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Inclusive development and multilevel transboundary water governance

The Kabul River

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9 MULTI-LEVEL INTEGRATED ANALYSIS FOCUSING ON ISSUES FOR RE-DESIGN

9.1 INTRDUCTION

This chapter integrates elements of freshwater governance from the different geographic levels of the KRB and aims to answer the question: How do power and institutions influence multilevel freshwater governance in the KRB and the achievement of inclusive and sustainable development? This chapter also answers some sub-questions: (1) How are various characteristics including biodiversity, ESS and drivers of freshwater problems taken into account at multiple levels of governance in the KRB? (2) How have freshwater governance frameworks evolved at multiple levels of governance in the KRB? (3) Which governance instruments address the drivers of freshwater problems at multiple levels of governance in the KRB? (5) How do power and institutions influence water sharing at multiple level of governance in the KRB? And (6) How can the current designs of the KRB multilevel institutional architecture become consistent with the key global institutions to achieve inclusive and sustainable development?

To answer these questions, this chapter applies the methodology explained in Chapter 2 and continues as follows. First, it describes the political organisation of multilevel governance in the KRB (9.2), multilevel biodiversity and ESS in the KRB (9.3) and multilevel drivers of freshwater problems (9.4). Second, it assesses the evolution of the multilevel institutional context (9.5) and identifies the relevant goals, principles and instruments (9.6) within these institutions. Third, it explains the instances of legal pluralism (9.7). Fourth, it explores the relationship between drivers and principles/instruments to achieve inclusive and sustainable development (9.8). Fifth, it explains the linkages between power and intuitions as a hybrid approach (9.9). At the end this chapter draws inferences (9.10).

9.2 THE CONTEXT OF MULTILEVEL WATER GOVERNANCE IN THE KRB

General Stanley McChrystal in *The Atlantic Monthly*, 2010 stated: _The insurgency is only fundamentally effective in the Pashtun belt - The critical part of the population is where the water and the roads are. People near water are more important economically along the Helmand and Kabul rivers. You secure these areas, and you take the oxygen out of the insurgency'. In Chapters 6, 7 and 8, I have discussed the context of water governance at transboundary level (Chap 6), and national and subnational levels (Chap 7 and 8) in the Kabul River Basin. The context specifies that: (1) the growing water issues between Afghanistan and Pakistan needs to be evaluated in the context of increasing population, urbanisation, industrialisation and climate change rather than only in the context of security and strategic discussions; (2) shortages and poor management of freshwater resources in this region contributes to geopolitical turmoil; and (3) there is no formal bilateral cooperation between Afghanistan and Pakistan on technical information exchange, flow monitoring and water planning, nor on rights and equitable sharing of freshwater. Afghanistan's plans for constructing reservoirs, hydro-power, irrigation, and fishing could ultimately start tensions, particularly given the decades-long unresolved Durand Line issue between Afghanistan and Pakistan is famous for ideology-based

extremism, terrorism, and historical tribal conflict. Nevertheless, the growing water issues between Afghanistan and Pakistan is hardly noted, let alone factored into the reasons of local conflict. As the demand for freshwater will grow in the next decades and as climate changes affect precipitation patterns, the pressure on the Kabul River water sharing will increase. This is because the Kabul River supports over seven million people in Afghanistan in addition to more than two million on Pakistan and contributes approximately 26% of Afghanistan's total annual flow (Bokhari et al. 2018; Iqbal 2017; Tariq et al. 2014; Yousaf 2017).

9.3 MULTILEVEL BIODIVERSITY AND ECOSYSTEM SERVICES IN THE KRB

This section analyses the biodiversity and ESS in the KRB in a multilevel institutional context. There is similar ESS and biodiversity which can lead to an enabling environment for transboundary cooperation. In the post-colonial period of Afghanistan, there are seven different multilevel legal frameworks that address different aspects of freshwater-related biodiversity and ESS. However, in Pakistan conservation and protection of biodiversity and different ESS appear in three different legal texts from both the colonial and post-colonial periods. At the transboundary level, the legal texts that address biodiversity and ESS only appeared in the colonial era and no longer apply. The multilevel biodiversity and ESS are elaborated in Table 9.1 and Annex K.

