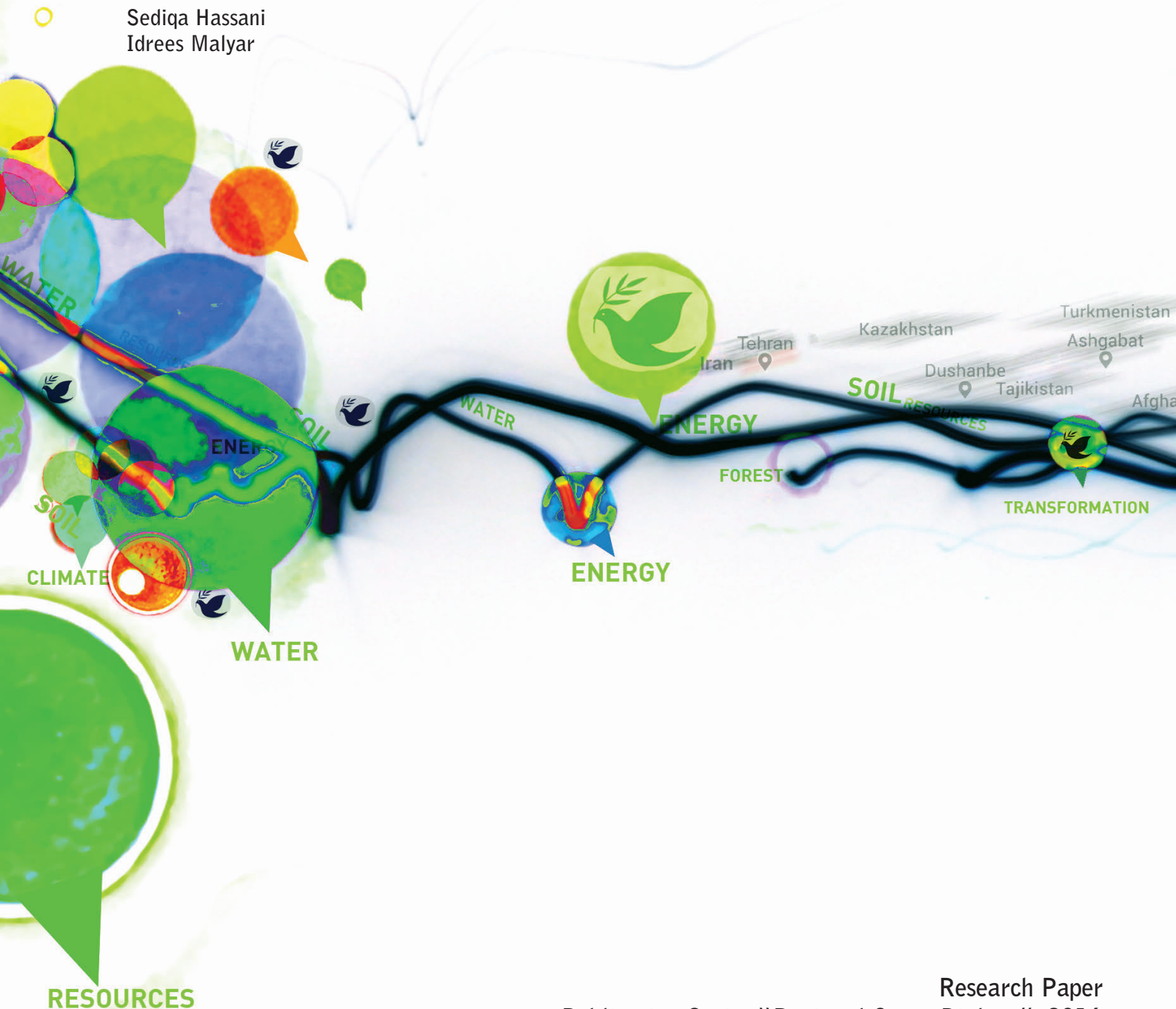


# Transboundary Basin Management under conditions of Latent Conflict:

A Multi-Sectoral and Multi-Disciplinary  
Approach towards the Kabul River Basin

Basharat Ahmed Saeed  
Sediqa Hassani  
Idrees Malyar



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2016

**Basharat Ahmed Saeed**

**Sediqa Hassani**

**Idrees Malyar**

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### **Transboundary Basin Management under conditions of Latent Conflict:**

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# Table of Contents

<b>Abstract</b>	<b><u>7</u></b>
<b>Section 1:</b>	
<b>Background</b>	<b><u>7</u></b>
<b>Introduction</b>	<b><u>8</u></b>
<b>Section 2</b>	
<b>Methodology</b>	<b><u>10</u></b>
<b>Literature Review</b>	<b><u>10</u></b>
<b>Key Informant Interview</b>	<b><u>10</u></b>
<b>Section 3</b>	
<b>Mapping Kabul River Basin Stakeholders in     Pakistan and Afghanistan: A Complex Task</b>	<b><u>11</u></b>
<b>Section 4</b>	
<b>Societal and Natural Interests in the Kabul River Basin:     A new route to diplomacy</b>	<b><u>14</u></b>
<b>Section 5:</b>	
<b>The Current State of Mistrust and Latent Conflict</b>	<b><u>17</u></b>
<b>Section 6:</b>	
<b>Leveraging Basin-level Benefits for Cooperation     and Conflict Resolution</b>	<b><u>18</u></b>
<b>Section 7:</b>	
<b>From Water Cooperation to Water-Energy-Food Nexus Cooperation</b>	<b><u>19</u></b>
<b>Section 8:</b>	
<b>Conclusion and Recommendations</b>	<b><u>21</u></b>
<b>References</b>	<b><u>23</u></b>



# Abstract

Kabul River Basin, a highly significant geographical and thematic area of concern, requires immediate attention of authorities from both sides of the Durand Line keeping in view the long-time security-centred nature of Pakistan-Afghanistan relations. However, the issue remains virtually absent from the script of inter-state relations and diplomacy. Attempts made by both the states to forge a water treaty have not succeeded so far and experts believe that neither Pakistan nor Afghanistan is serious about addressing the issue. Given the lives and livelihoods now at stake (elaborated in subsequent sections), it is reckless on the part of authorities not to adopt alternative approaches towards the shared management of the Kabul River Basin, especially when water stress is increasingly being linked to heightened diplomatic tension and possible violent conflict. In this situation, we suggest an alternative approach that expands the concept of water sharing to the sharing of cross-sectoral benefits of water utilization and that challenges the presumed need for a state-brokered treaty before some meaningful basin cooperation may take place. This approach is contextualized within a hybrid framework that draws from both 'conflict resolution' and 'conflict transformation' frameworks, and reserves a significant role for non-state, sub-state, and civil society stakeholders in peace-building. The key proposition in this study is that if the transboundary basin management discourse about the Kabul River Basin can be changed from water-sharing to benefit-sharing across the water, food, and energy sectors, the social conditions and political will needed for long-term state-to-state engagement can be created without jeopardizing the lives and livelihoods of basin-dependent communities during the intervening period.

## Section 1:

### Background

Afghanistan has been undergoing profound changes, and facing equally profound challenges, across a number of sectors. It is currently in the phase of establishing a functioning government, developing its economy, enforcing rule of law, taking stock of the best use of its natural and human resources, ensuring equal rights for all of its citizens, and maintaining domestic law and order. All these developments are taking place in the backdrop of insecurity from within and outside the country coupled with gradually eroding faith of its masses in the democratically-elected government<sup>1</sup>. Service delivery in key sectors, including water, energy, and food for both rural and urban areas is very poor where people's trust in the state has dwindled.

In a survey of attitudes towards water, 88% of respondents from Afghanistan responded with critical comments about domestic water management referring to issues such as poor water quality, domestic mismanagement, corruption, and lack of government capacity to deliver (Price, 2014). In the same survey, 89% reacted negatively when asked about cooperation with Pakistan in general and particularly with regard to water sharing and management. This predominantly negative perception about its eastern neighbour is both

informed and exacerbated by allegations of collusion and support for the Taliban from within Pakistan (USIP, 2017), and the latter's perceived mistreatment of Afghan migrants and refugees<sup>2</sup>. These trends have multiple implications on security, trade, infrastructure development and peace in the region. Since the beginning of the Soviet-Afghan war, Pakistan and Afghanistan have been in a state of mutual mistrust, which oscillates between active violence, diplomatic aggression, and non-confrontational hostility. Such historically rooted mistrust between two neighbours, one dubbed the graveyard of empires and the other at times labelled the most dangerous place on earth, is bound to impact relations across different domains. One such domain is that of shared water resources between Pakistan and Afghanistan along the Kabul River Basin. Though this aspect of Pak-Afghan relations, coupled with shared ethnicities, languages, religions, and cultures, theoretically provides opportunities for multi-sectoral collaboration, the legacy of incongruent Cold War alignments, disagreements over the legitimacy of the Durand Line; the thorny issue of refugees; illegal trade; and periodic allegations of political and security sabotage, have grounded Pak-Afghan relations in the domain of the military and in a perpetual state of latent conflict. This security-centric discourse has crowded out the conversation on local-level societal

<sup>1</sup> According to a yearly perception survey of Afghan people, less than half were satisfied with the government's performance in 2016, a seven percentage point drop from the previous year, which itself was an eighteen point drop from 2014 (Burbridge et al., 2016).

