Water Diplomacy Framework represents a significant path. It would help build favorable terms for combined institutions in the field of water resources. The miracle cure for enduring peace and stability of our environment is expectation and a preventive hydro-diplomacy which builds confidence to lay surface for water coordination.

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