9.3.1 Multilevel Biodiversity in the KRB

In this section I discuss multilevel biodiversity in the KRB. By identifying similarities and differences in biodiversity at multiple levels, it is possible to find common ground for both riparians to collaborate on protection activities that can enhance social and environmental sustainability. For example, the snow leopard is a unique and endangered species for which international efforts are underway for its protection and conservation. Since both Afghanistan and Pakistan are parties to the CBD, joint conservation efforts can be planned and implemented for its protection. Conservation efforts in one country may not be effective if these species travel to the bordering country where they are not protected. Similarly, both countries can work to protect migratory birds as their route crosses both the countries where joint efforts can provide conducive habitats for migratory birds. A number of similar flora species at transboundary level can be protected and promoted by adopting joint efforts in terms of pesticide usage and introduction of suitable crop varieties for the region's ecosystem and environment. Fish species are one of the most important aspects of transboundary rivers since activities in the upper riparian country can significantly affect these species where joint efforts can protect and promote fish species that benefit a large population and economy in both countries.

| | | Transboundary | Afghanistan | Pakistan |
|---------|-----------|-----------------------------------|------------------------------|-----------------------------|
| | | 35 fish species including the | Nine local sheep breeds in | Snow leopard (Panthera |
| | | endangered Masheer (king of | Afghanistan; eight cattle | uncia) |
| | | river fish) | breeds and seven goat breeds | |
| | | Pintail, shoveller, widgeon, | | Indus dolphin (Platanista |
| a | | mallard, garganey, tufted and | | gangetica) |
| une | | ruddy shelduck, lapwings, | | |
| Fa | | herons, egrets, gulls and terns | | |
| | | Common cranes are occasionally | | The migratory and guest |
| | | sighted | | waterfowl population |
| | | A number of turtle species along | | |
| | | many parts of the river | | |
| | | | Fuel wood | Plant Kut (Saussurealappa) |
| a B | | | Pistachio/ juniper forests | The coniferous and other |
| lor | | | | rain forests |
| E | | | Crop plants | Sea grape (Ephedra procera) |
| | | | Wheat and other local crops | |
| | | Habitat of migratory bird species | | The Indus flyway is |
| Habitat | ory es | (e.g. wtarefowl, cranes, and | | considered as the fourth |
| | grat | waders | | major bird migration route |
| | Mig R | | | in the world |
| | Pi | | | |

Table 9.1: Multilevel biodiversity in the KRB

9.3.2 Multilevel Ecosystem Services in the KRB

As described in Annex H, various types of ESS are relevant at different geographic levels in both countries. These services are dealt with by different institutions (in some cases similar while different in others) and can have implications for transboundary level interactions. For example, in the category of provisioning services, the governance of hydro-energy in Afghanistan is a federal subject whereas in KP Province of Pakistan hydro-energy can be produced and sold by the local and provincial governments to the State (see Annex H). The dissimilarity in this category can have negative consequences for transboundary level interaction because interests at local, provincial and national levels can undermine the institutional cooperation between the two countries. Furthermore, dialogues for a joint hydro-power project between the WAPDA (federal level authority in Pakistan) and Afghanistan's Khost Province in 2006 did not materialise primarily due to the disparities in interests between the two administrative levels of both the countries. Additionally, the multilevel institutional analysis indicates that provisioning services gets much attention in the policy arena since these services are materially more visible and politically charged issues in both countries. In Pakistan's case, the multilevel water governance arrangements also pose a difficult challenge in terms of accommodating the contextual and local issues of different provinces in national level policymaking. When provincial level priorities and ESS (in the case of KP province) are not fully

acknowledged and included at national level policymaking, the transboundary cooperation between the two countries might not foreground the importance of various ESS and their benefits.

My analysis (see Chapter 6, 7, and 8) indicates that regulating services usually get less priority and institutional support at national level and fewer financial resources are allocated to these issues. Since these regulating services are generally perceived as regional and international issues, both countries seek and depend on external financial resources as well as technical expertise to address these issues.

Similarities in terms of cultural services are high due to the customary Pakhtun practices as Pakhtun communities follow the Pakhtun Code of Conduct called _Pakhtunwali' whether living in Afghanistan or Pakistan. Since transboundary cooperation occurs at national level, similarities at provincial and local level tend to get ignored, undermining transboundary water cooperation. People to people linkages are stronger between both sides despite dissimilarities at the formal institutional level. In Afghanistan where the Pakhtun are in the majority and politically powerful, their local customs are recognised in national level policies processes and institutional building, while in Pakistan the Pakhtun community does not form the majority and hence the local Pakhtun code of conduct does not inform the national level policy processes.