<sup>2</sup> For example, Pakistan's decision in May 2016 to enforce a strict visa policy that reduces the ability of Afghans to legally enter Pakistan and of those already in Pakistan to remain in the country. Retrieved from: <https://en.dailypakistan.com.pk/headline/pakistan-to-enforce-visa-regime-for-afghans-entering-pakistan-from-today-afghan-council-general-creates-drama/> (Accessed 3rd February 2017)



and natural interests of communities residing within the shared Kabul River Basin<sup>3</sup>, which houses 37% of Afghanistan's population (The World Bank, 2010) and sustains the livelihoods of poor mountain-dwelling communities of Pakistan's frontier region, that suffer from low infrastructural and economic support from the government (MICT, 2015). This, in turn, has led to the suspension of any investigation into how an attempt to consolidate these interests on either side of the Durand Line could facilitate better bilateral relations. Consequently, a highly significant area (geographical and thematic) of concern that requires attention from both sides of the Durand Line remains virtually absent from the script of inter-state relations and diplomacy.

In popular water management discourse, the linchpin of transboundary basin management is considered to be inter-state water sharing treaties, accords or legal agreements. There is currently no such agreement between Afghanistan and Pakistan. The only treaty related to water in the Kabul basin is the 1921 Treaty between Afghanistan and the Great Britain, but its reference to water is very limited (Hearn, 2015). According to the treaty, the United Kingdom agreed to permit Afghanistan to draw water through a pipeline for use by the residents of Torkham. In return, Afghanistan agreed to permit British officers and tribes on the British side of the border (now Pakistan) to use the Kabul river for navigation and maintain the existing irrigation rights (Favre and Kamal, 2004).

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<sup>3</sup> Refer to Box 1

### Box 1: The Kabul River Basin

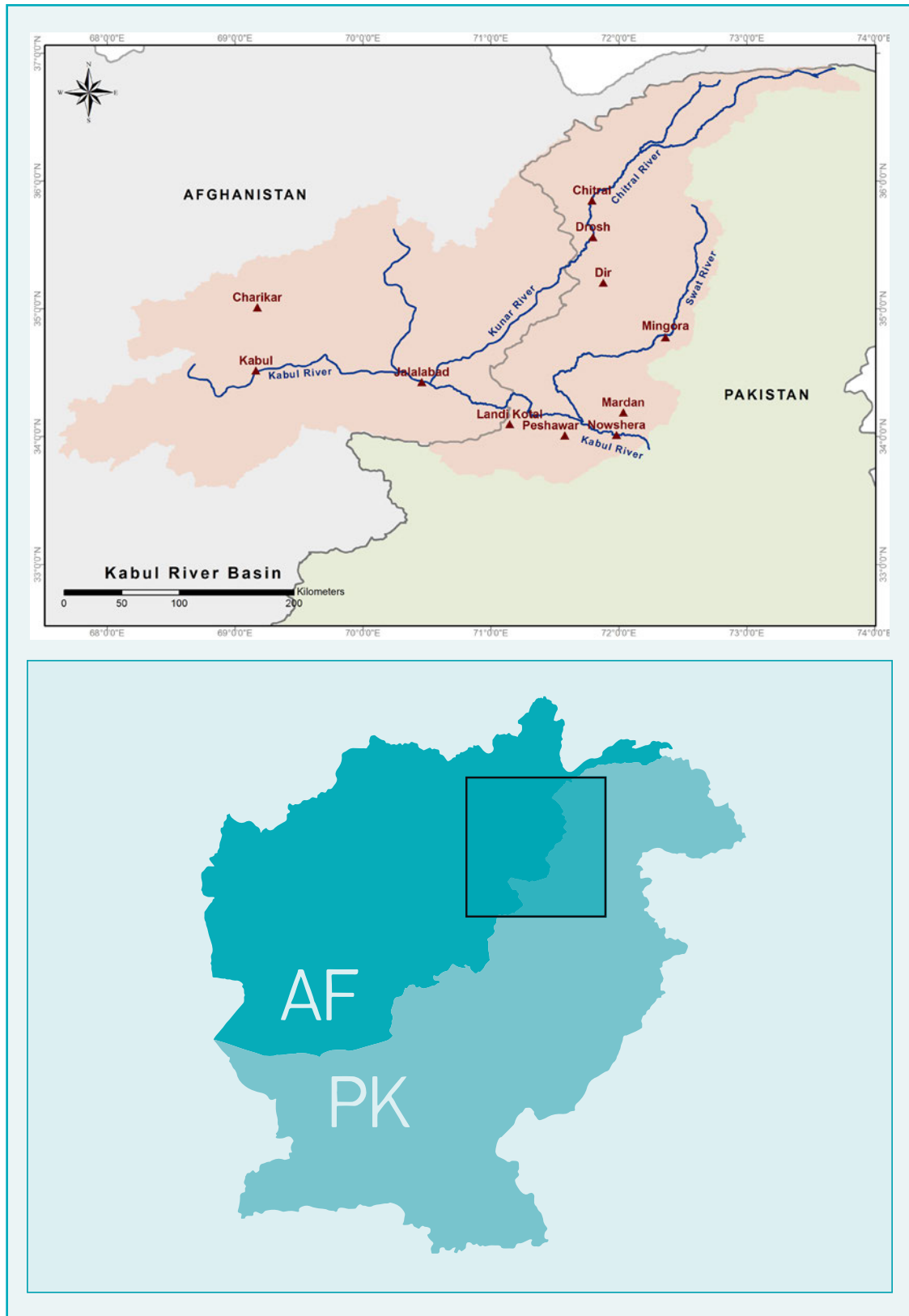
One of the most important transboundary river basins for Afghanistan is the Kabul River Basin, which is shared with Pakistan. An estimated 9 million inhabitants reside in the basin. It has a unique position in which both countries are upstream and downstream of each other. At the Kunar catchment, which is part of the basin, Kabul River receives flow from Pakistan's Chitral River, while just downstream of the confluence between Kunar and Kabul rivers the waters flow back into Pakistan. This is the only river of Afghanistan which is a tributary to a river system – the Indus River, which ends in the Indian Ocean. The Kabul river and its tributaries, e.g. Logar, Panjshir, Ghorband, Laghman-Alingar, and Kunar rivers irrigate 72,000 km<sup>2</sup> or 11 per cent of Afghanistan (FAO, 2012). Around 37 per cent of Afghanistan's population (11.6 million) live in the Kabul River Basin (Ibid.). The Kabul river with its tributaries, represents approximately 26 per cent of the available water resources in Afghanistan (King, & Sturtewagen, 2010). Total inflow from Afghanistan to Pakistan in the Indus basin is estimated at 21.5 km<sup>3</sup> from the Kabul river (of which 10 km<sup>3</sup> come from Pakistan), and 6 km<sup>3</sup> from other tributaries, e.g. Panshir, Gomal, Margo Shamal and Kurram. The area equipped for irrigation in Afghanistan is 0.44 million ha or 1.7 per cent of the total area in the Indus basin, whereas in this Pakistan accounts for almost 19.08 million ha or 72.7 per cent (FAO, 2012). In terms of water withdrawal in the Indus river basin, Afghanistan only counts for 1 per cent as compared to 63 per cent on the Pakistan side (Ibid.). Based on Pakistan's Water and Power Development Authority (WAPDA), Kabul River provides 16 to 17 per cent of Pakistan's water supply (The Express Tribune, 2011). It is not known clearly in what measure implementation of water and hydropower projects in Afghanistan can affect Pakistan since there are contrasting reports from both sides regarding the impacts of planned projects in Afghanistan over water availability in Pakistan. Based on World Bank studies, the impact of Afghan planned dams over water availability in Pakistan is very limited, i.e. less than three per cent, but the flow pattern might change with more water flow from January to March and less flow from April to June (Thomas et al., 2016).

## Introduction

Since the post-Taliban era began, both Pakistan and Afghanistan have been trying to reach a bilateral treaty over Kabul Basin's shared water. Though, the World Bank and USAID mediated between the two countries besides facilitating them with consultation assistance in this regard, nothing concrete has emerged so far. In 2003, a joint technical committee was formed to draft a treaty but it failed mainly due to the existing mistrust over data-sharing. In 2006, the World Bank offered consultation support to start a drafting process for a bilateral treaty, but that too could not motivate the two countries to renew the dialogue. In August 2013, the finance ministries of both the countries committed to developing a joint hydropower project over Kunar river. However, the details of this commitment are not clear and no progress has been seen since the announcement. Furthermore, experts and academics who have engaged with the issue of transboundary water sharing in South Asia seem to converge on the notion that neither Pakistan nor Afghanistan is serious about reaching an inter-state agreement on water sharing (IUCN, 2014; MICT, 2015; Pervaz & Khan, 2014; Price, 2014).

It is difficult to argue that sustainable transboundary management of the Kabul River Basin can be achieved in a trust vacuum. At the same time, to wait for centralized and top-down conflict resolution and diplomacy to succeed before meaningful transboundary basin management can begin is akin to negligence, which is "devastating to communities living near the border, where water is already scarce" (MICT, 2015).

**Figure 1: The Kabul River Basin**



**Source:** created by Samar Minallah, LEAD Pakistan, on 30th May 2017

p.5). Historically, such devastation in Afghanistan and Pakistan – manifested as water shortage, crop failure, loss of livelihood, etc. – has led to either disillusionment with the government (Burbridge et al., 2016), distrust of upstream riparian states, provinces, or communities (Price et al., 2014), or a combination of the two. In the Kabul River Basin, basin mismanagement - or lack of management - combines insidiously with historically rooted mistrust between the two neighbours. The result

is a vicious cycle where perpetual latent conflict fuels state-level mistrust, which prevents any meaningful state-to-state dialogue on transboundary waters, which harms the interests of communities that rely on shared basin resources, specifically water. This in turn heightens resentment and mistrust at the community level. The result is a decrease in motivation and in reasons for non-state stakeholders to push for transboundary cooperation, further decreasing the likelihood of

conflict mitigation and equitable basin management in the long-run. The eventual result is that state-to-state dialogue remains one-dimensional and security-centric. Given the lives and livelihoods at stake (elaborated in subsequent sections) it is reckless to not seek alternative approaches to shared management of the Kabul River Basin, especially since experts are already starting to link projected water stress to heightened diplomatic tension and possible violent conflict.

In this study, we suggest a new path towards transboundary management of the Kabul River Basin as an alternative to the traditional state-centric conflict resolution and diplomacy route. We propose a bottom-up approach where local community action for cooperation over water and water-derived benefits on either side of the Durand Line generates, what Putnam (1993) calls 'bridging social capital'. This is derived from prevailing perspectives from conflict and peace studies that prioritize conflict transformation over conflict mitigation and retain an important role for civil society and community actors. Their application here is proposed mainly to develop the social conditions and political will needed for long-term state-to-state engagement without jeopardizing water-related needs of basin-dependent communities in the intervening period. The emphasis on bottom-up approach for transboundary management in this particular basin is also premised on the idea that there is significantly higher convergence of interests, identities, and practices at the community level across the Kabul River Basin than there is at the state level. This idea is explored further in this study. The approach towards cooperation suggested here is one that replaces water-sharing with benefit-sharing, and expands the measure of water to include its relationship with food and energy. The intent behind choosing this water-energy-food nexus approach is purely illustrative and others are free to suggest their own approaches that can facilitate the move towards a more integrated and democratized form of transboundary water management and dialogue. The ultimate aim of this study is to start a conversation on the Kabul River Basin that doesn't begin with the declaration that a binding international water treaty is necessary and end with the unwillingness of state actors to forge such a treaty because of mistrust and insecurity. We suggest an alternative approach that expands the conception of water sharing to the sharing of cross-sectoral benefits of water utilization and that challenges the presumed linearity of state-driven top down diplomacy. The remainder of this study provides historical, institutional, and theoretical background and analysis that has informed this proposition and articulates some thoughts on how this idea can be operationalized.

## Section 2:

### Methodology

Given the exploratory nature of this research and our ambition to forge a new approach towards transboundary basin management in Pakistan and Afghanistan, we relied on a multi-disciplinary literature review followed by Key Informant Interviews.

### Literature Review:

A general picture of the Kabul River Basin (Section 1), stakeholder analysis (Section 3), and the discussion on societal and natural interests (Section 4) is based on available studies, reports, and articles obtained from print and online sources. These included academic journals, institutional publications (articles and reports), press material, and proceedings from conferences and panel discussions. The perceptions of mistrust (Section 5) are gauged through articles, opinion pieces, and blogs on electronic media and through the Chatham House report titled: "Attitudes towards water in South Asia" (Price et al. 2014). Care was taken not to entertain unsubstantiated opinions and propositions that the authors adjudged to be bordering on conspiracy theories. Section 6 relies on literature from conflict and peace studies.

### Key Informant Interviews:

Based on the information gathered from the secondary sources (e.g. reports, articles, and books), this section focuses more on ground realities and learning from the people, who work in Afghanistan and Pakistan on water-related issues. These experts belong to government institutions, non-governmental organizations, relevant chambers and committees, academic institutions, and trading organizations.

Semi structured interviews of at least 9 people were conducted. Guest et al. (2006) indicate that researchers usually reach saturation point between 6-12 interviews. It is worth mentioning that transboundary waters management is a politically sensitive issue both in Afghanistan and Pakistan. Thus, reaching officials (particularly high-ranking officials) for interviews was a limitation.

Each interview ranged from 45 minutes to 1 hour duration depending on how much time the interviewee was able to devote, and how much information they wanted to share.

With the exception of two interviewees from Pakistan, there was a request to keep identities anonymous. This desire was reinforced during discussions on the role of the neighbouring country (Pakistan or Afghanistan, depending on who the interviewee was) in negatively impacting the development of water sector infrastructure.

## Section 3:

### Mapping Kabul River Basin Stakeholders in Pakistan and Afghanistan: A Complex Task

Assessing stakeholders in the water sector is a complicated task for both Afghanistan and Pakistan. On the one hand legal, constitutional, and policy changes in both the countries during the last decade impacted water management practices, but on the other, bureaucratic inertia, lack of clarity over division of labour and authority, and metathesiophobia<sup>4</sup> seem to have combined to create dissonance between policy and practice. This domestic complication is amplified while charting stakeholders that are integral to transboundary water sharing. A further layer of complexity is introduced when the transboundary basin discourse is expanded, as we recommend later, to include sharing of benefits that are traditionally the domain of other sectors such as food, energy, social welfare, etc. Finally, as highlighted in subsequent sections, there is a need for greater civil society and community level engagements for meaningful collaboration across the border. This engagement should not only be limited to formal consultations used to elicit opinions but should also create an enabling environment for water and water-benefit users on both sides to collaborate, independent of diplomatic treaties/accords. This idea is the focus of the next section. Here we provide a snapshot of the current map of stakeholders in the water sectors of Pakistan and Afghanistan.

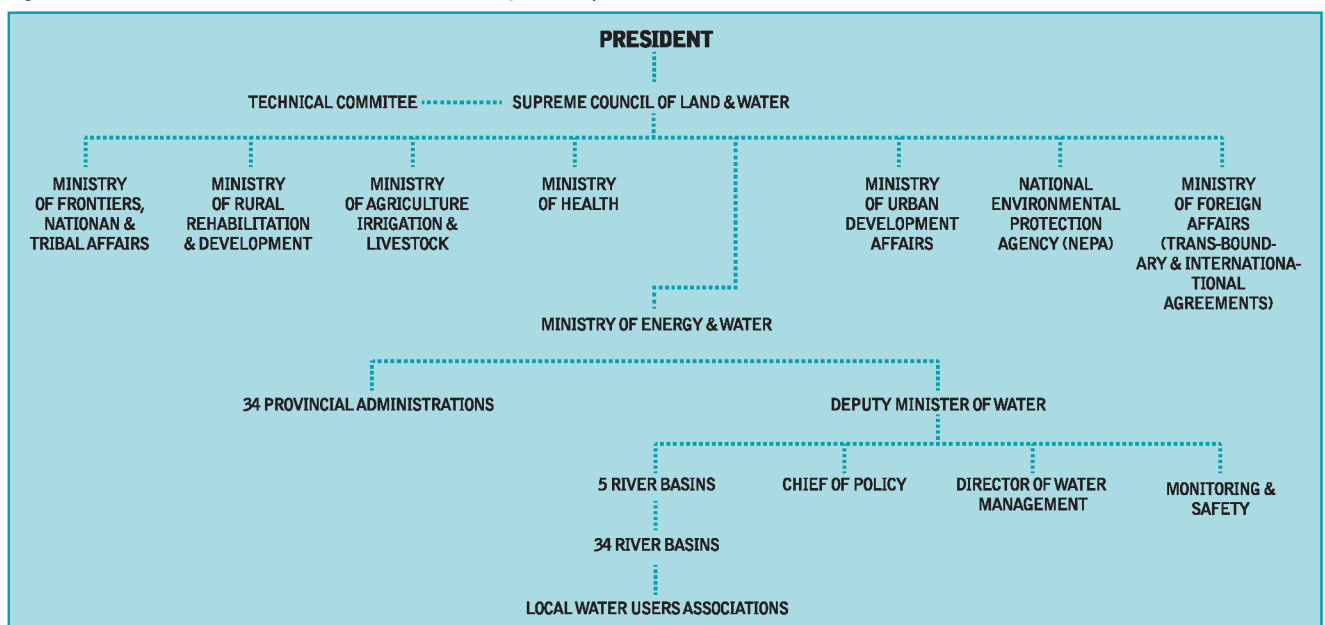
The Water Law 2009 provides the legal foundation and offers policy direction for institutional water management in Afghanistan. The letter of the law slightly touches on transboundary water issues:

“Management and planning for the transboundary waters between Afghanistan and its neighbouring countries and changes of water courses are the responsibility of the Ministry of Energy and Water with agreements from the Ministry of Foreign Affairs, Ministry of Interior and the Ministry of Border and Tribal Affairs.”(Ministry of Justice, 2009)

On the other hand, Pakistan is still in the middle of a rather prolonged phase of revision for its National Water Policy. On 1st September 2015, Federal Minister for Planning, Development and Reforms Mr. Ahsan Iqbal asked the Ministry of Water and Power to finalize the National Water Policy within three months to “save the country from water crisis”<sup>5</sup>. Later, the Ministry of Water and Power announced that the draft policy is being refined and reviewed, and a National Consultation with all stakeholders will be held in Islamabad by the end of 2016<sup>6</sup>.

In terms of water management – development, distribution, and administration – figure 2 maps the interaction and respective status of various ministries and institutions under the Supreme Council of Land and Water (SCoLW) in Afghanistan. The President is the ceremonial head of SCoLW and its Technical Committee. The council oversees seven ministries that cover practically all sectors related to water use, e.g. agriculture, livestock, health, rural and urban development, etc. Of course, the major ministry, which

Figure 2. Institutional Stakeholders of Water Sector: Afghanistan,



Source: MICT, 2015

5 From press: <http://nation.com.pk/business/01-Sep-2015/ministry-directed-to-finalise-national-water-policy> (Accessed 11th December 2016)

6 The authors were unable to get a definitive follow-up regarding this National Consultation and there has been no press coverage either.