Supporting services (solid formation, habitat provision and nutrient cycling) are typically natural processes which are seriously affected by human interaction but are generally not prioritised in the policy processes. However, they are the same at the local level, so they can contribute to transboundary level cooperation. In terms of provisioning, cultural and supporting ESS most of the elements are relevant at different geographic levels but are dealt with by similar level institutions. However, since the regulating service (e.g., climate and water regulations) is typically perceived as natural and _international', national governments depend on foreign assistance.

Due to donor interest or funding availability, regulating services are typically discussed at transboundary level (e.g., GLOFs and climate change related events) while politically sensitive issues (e.g., water governance) are seen as important state secrets and issues of sovereignty and national security. In the context of inclusive development, it is important that local level institutional mechanisms (Pakhtun customs, such as on equitable water sharing, water reuse and conflict resolution) inform those national level policy and institutional development processes that are important in transboundary level cooperation. However, this is not the case in Afghanistan where local level Pakhtun customs are an integral part of the constitutional as well as formal institutional mechanism dealing with water and other related issues. This dissimilarity can undermine the transboundary cooperation. Therefore, it is important to ensure participation at local level to meaningfully inform national policy processes.

9.4 THE MULTILEVEL DRIVERS OF CONFLICT

Based on the literature review, I have already identified a range of direct and indirect drivers influencing freshwater governance. Additionally, the analysis of various national and subnational as well as transboundary policy documents and laws and fieldwork in both countries have resulted in the identification of ten drivers within Afghanistan, eight in Pakistan and eight at the transboundary level (see 6.4, 7.4, and 8.4). Multilevel analysis shows that there are four direct and six indirect drivers which are relevant for analysis. These drivers can be linked to both natural and anthropogenic activities. For example, flash floods caused by GLOFs in the HKH region can affect the freshwater quality in the KRB at multiple levels. Similarly, population growth and economic development through industries and agriculture development can depreciate the quality and quantity of freshwater.

Table 9.3 shows that most of the direct and indirect drivers are similar at multiple levels except for the municipal level water supply and sanitation services. This shows that highlighting these drivers and linking them to similar issues of both countries (e.g. agriculture development, industry, economic growth, environmental degradation, unemployment and militancy) can result in common problem framing at the transboundary level where solutions can be discussed based on a shared understanding of the issues, and ultimately feed into policy making processes.

Table 9.2: Multilevel drivers of conflict in the KRB

| Direct Drivers | | | | |
|---|--|--|--|--|
| Agriculture development (e.g., commercial agriculture practices including animal husbandry, the | | | | |
| extractive sector and water use in energy) | | | | |
| Industry (including services and infrastructure) | | | | |
| Municipal water supply and sanitation services for household uses (drinking water, sanitation, | | | | |
| hygiene) and subsistence agriculture | | | | |
| Demographic shifts (i.e., migration, population growth, increase in population density, urbanisation, | | | | |
| population growth) | | | | |
| Indirect Drivers | | | | |
| Political dynamics between/within states (e.g. on Durand line) | | | | |
| Culture and ethnic elements (attitudes about access and allocation, wasteful use of resources, etc.) | | | | |
| Non-water-related policies (agriculture & food security, land use, land tenure, economic development; | | | | |
| China-Pakistan-Afghanistan economic corridor related projects) | | | | |
| Economy (economic growth) | | | | |
| Poverty | | | | |
| Technological advances (agriculture intensification) | | | | |
| International trade (e.gglobalisation' or trade in virtual water) | | | | |
| Natural change and variability in weather, Droughts; Floods; Earthquakes; Landslides, tectonic movement | | | | |