4 Fear of making changes to established norms/practices.

can be considered the focal point for water management issues remains the Ministry of Energy and Water (MEW). Through three degrees of separation, MEW is linked to local Water Users Associations (See Figure 2). Under the Water Sector Strategy (WSS), which was devised in early 2008, the Kabul River Basin Council was established within the MEW. It achieved some success in domestic water management, but it was a failure from the view of transboundary management of Kabul River Basin due to its inability to facilitate data sharing and collaboration with Pakistan (MICT, 2015). Interestingly, the Ministry of Foreign Affairs is also included in this organogram and is vested with the responsibility to oversee transboundary and international agreements. The Ministry of Foreign Affairs is among one of the four ministries, which are required to cooperate with the Council over transboundary water management. Official jurisdiction falls under MEW but Ministry of Interior Affairs, Ministry of Borders, Nations and Tribal Affairs, and Ministry of Foreign Affairs assist the MEW in the drafting of treaties, agreements, and memorandums of understanding (MICT, 2015).

In Pakistan, the institutional mapping of water sector is slightly more complicated, especially in the context of transboundary water management. This mapping is shown in Figures 3 and 4. The Federal Ministry of Water and Power (MoWP) has the policy mandate for the water sector and is leading the effort to finalize the National Water Policy. Water management falls under the Water and Power Development Authority (WAPDA), which works under MoWP. The main mandate of WAPDA is water storage and hydropower generation, which it plans and executes based on the information generated by the Indus River System Authority (IRSA). Irrigation departments in all the four provinces come under IRSA. There are other institutional stakeholders highlighted in government documents that are integral to holistic water management. Among others, these include: Federal Flood Commission; Ministry of Finance; and Ministry of National Food Security and Research.

However, this structure does not capture the layer of complexity that was added with the promulgation of the 18th Amendment to the Constitution of Pakistan, which devolved the mandate of the water sector to the provinces. Currently, the provinces are developing their separate water policies. At the same time, they are stakeholders in the National Water Policy. In terms of transboundary water management, it is unclear if Khyber Pakhtunkhwa (KP), which borders Kunar province of Afghanistan, can proceed to develop a formal relationship with Afghanistan, independent of federal level priorities and preferences. Using a snapshot of decision-making structures in the status quo, it is tempting to not even consider it a possibility. However, the legislative space created by the 18th Amendment has opened up possibilities and possible stakeholders that are yet to be explored. The 18th Amendment devolved water sector legislation and management to

the provinces. However, there is no precedent, nor has there been an attempt to apply this devolved authority to transboundary water management. There is however, an argument to be made for KP citing provincial water interests in order to pursue collaboration on project design, budgeting and benefit-sharing with actors in Afghanistan. This case needs to be taken up by the Ministry of Inter Provincial Coordination, which, under its Rules of Business, is responsible for "policy issues emanating from the Provinces which have administrative or economic implications for the country as a whole"<sup>7</sup>. Mr Ahmad Rafay Alam<sup>8</sup>, a legal expert on water issues, is of the view that it would difficult to build a consensus around this case and it might bring distaste for the federal government. However, there is legal space post-18th Amendment for it to be explored. He says that both irrigation and energy production are also provincial subjects. This fact is relevant to our analysis of the Water-Energy-Food Nexus in Section 7. Mr Ali Tauqeer Sheikh<sup>9</sup>, the Chief Executive Officer of LEAD Pakistan, also supported such an application of the 18th Amendment to transboundary basin management, but expressed concern over the capacity of provincial and sub-provincial actors in this regard. However, he said that the absence of capacity is an argument for capacity building and not an argument for denying institutions their right to manage their own affairs.

The second layer of complication is that vast tracts of shared border-land and shared basin territory fall under the Federally Administered Tribal Areas (FATA) of Pakistan, which is not a province and is connected to the Federal Government through a different structure. For one, the rivers that flow through FATA do not fall under the jurisdiction of IRSA and instead fall under the Federal Ministry of States and Frontier Regions (SAFRON). The Irrigation Department in FATA is linked to SAFRON through FATA Secretariat.

Project implementation for all sectors is carried out by the line departments of FATA Secretariat, which was established in 2006. At the Agency level<sup>10</sup>, the Political Agent (PA) is responsible for overseeing the line departments and is also responsible for resolving tribal disputes concerning the use of natural resources and their trade. The PA also supervises development projects within the respective Agency and is the project coordinator for rural development schemes. In the case of water use and management, the concerned departments in FATA include: Planning and Development Department, which looks after planning, implementation, monitoring and evaluation of all development activities; Department of Production and Livelihood, which looks after all issues pertaining

7 Rules of Business 1973, as amended up to 29th October 2014, and as appear on the official website of the Ministry of Inter Provincial Coordination. Retrieved from: <http://www.ipc.gov.pk/> (Accessed 6th February 2017)

8 Interviewed for this paper, Lahore, Pakistan, 14th December 2016

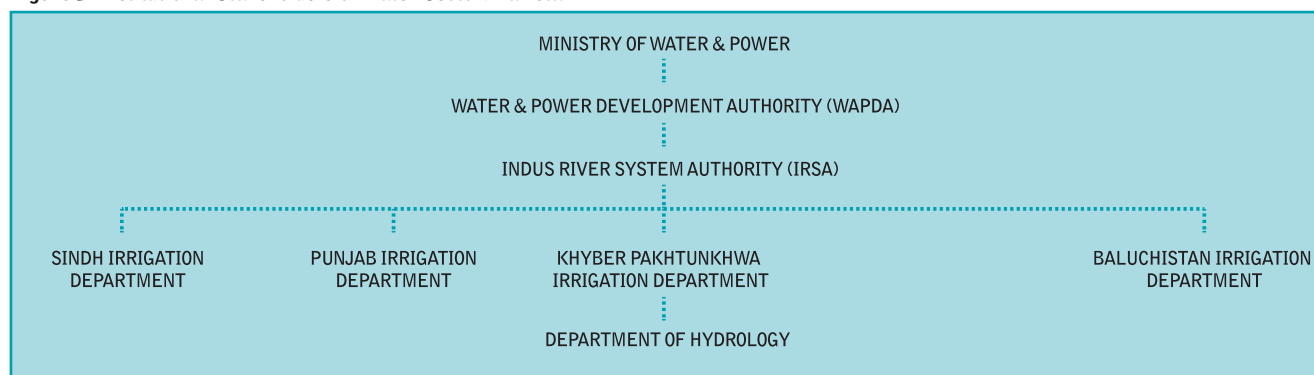
9 Interviewed for this paper, Islamabad, Pakistan, 12th December 2016.

10 FATA consists of 7 Agencies: Mohmand, Bajaur, Khyber, North Waziristan, South Waziristan, Kurram, and Orakzai.

to agriculture, forests, livestock, and fisheries among others; and Social Sector Department, which ensures the provision of social welfare and coordinates among government, NGOs, and the local community. There exist a number of directorates as well. The most relevant among them is the Directorate of Irrigation, which is tasked with the management of surface water and groundwater to ensure its efficient water use, flood protection, and small-scale hydropower generation. Finally, there are municipal committees for the delivery of essential services, but this network is restricted to parts of Kurram Agency and North Waziristan Agency<sup>11</sup>. Since the first point of contact for the Kabul river and most tributaries of the Kabul River Basin in Pakistan is FATA before the rivers eventually move to other provinces, state or sub-state negotiations would first require careful delineation of the roles and responsibilities of each institution and how they relate to transboundary water management.

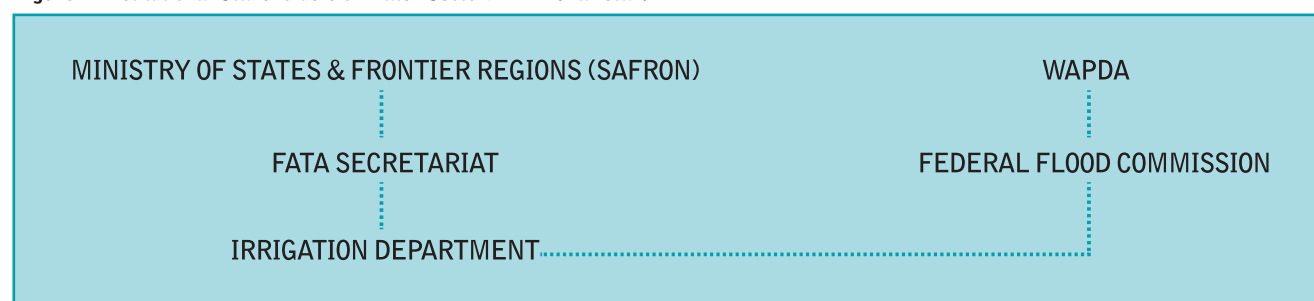
In addition to these formal institutions, both Pakistan and Afghanistan rely on local level community-based governance structures. This is especially true for agricultural communities in rural areas where water distribution for irrigation, though a responsibility of state empowered irrigation departments, is managed through warabandi system in Pakistan and mirab system in Afghanistan<sup>12</sup>. There is more on these systems and their significance in Sections 6 and 7.

**Figure 3: Institutional Stakeholders of Water Sector: Pakistan**



Source: MICT, 2015

**Figure 4: Institutional Stakeholders of Water Sector: FATA (Pakistan)**



Source: MICT, 2015

11 The information related to Political Agents, departments, directorates, and municipal committees is taken from the official website of FATA Secretariat: <https://fata.gov.pk/> (Accessed 11th January 2017)

12 Warabandi is a rotational method for distribution of the available water in an irrigation system by turns fixed according to a predetermined schedule and based on size of landholding. The Mirab system is the traditional system for managing irrigation water in Afghanistan. The Mirabs are the water masters vested with the responsibility for deciding the distribution of irrigation water to the farmers and handling the operation and maintenance of the irrigation infrastructure.

## Section 4:

### Societal and Natural Interests in the Kabul River Basin: A new route to diplomacy

Historically rooted mistrust between two neighbours – one dubbed the graveyard of empires and the other at times labelled the most dangerous place on earth – is bound to impact relations across different domains. One such domain is that of shared water resources between Pakistan and Afghanistan along the Kabul River Basin. Though this aspect of Pak-Afghan relations (coupled with shared ethnicities, languages, religions, and cultures) theoretically provides opportunities for multi-sectoral collaboration, the legacy of incongruent Cold War alignments, disagreements over the legitimacy of the Durand Line, the thorny issue of refugees, illegal trade, and periodic allegations of political and security sabotage have grounded these relations in the military domain and in, what can be considered a perpetual state of latent conflict. This security-centric discourse has crowded out the conversation on local level societal and natural interests of communities residing within the shared Kabul River Basin. This single-agenda focus is akin to negligence, which is “devastating to communities living near the border, where water is already scarce” (MICT, 2015 p.5). This, in turn, has led to the suspension of any investigation into how an attempt to consolidate these interests on either side of the Durand Line could facilitate better bilateral relations. Before we proceed to develop this theory of bottom-up diplomacy along the Kabul River Basin, we must first take stock of what some of these societal and natural interests are.

The fact that a set of shared rivers and tributaries provides a lifeline for rural agricultural communities in the Kabul River Basin is hardly a revelation to observers in Pakistan or Afghanistan. However, there are patterns of flow and consumption that make the Kabul river exceptionally critical for the cropping calendar followed by communities on both sides. The Kabul river is considered an ‘early riser’. The flow of water begins to rise in between March and April – earlier than Indus river – which provides water for sowing of Kharif crops<sup>13</sup> in Pakistan (IUCN, 2014). It is presumed that a number of factors will impact water availability in Kabul River Basin in Pakistan. These include demographic changes, population growth, impact of climate change, industrialization, and significant diversion and/or storage of water on the tributaries of Kabul River Basin by Afghanistan. The projected decrease in availability would not only impact farming households in FATA and KP, which lie immediately along the Durand Line, but also in Southern Punjab and Sindh, who rely on the Kabul river draining the Indus at Attock district for the early

supply of water. Given the menu of options, it is perhaps easiest for water users to disproportionately attribute water shortages to infrastructural development in Afghanistan. There is precedent for the attribution of blame for water shortages in public and media discourse to be inconsistent with data and ground realities. This has frequently been the case with India’s use of water from the western tributaries of the Indus river - India is often blamed for creating water shortages in Pakistan despite experts’ claim that the culprit is Pakistan’s lack of adequate and appropriate water management<sup>14</sup>. This was echoed by IRSA Chairman Mr Rao Irshad Ali, who clarified that the allocations made under the Indus Waters Treaty were actually underutilized by India<sup>15</sup>.

The ‘Kabul Basin Investment Plan’<sup>16</sup> examines a set of development opportunities, which may potentially be implemented in the basin. The report provides the impact of each investment on the flow at the outlet of the basin (to Pakistan). The report states:

“While some investment options have a seasonal impact on flow, all have an insignificant impact on the annual flow.” (World Bank, 2013)

Based on the information provided by one of the interviewees, the proposed water developments in Afghanistan will only impact three to five percent of the current flow to Pakistan. However, familiarity with public discourse in Pakistan on water shortages in the transboundary Indus Basin compels the authors to assume that the proportion of blame appropriated to Afghanistan for shortages in the Kabul River Basin will be far greater than three to five percent. As a country that is already teetering on the edge of water scarcity<sup>17</sup>, loss of livelihood for Kabul River-dependent agriculturalists stands to jeopardize Pakistan-Afghanistan relations further and add to the existing mistrust.

A less discussed role of the Kabul river in sustaining livelihoods in Pakistan is through the fisheries sector. According to Nafees, Ahmed, & Arshad. (2011) some 54 species of fish could be found in the Kabul river, but there has been a decline in fish species, fish numbers and consequently its value as a source of livelihood since the early 1990s, citing water pollution as a leading cause. Today most fishermen diversify their income through other agricultural and non-farm

14 See for example: <http://tribune.com.pk/story/918101/clearing-the-air-india-not-behind-water-shortage-in-pakistan/> ;<http://www.dawn.com/news/1128132> ; <https://www.thethirdpole.net/2014/09/10/when-will-pakistan-stop-blaming-india-for-its-water-crisis/> ; <http://www.southasiaanalysis.org/node/1505> (Accessed 6th February 2017)

15 Retrieved from: <http://tribune.com.pk/story/918101/clearing-the-air-india-not-behind-water-shortage-in-pakistan/> (Accessed 6th February 2017)

16 This refers to the investment plan that received funding support from the World Bank and was prepared by Landell Mills Development Consultants upon the request of the Government of Afghanistan

17 Water availability per capita in Pakistan dropped to a little over 1000 m<sup>3</sup> in 2010 (Rasul & Sharma, 2015) making it a water stressed country. Water scarcity is defined as per capita availability decreasing to below 1000 m<sup>3</sup>.

activities (Nafees, Ahmed, & Arshad, 2011). However, a decrease in water availability - due to a confluence of factors discussed earlier - and the consequent impact on livelihoods of fishing communities in the Kabul river would further decrease the changes of amicable societal relations between Pakistan and Afghanistan.

On Afghanistan's side, the Kabul River Basin is a vital source of livelihood. Though it is not Afghanistan's largest river basin, it is a home to over seven million people, roughly 23 percent of the national population (MICT, 2015). The residents depend on water flows for agriculture-based livelihoods and to some extent for drinking water. The Kunar river, which joins the Kabul river at Jalalabad, receives about 10.5 billion m<sup>3</sup> (8.5 MAF) from the Chitral river in Pakistan<sup>18</sup>. If Pakistan decides to actualize the hydroelectric and irrigation potential of Chitral river by diverting water to Panjkora and Swat rivers (IUCN, 2014), a significant proportion of the populations that depend on the Kunar river will be impacted in multiple ways, not least of which will be livelihood insecurity.

In addition to the Kunar and Kabul Rivers, there are a number of tributaries of the Kabul River Basin that supply water to communities and to hydroelectric infrastructure in Pakistan. Since the discourse on transboundary water has been from the perspective of state-level interests, it is dominated by the Kabul river. However, when one delves into societal and natural interests at the community level, even smaller rivers become significant avenues for potential collaboration.

Gomal river, which has its origin in Ghazni Province of Afghanistan, enters Pakistan via South Waziristan Agency of FATA after passing through Paktika Province. In addition to its beneficiaries in Ghazni, Paktika, and South Waziristan, there is another set of beneficiaries whose fate is now tied to continued water flow in the Gomal river. They are the beneficiaries of the Gomal Zam dam, which started generating electricity in August 2013. The dam also feeds an irrigation canal network, which will expand under the planned Waran Canal project bringing the total land (191,000 acres) under permanent irrigation in Dera Ismail Khan and Tank districts of KP. Thus, any change in river flows due to activity in Ghazni or Paktika in Afghanistan, or in South Waziristan Agency of Pakistan will potentially impact the energy and irrigation dependent livelihoods of thousands in Tank and Dera Ismail Khan. It is worth noting that there were no basin-level transboundary consultations with Afghanistan for the construction of this dam. It is a missed opportunity for collaboration that can now have grave consequences on hydroelectric development in Afghanistan and subsequently on inter-state relations.

18 Source: The News May 12, 2011, India to help Afghanistan build 12 dams on Kabul River. Retrieved from: <https://www.thenews.com.pk/archive/print/613757-india-to-help-afghanistan-build-12-dams-on-kabul-river> (Accessed 7th February 2017)

Note: This information is from a newspaper article which does not cite a source for this figure.

Parachinar, the most populous city in Kurram Agency compared to other agencies in FATA, receives water from the Kurram river, which begins in the mountains of Paktia<sup>19</sup> province. The possibility of Parachinar suffering from water shortage in the future is high if the energy and irrigation potential of Paktia province is actualized. This actualization is highly likely due to three reasons. Firstly, Paktia is considered an ideal area for agriculture due to the availability of surface water coupled with high soil fertility. It is scoped as an ideal area for growing potato, rice and corn. Secondly, Paktia is prone to seasonal flooding, which provides a compelling reason to create reservoirs that double as flood defence. Thirdly, a plan is underway to construct the Machalgho Dam on the Kurram river in Paktia to meet the energy and agricultural needs of local communities (MICT, 2015). The murder of Khan Wali, a local militia leader who was hired to protect the Machalgho Dam site, was allegedly done with 'Pakistani involvement'<sup>20</sup>. It is therefore important for communities of Kurram Agency to either pressurize the Government of Pakistan to negotiate a deal with their Afghan counterparts or to come up with alternatives to adapt to the inevitable decrease in surface water supply.

Furthermore, the Kurram-Tangi Dam project is gaining momentum. The dam is being built on Kurram river between North Waziristan Agency and Bannu district after a Memorandum of Understanding was signed between Water and Power Development Authority (WAPDA) and Frontier Works Organization (FWO) in June 2016<sup>21</sup>. If the planned reservoir of 1.2 MAF capacity is to receive regular feed, perhaps some attention needs to be paid to planned development on Afghan rivers that will be contributing water. Though this is taking the ball from sub-state and non-state actors and tossing it back into the court of track-one diplomacy, we feel that there are significant societal interests at stake for communities.

Parachinar is a densely populated area compared to other parts of FATA and has historically been the victim of various types of violence - communal, sectarian, terrorism, and state-led. Severe shortage of water in the future can serve as a flashpoint for violence, often drawn along ethnic or sectarian identities. Violent clashes between farmers belonging to Sunni and Shia communities often break out over the use of underdeveloped irrigation systems (MICT, 2015). FATA is also notorious for the presence and recruitment activities of militant organizations. Breakdown of social relations in rural communities - that are, in part, built around the dominant mode of production - and subsequent displacement can create opportunities for recruitment by militant organizations. Mustafa et al.

19 Not to be confused with Paktika province.

20 Originally appeared in an article published by TIME in 2012. This reference however, is taken from: <http://thediplomat.com/2016/11/afghanistans-water-sharing-puzzle/> (Accessed 7th February 2017)

21 Source: <http://www.fwo.com.pk/news-info/latest-news/439-7-june-2016-singing-of-mou-for-kurram-tangi-dam> (Accessed 7th February 2017).



(2013) illustrate this point by looking at the karez<sup>22</sup> in Pakistan and Afghanistan. They conclude:

**“The consequence [of karez degradation] has been a breakdown of community cohesion and the social capital that coalesced around the karez system. It is highly likely that the breakdown in the karez-based social capital is, in fact, creating armies of young people outside of community structures. This social disintegration runs the risk of contributing foot soldiers for assorted insurgent outfits in the region.” (Mustafa, Akhter, & Nasrallah, 2013 p.16).**

Downstream within FATA, the Kurram river is fed by yet another river from Afghanistan – the Shamil River, which passes through Khost Province of Afghanistan into North Waziristan Agency. This further exacerbates the potential future vulnerability of FATA as well as the planned Kurram-Tangi Dam.

There are also a number of Kabul river tributaries that, coupled with tributaries from the Eastern Helmand Basin, supply seasonal water to Balochistan province of Pakistan and help sustain hundreds of thousands of people in both countries. Despite government neglect, there are small community-led (often donor funded) efforts that have yielded small dams which the communities use for river water and rainwater storage (MICT, 2015). This allows them to grow crops throughout the year and creates a buffer between uncertainty of surface water supply and their food security and/or livelihood.

Given the significance of water and agriculture to communities bordering the Durand Line on either side, it is no surprise that climate change is a common threat across the Kabul River Basin. Projected climate change across the region includes rising temperatures and changing monsoon patterns. The impact of these climatic factors includes receding glaciers and decreased precipitation by about 20 percent (especially in the winters) (IUCN, 2014). These changes lead to uncertainty of water availability for both irrigation and rainfall dependent communities across the Kabul River Basin. However, this second order impact and its link to livelihood, food security, health, etc. is as much a function of adaptive capacity and adaptation planning as it is of climate change itself. Collaboration between communities across the Kabul River Basin will be instrumental in building basin-wide resilience.

Another phenomenon in the region that is linked to Climate Change<sup>23</sup> is Glacial Lake Outburst Floods (GLOF). In this case, it is Pakistan’s status as upper riparian at the Chitral/Kunar border that poses a transboundary threat to communities in Afghanistan. The GLOF in July 2015

claimed at least 36 lives, decimated hundreds of homes, displaced thousands of people, and damaged critical infrastructure such as roads and bridges. These floods also caused loss of life and property to communities in Kunar and Nangarhar provinces of Afghanistan (MICT, 2015).

The above analysis is grounded in the most recent literature and policy documents available. What is striking to the authors is the near-absence of community voices from this discourse. Most data and perspectives are through the purview of water sector experts, politicians, academics, and foreign policy analysts. In a recent and comprehensive survey of perceptions towards water sharing, titled “Attitudes towards Water in South Asia” (Price et al., 2014), covering a broad cross-section of people working on water issues, the voices of people who depend on the shared water resources between Afghanistan and Pakistan remained missing. A lot of commentary and academic research is available on transboundary water related issues. Similarly, a number of recommendations on how to facilitate cooperation between Pakistan and Afghanistan have also been made, but silence looms large when one searches for the voices of local community level end-users – the farming households that have surrendered their lives and livelihoods to the increasing vagaries of the Chitral, Kunar, and Kabul rivers. For the communities of FATA, this absence of voice in the water discourse echoes a similar status in the broader institutional discourse in Pakistan. However, even Kabul Basin communities on the Afghan side and their counterparts across the Durand Line in KP seem to be absent from the voices on Pakistan-Afghanistan water cooperation.

This proclivity when seeking information is reflective of the linear and top-down approach towards transboundary water in Pakistan and Afghanistan, whereby it is assumed that a near revolutionary shift in diplomatic relations is necessary to forge a formal understanding on water sharing, which in turn is a pre-requisite for on-ground collaboration across the border. The militaristic nature of our inter-state discourse and its grounding in geo-strategic security concerns further entrenches this belief. Though such a top-down scheme is the most convenient option (if achieved), we believe that alternative approaches can be experimented with, provided there is some theoretical basis for them.

In the rest of this paper, we combine our situation analysis of the Kabul River Basin with theoretical frameworks from the canons of peace and conflict studies to explore whether the current discourse can be turned on its head and whether this can usher in a new era of bottom-up diplomacy spearheaded by sub-state cooperation across the Kabul River Basin. The recourse to peace and conflict studies is premised on the authors’ opinion that Pakistan and Afghanistan are in a perpetual state of latent conflict. This opinion is also upheld by commentators on conflict in South Asia (see, e.g. Chandran & Chari, 2011; Krause & Mallory; 2014; Nadiri, 2015, etc.), and we hope readers familiar with the historical context of Pakistan-Afghanistan relations will generally agree, even if with qualifications.

22 An underground canal system that taps aquifers by gravity through a series of subsurface tunnels; often extends for many kilometres before surfacing to provide water for drinking and irrigation (Rout, 2008)

23 GLOFs are caused by a confluence of factors which include climate change and also changes in the immediate natural and built environment.

## Section 5:

### The Current State of Mistrust and Latent Conflict

The understanding of Pakistan-Afghanistan relations demands a discerning analysis of nuanced and multi-layered realities that are contained within competing and contradicting renditions of history; informed by vested geo-political and military interests, driven by realpolitik, and haunted by the spectre of colonial and neo-colonial experimentation. It is tempting to forgo such an analysis in favour of wholesale purchase of the narrative of victimization. When it comes to transboundary water sharing between Afghanistan and its neighbours, the line between conspiracy-mongering and sincere commentary is difficult to tread.

The claim that Afghanistan's neighbours undermine its water sector interests, though not explicitly proven, does conform to the narrative of victimization that comes from within. Firstly, there is a passive exclusion of Afghanistan from any meaningful partnership on shared water resources by its neighbours. During the Soviet Era, a number of Central Asian neighbours reached agreements for water sharing and water trading – normally in exchange for other resources. Despite it making geographical sense, Afghanistan did not feature in any of these negotiations and consequent agreements. A treaty in 1958 between the Soviet Union and Afghanistan did not delve into cooperation over shared resources or benefits, but simply stipulated that each country could freely use the shared waters up to the recognized political border between them – on the Amu Darya river - and that both would continue to respect each other's interests. At a time when complex approaches to water sharing were being designed in the region, this treaty hardly broke any ground, except for an emphasis on respecting each other's right to unrestricted use within sovereign boundaries.

Secondly, there are claims of deliberate sabotage. Many experts cite the "machinations of more powerful downstream riparians", as the reason for underdeveloped water infrastructure in Afghanistan (Price et al., 2014). In many ways, there is a perverse but strategic interest in sustaining weak governance and perpetual conflict for most neighbours of Afghanistan due to the latter's status as upper riparian on five major river basins. Traditionally, with all else equal, upper riparian states find themselves in the driving seat of negotiations on transboundary water issues. However, there is little equality between Afghanistan and its neighbours with regard to political stability, socio-economic development, peace and security, economic assets, military strength, and regional clout. Both Iran and Pakistan have enjoyed increased downstream water flows from Afghanistan due to deteriorating infrastructure, at least partially caused by internal

violence, civil war, and military invasions, starting from 1979 and continuing to this day (Price et al., 2014). Even the Helmand River Water Treaty of 1973 between Afghanistan and Iran led to little substantial cooperation in practice. Afghanistan accused Iran of not making compensation payments as directed by the treaty and levied further accusations on Iran for affecting water supply within Afghanistan. In extreme cases where dam construction sites have witnessed violence – e.g. multiple attacks at the Kunar river dam – blame has been put on 'foreign-backed' armed groups and the reason cited has been to undermine Afghani control over its water resources. Again, despite no explicit naming of culprits, those with an understanding of Pak-Afghan and Pak-India relations would assume that the party being alluded to is Pakistan. This ambiguity broke down in interviews conducted by Price et al. (2014) for a Chatham House report, where local Afghan workers accused Pakistan of maintaining instability in Afghanistan for their own benefit. The same report concludes that:

**"Relations with Pakistan in general, and concerning water in particular, were judged by most to be the poorest of all the neighbouring countries. Whereas most interviewees said that it was the lack of common links with Afghanistan's Central Asian neighbours that coloured cross-border relationships Pakistan was regarded as a malign influence – a neighbour that could not be trusted. This view was most common among Afghan respondents, who in the main indicated that Pakistan was almost certainly putting pressure on international institutions to prevent funding for water projects within Afghanistan. This is a common opinion not only among NGO workers, but also among government officials, reflecting a persistent view that many Afghans share." (Price et al. 2014, p.40).**

In the same report, an NGO official based in Kabul was quoted as saying:

**"For the last 30 years, the government has had no resources to construct anything. Now there is money available to construct a micro-hydro plant on the Kabul river, but resistance from Pakistan has stopped this." (Price et al. 2014, p.30)**

The above stated reasons only add to the authors' submission that the two states are in a perpetual state of latent conflict. Under such circumstances, it is imperative to reorient our approach towards the Kabul River Basin and accept that conditions are not conducive for expecting a bi-lateral treaty that simply divides volumes of water among the signatories. In the remainder of this study, we dissect the current discourse on Pak-Afghan water relations and explore the potential of using theoretical approaches hitherto not applied to the Kabul River Basin.

## Section 6:

### Leveraging Basin-level Benefits for Cooperation and Conflict Resolution

The discourse on transboundary waters between Afghanistan and Pakistan has thus far assumed a linear approach. There seems to be a consensus among policy stakeholders that any meaningful cooperation between communities on either side of the Durand Line must be premised on an existing water sharing agreement or treaty, and cannot function without it. The possibility of such an arrangement is, in turn, dependent on peaceful diplomatic relations between the two states and the certainty that such a peace will endure. Of all the aspects of Pak-Afghan ties – shared rivers, trade, movement of human populations, shared ethnicities, religion, languages, etc. – the most prominent and enduring one is unfortunately rooted in the shared history of dealing with non-state militant groups. Further, such groups are periodically alleged by each side to be linked to the geo-strategic machinations of the other, or to their inability to deal with them. Though commentators, academics, and experts have stressed the need for cooperation, the governments of Pakistan and Afghanistan have not approached it seriously thus far (Pervaz & Khan, 2014). Following this linear chain, the status quo holds civil society and community level cooperation hostage to the absence of peace and stable diplomatic relations coupled with the lack of a formal water treaty to parenthesize cooperation.

There are two reasons to question this presumed linearity, one historical and the other theoretical. The first is success of Indus Water Treaty between Pakistan and India, which has endured three inter-state wars and numerous periods of hostility and breakdown of diplomatic relations. The nature of rivalry and enmity between India and Pakistan exceeds the same between Afghanistan and Pakistan. Thus, historical precedent suggests that an arrangement over shared river basins can be sustained independent of sour diplomatic relations.

The second requires engagement with prevailing theories from the canons of peace and conflict studies.

Firstly, as a general observation, Robert Putnam (1993) argues that due to protracted conflict 'bonding social capital' – generated by intra group solidarity and trust – increases while 'bridging social capital' – generated by inter group solidarity – decreases. The argument is that in post-conflict or latent-conflict settings, civil society tends to align itself along primary/traditional groups and this comes at the expense of more diverse alignments across traditional groups (Strand et al., 2003). Thus, what is often demanded is a breakthrough at the top through track-one diplomacy, before subsequent generations of civil society groups can begin building inter-group social capital. In the case

of Afghanistan and Pakistan, the ethnic, linguistic, and religious commonalities between communities settled on either side of the Durand Line blur the lines between bonding social capital and bridging social capital. It can be argued that these communities have more in common with each other than with other groups in their respective countries. In such situations, it is observed that "inter and intra community collaboration around common interests and/or values survives even in the least conducive of circumstances. However, the manifestations and scale of these forms of civil society are such that in most cases they escape the radar of international actors" (Pishchikova & Izzi, 2011, p. 51). In a survey of perceptions and attitudes towards water in South Asia, some respondents suggested that cooperation between Pashtuns over Durand Line would be easier (than with other neighbours) because of the shared identity (Price et al., 2014, p.41). However, there has been little investigation of the state of transboundary community level relations with regard to water use in the Kabul Basin. Nor has this aspect been used constructively in interventions by international actors that have attempted to broker some sort of agreement between Pakistan and Afghanistan. One of our interview respondents claims:

**"There is no need to write or create a new narrative of trust since that can already be found in the culture and history of the Kabul River Basin. What is required is an honest conversation with history. This is not the job of hydrological engineers equipped with data but of community and political leaders equipped with knowledge of their own past and an awareness of shared societal interests." - Ali Tauqeer Sheikh, CEO, LEAD Pakistan**

Secondly, the prevalent frameworks for action when operating in conflict societies or post-conflict societies include: conflict management; conflict resolution; and conflict transformation and peacebuilding. Each of these is championed by a different school of thought within conflict and peace studies. Conflict management, which is advocated by realist and neorealist schools of thought, states that management and settlement of conflict through state-led (or in some cases parastatal organization-led) negotiations are the only sustainable way forward and civil society has limited influence and marginal importance (Bercovitch and Rubin, 1992; Kriesberg and Thorson, 1991; Marchetti and Tocci, 2011). This approach is meant for societies that are in or are recovering from military escalations and/or all-out war. The underlying assumption behind this – a common theme in realism and neorealism across disciplines – is that conflict is endemic to human nature. In the case of Pakistan and Afghanistan, the escalation is often transmuted through diplomatic means, trade policies and sanctions, and impositions on the movement of people across the border, but stops well short of declarations of war. As such, the relationship between the two can be described as 'latent conflict' and has not

mutated to the point that conflict management remains the only viable option.

Turning towards other approaches, we argue that a combination of conflict resolution and conflict transformation and peace-building is a suitable framework of action in the case of Pakistan and Afghanistan. Both approaches retain an important role for civil society, and suggest that broader societal interests articulated by civil society actors and organizations are critical to developing 'bridging social capital'. The liberal school of conflict resolution decouples conflict from human nature and instead attributes it to human needs. In its simplest form, the idea is that peace prevails when human needs of all groups are respected (Burton, 1990; Marchetti and Tocci, 2011). However, complication arises when the means adopted by one group to satisfy its needs conflict with the attainment of the same by other groups. In the case of the Kabul River Basin, the potential impact of water management, flood protection, and storage infrastructure in Chitral district on communities in Kunar province, and impact of planned dams on Kunar river on communities in FATA and KP push this region into the theoretical domain highlighted above. Another related approach comes from the school of critical thinking and focuses on conflict transformation and peace-building. The argument is that conflict stems from more than just a perceived or actual violation of societal interests, but from structures that perpetuate, among other things, unequal development and social injustice (Galtung, 1980). Thus, it follows that peace-building will require more than just a re-articulation of societal interests – as proposed by the liberal school – and will necessitate a transformation of the structural determinants of latent conflict (Marchetti and Tocci, 2011). We argue that for peace-building between Pakistan and Afghanistan – starting from the transboundary water sector and extending to diplomatic relations – a synthesis of these two approaches is required. As one of our respondents claims:

**“Pak-Afghan relations have hinged on a single-point agenda: terrorism and security. The more avenues you open up, the greater the chances of the impact of this militarized discourse being diluted. And this is more likely to happen if sub-national actors get involved and assert their interests.” - Ahmad Rafay Alam, Legal and Water Sector Expert, Pakistan**

The interviewees from Afghanistan not only suggested technical cooperation and exchanges of knowledge among academic circles but also stressed the need for community-level water managers to create networks to rectify the mistrust. Water experts who were interviewed in Afghanistan emphasized the need to rethink shared water as an opportunity for corporation over joint projects between the two countries. The role of international organizations as mediators, but more importantly, the role of civil society as the levers of good inter-state relations was given significant importance.

## Section 7:

### From Water Cooperation to Water-Energy-Food Nexus Cooperation

For the Kabul River Basin, there is a need to rearticulate the societal and natural interests at stake for communities on either side of the Durand Line, and also a need to transform the scaffold that supports discourse on collaborative basin management. One possible transformation is to reframe transboundary basin management from a function of water sharing to the sharing of products of the water-energy-food (WEF) nexus. The water-energy-food nexus is simply the acknowledgement that there are complex relationships between water, energy, and food, which are intuitive and evident in the processes of production, distribution, storage, etc. However, the linkages that are obvious as a fact of existence are seldom scrutinized, rarely explored systematically, and even more scarcely incorporated into management and governance. The result is isolated sector-specific decision-making, which leads to inefficient allocation of natural, human, social and financial resources, and the reproduction of strategies that degrade the environment, perpetuate unequal access, and breed conflict. These impacts are exacerbated by climatic and demographic stress. The current approach towards transboundary water management in Pakistan and Afghanistan follows the same isolated sector-specific decision-making whereby the emphasis is on quantity of water. Even in the context of what effect hydropower generation in Afghanistan will have on Pakistan, the debate is limited to the impact of planned construction of reservoirs on water flows. Such a narrowly focused discourse risks forgoing more reasonably attainable mutual benefits in other sectors such as food and energy, which are a major drivers of the need for transboundary management to begin with (Bizikova et al, 2013). An agreement on guaranteed minimum flows at the various transit points on the Durand Line loses its power to hold the entire basin hostage if arguably easier arrangements for trade and cooperation over food and energy can be reached. It is for this possibility that the WEF nexus approach is suggested as a way to refine the discourse.

This is both complex and complicated and there is little theoretical work on the subject. However, the idea itself is not completely alien to communities on the ground. In the survey on attitudes towards water in South Asia (Price et al., 2014), some respondents suggested trading Afghan water for goods, services or energy as a way to build trust outside of formal state-to-state negotiations. A Pakistani expert on water, food security and climate change, Ms Seemi Kamal, believes that no treaty is needed for water sharing between the two countries, as experiencing minimum flows is not the

ultimate goal of communities in the Basin<sup>24</sup>. There can be shared benefits and integrated basin management based around food sharing, electricity sharing, and livelihood impact. In addition, there are practices specific to local water management that can be used to foster a sense of 'shared water experience'. The informal tradition of warabandi determines a rotation schedule for canal irrigation in Pakistan, which is maintained through localized relations involving land-owners and other stakeholders in a given area. Under the Canal and Drainage Act, 1873, a more formal form of warabandi was introduced – pacca warabandi. This involves the Irrigation Department setting the rotational schedule and requires legal action to be taken against farmers that violate it (Qureshi, Hussain, & Zeb-un-Nisa, 1994). However, litigation is expensive and rarely sought, which makes informal warabandi more popular. In Afghanistan, there is a similar informal institution for water distribution whereby water users appoint a mirab, who functions as a water manager. Among other tasks, mirab is responsible for maintaining a rotational schedule and carrying out maintenance works. About 90 per cent irrigation in Afghanistan is estimated to be managed through this community-based system (King & Sturtewagen, 2010). Thus, in both countries, there exists a formal water management apparatus that runs parallel to informal traditional mechanisms. Similarly, on both sides there is acknowledgement of religion's (predominantly Islam) stress on environmental consciousness and water conservation, though there is no consensus on the viability of invoking religious edicts to influence behaviour (Price et al. 2014). Also, there are common risks and threats to communities on either side linked to climate change and poor watershed management (IUCN, 2014). Finally, there exists precedent – though limited and localized - for sub-national and even sub-provincial engagement across the border on shared basin concerns. It is reported that communities in Paktika province of Afghanistan and Kurram Agency of FATA in Pakistan remain in touch over water-security issues, notwithstanding the status of inter-state relations (MICT, 2015). At the provincial level, a meeting between governors of Khost (Afghanistan) and Khyber Pakhtunkhwa (Pakistan) was held in 2005 regarding water and energy security. In the same spirit as that of the WEF nexus, a dialogue was initiated under the regime of General Pervez Musharraf on the export of electricity to communities in Afghanistan from planned hydroelectric projects in FATA (ibid.).

As far as the need for creating bridging social capital is concerned, the above examples show that the foundation for such social capital accumulation already exists between communities immediately along the Durand Line, whether approached from the point of view of common identities, co-existence of formal and

informal systems of water management, or common drivers of risk.

However, sustained collaboration over the water-energy-food nexus cannot exist in a political vacuum and both governments will eventually need to formalize their commitment to benefit sharing across the Kabul River Basin. The reason for adopting a conflict resolution-transformation hybrid framework here is merely to develop the social conditions and political will needed to provide impetus for long-term state-led agreement and to move towards a more integrated and democratized form of transboundary water management and dialogue.

Currently, there is no blueprint for how to foster such social capital and political will (Renner, 2011). It is opined that:

**“Transboundary negotiations (in South Asia) generally focus on the availability of a volume of water for a downstream riparian, and have been disconnected from other human development and environmental issues (...) Consequently, transboundary debates are set around concerns about the impact of the construction of infrastructure, notably dams, on a downstream riparian.” (Price et al., 2014, p.2).**

Thus, one of the reasons for proposing the framework of Water-Energy-Food nexus is to restructure the discourse on basin cooperation to focus on three major sectors and their associated users and stakeholders. WEF nexus is a multi-purpose framework, which is as much a resource management tool as it is a tool of diplomacy. At the local level, it can help capitalize on cross-sectoral synergies and limit trade-offs, thus acting to relieve the sort of pressure on resources that often leads to transboundary disputes.

From a multi-level lens, when entrusted in the hands of civil society and local users, it is beneficial as it eases the pressure on the state for both service delivery and actively fostering inter-state harmony. Conversely, the dependency on good inter-state relations for continued service delivery or livelihood protection is also reduced. As an illustration, consider a lower riparian community in Pakistan that relies on the Kabul river for irrigation water. Any infringement or intervention to divert water in Afghanistan would have an impact on water flows and thus an impact on water-dependent processes. Every cubic meter of water that doesn't reach communities in Pakistan is a cubic meter worth of blame appropriated to Afghanistan. The hurry to blame Afghanistan would actually not be unfounded. However, if water from the Kabul river is complemented by rainwater harvesting and run-off capture ponds/check dams, variability of water flow would not cause immediate harm. Similarly, investment in High Efficiency Irrigation Systems (HEIS) coupled with localized water storage for agriculture would

<sup>24</sup> Excerpt from a televised panel discussion aired on 3rd November 2015 titled "Need of Pak-Afghan water treaty?". It was moderated by Dr. Moeed Pirzada that featured experts on transboundary water sharing and the water sector in general. The discussion can be accessed at: <https://www.youtube.com/watch?v=7AJQFDr4Mxk>

reduce water demand and consequently reduce the dependency on perennial water flow from the Kabul river. This buffer for livelihood security reduces both the vulnerability of individual users and the upstream-downstream relationship between the two. Another example is switching to decentralized and off-grid electricity production, e.g. micro-hydel and solar power, for groundwater abstraction, pressurization of water for HEIS, pumped water storage, etc. for food production and domestic water use.

In the case of Pakistan and India, the eastern neighbour has already singled out Pakistan's inability to store or efficiently use its water<sup>25</sup>. Some argue that if Pakistan-India water relations turn more sour than they already are, Pakistan's domestic water management would be the major culprit. We contend that for both Pakistan and Afghanistan, WEF nexus thinking is a path to better local management and, through it, to less fragile transboundary relations.

Furthermore, integration of WEF nexus at a basin level has more direct advantages when it comes to transboundary water management and diplomatic relations. Though more research is required, we feel comfortable offering the following benefits of a shift towards WEF nexus management of the Kabul River Basin with civil society actors and end users as the primary stakeholders:

- ◆ Expand the cluster of relevant stakeholders and potentially dilute the disproportionate clout currently held by the military and the foreign offices of Pakistan and Afghanistan. The inclusion of broader stakeholders allows for a more comprehensive and equitable discourse that is not held hostage by a single-point agenda and instead invites perspectives from multiple levels and sectors of governance (UNECE, 2015).
- ◆ Enhance perceptions about the benefits of managing the Kabul River Basin equitably and, conversely, about the costs of mismanaging it.
- ◆ Open new avenues of discourse between Pakistan and Afghanistan, which are not linked to terrorism and regional security concerns.
- ◆ Identification of benefits of enhanced cooperation that might otherwise go unnoticed such as: "Regional markets for goods, services, and labour; increased geopolitical stability and stronger diplomatic relations; and reduced risk and avoided cost of conflict and savings from reduced military spending" (UNECE, 2015 p. 24)

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25 From the English transcript of a speech delivered by Indian Prime Minister Narendra Modi where he said that water from Indian rivers (Ravi, Beas, and Sutlej) flows from India and gets wasted in the Arabian sea. Neither Pakistan uses it, nor do Indians get to use it. From Press: <http://indianexpress.com/article/india/india-news-india/water-that-belongs-to-india-cannot-be-allowed-to-go-to-pakistan-pm-modi-in-bathinda-4394371/> (Accessed 13th February 2017)

## Section 8:

### Conclusion

There are two schools of thought<sup>26</sup> in Pakistan on how to best achieve a mutually beneficial arrangement between Pakistan and Afghanistan on the Kabul River Basin (IUCN, 2014). The first and more prevalent school states that a formal treaty between the two states is urgently required before any practical collaboration can take place. An increasing involvement of India in supporting hydroelectric infrastructure as well as the gradually increasing state capacity in Kabul is perceived as threats to Pakistan's water security. Adherents of this perspective caution against an impending future when the threat of water crisis has fully materialized and pointed out the potential difficulty of reaching an agreement under such circumstances. The second school of thought believes that the current state of latent conflict has withered the foundation of trust and comfort needed to forge a meaningful agreement. Furthermore, both states are influenced by the ambitions of competing regional powers. Therefore, a bi-lateral negotiation will not strictly be bi-lateral. An attempt at an agreement at this point, though well intentioned, will ultimately be counterproductive. This school of thought proposes more localized sub-state or non-state initiatives to enhance information sharing, collaboration on hard interventions in multiple sectors, and capacity building of community stakeholders across the Basin as a precursor to arriving at a meaningful and constructive water treaty in the future.

In this study, the authors endorse the second school of thought and add that in addition to facilitating a long-term transboundary basin partnership, this approach can foster inter-state diplomacy and peace-building. A review of literature on conflict resolution and transformation, coupled with an analysis of the commonalities between cross-border communities of the Kabul River Basin, revealed that building 'bridging social capital' through benefit-sharing in the areas of water, energy, and food is not only possible but is perhaps a lot easier in the Kabul River Basin than in other transboundary basins. However, for this to be achieved, the discourse on transboundary basin management needs to be expanded beyond water-sharing to focus on sharing the different benefits of water use. Readers are invited to suggest ways of doing this and to define the limits of its application. But, to illustrate the possibility and desirability of it, we have suggested rearticulating water-sharing as water-energy-food nexus benefit sharing.

In the process of peace-building, there are tasks for everybody (Galtung, 1980). Lederach (1998) elaborates upon this idea and proposes the necessity of

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26 These are not theorized or canonized perspectives but rather a convenient way of grouping two diverging strains of opinion found in Pakistan.

an infrastructure of peace populated by multiple actors and activities at various levels. The discourse on peace-building between Pakistan and Afghanistan has never been inclusive, both in terms of actors and sectors. We hope that this paper's engagement with the nuances of transboundary basin management between Pakistan and Afghanistan starts what needs to be a drastic and dramatic expansion of stakeholders: an expansion that leads to the equitable distribution of water-related benefits and to a future without conflict – latent or otherwise.

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