Bold: Non-common Drivers; Non-Bold: Common Drivers

9.5 GOALS, PRINCIPLES AND INSTRUMENTS IN MULTILEVEL GOVERNANCE FRAMEWORKS

9.5.1 Goal of the Multilevel Governance Framework

The multilevel goals in the KRB include: (1) the goals at transboundary level; (2) goals of the Afghan governance frameworks; (3) and goals of the Pakistan governance framework. As no formal regulatory framework exists at transboundary level in the KRB, there are no goals on social and ecological inclusion. However, both countries have accepted the Sustainable Development Goals and hence have agreed to transboundary water collaboration. The Afghan water governance framework imposes the principles enshrined in Article Nine of the Afghanistan's Constitution for conservation, equitable distribution and sustainable use of freshwater resources, support for the national economy and securing water users' rights, in accordance with the principles of Islamic Law and the local customs. Likewise, the objective of Pakistan's water governance framework is to contribute to food security and diminish rising poverty levels by promoting sustainable productivity of freshwater through better management. This indicates that there are some differences in goal setting between the two countries. Pakistan's water goal emphasises increased productivity through better management while Afghan water laws (apparently) foster human rights, equitable distribution and conservation accordingly by incorporating local customs and Sharia. Despite some differences, the goals of both the countries' water governance frameworks are comprehensive and have elements that can support steps for transboundary water cooperation as explained in 9.5.2.

9.5.2 Principles in the Multilevel Governance Framework

Multilevel principles in the freshwater governance frameworks at the transboundary, national, and sub-national levels include Political, Social-relational, and Ecological Principles (see 6.6.2; 7.6.2; 8.6.2).

| Categories | Principles | T/boundary | Afghanistan | Pakistan |
|------------|--|------------|-------------|----------|
| | Exchange of Information | Х | Х | Х |
| - S | Notification of Emergency Situations | - | X | Х |
| iple | Notification of Planned Measures | - | Х | Х |
| olit | Obligation to Cooperate | Х | X | Х |
| P P | Peaceful Resolution of Disputes | Х | X | Х |
| | Limited Territorial Sovereignty/ No Harm | Х | Х | - |
| | Aquifer/basin as the Unit of Management | - | Х | Х |
| | BATT | - | - | |
| les | Conjunctive Use | - | X | X |
| ncip | EIA | - | X | X |
| Prir | Invasive Species | - | - | X |
| al] | Monitoring | - | X | X |
| lent | Pollution Prevention | - | Х | X |
| | Precautionary Principle | - | Х | X |
| virc | Protected Areas for water | - | Х | Х |
| En | Protected Recharge & Discharge Zones | - | Х | X |
| | Ecosystem Protection & Preservation | Х | Х | Х |
| | Polluter Pays Principle | - | Х | Х |
| | Capacity Building | Х | Х | Х |
| | Equitable & Reasonable Use | - | X | Х |
| | Human Right to Water & Sanitation | Х | | X |
| | Intergenerational Equity | - | X | X |
| | Poverty Eradication | Х | - | - |
| | Prior Informed Consent | - | X | X |
| | Priority of Use | - | X | X |
| S | Public Access to Information | - | X | X |
| ldi | Public Awareness & Education | - | X | Х |
| rinc | Public Participation | - | Х | Х |
| I P | Rights of Women, Youth, & Indigenous Peoples | - | Х | Х |
| ocia | Food Security | - | - | - |
| Š | Human Well-being | - | - | - |
| | Quality Education | - | - | - |
| | Clean Energy | - | - | - |
| | Economic Growth | - | - | - |
| | Infrastructure | - | - | - |
| | Reduced Inequality | - | - | - |
| | Sustainable Urbanisation | - | - | - |
| | Responsible Consumption & Production | - | - | - |

| Table 9.3: Multilevel | principles inclusion | (denoted by X) |
|-----------------------|----------------------|----------------|
|-----------------------|----------------------|----------------|

Source: Modified from Conti 2017; Bold: Common Principles; Non-Bold: Non-Common Principles

Although a number of principles are missing at the transboundary level, there are important elements at the national level that can be useful for transboundary level cooperation such as information exchange, peaceful resolution of disputes, obligation to cooperate,, limited territorial sovereignty/ no harm, and ecosystem protection and preservation, among others. Pakistan's water frameworks include almost all of the four categories of principles while Afghan water laws and policies do not cover some important principles such as BATT, invasive species, the human right to water and sanitation and a number of social principles (food security, human well-being, education, economic growth and inequality etc.). As can be observed in Table 9.4, most of the principles are not present at all levels of governance except for the exchange of information, obligation to cooperate, ecosystem protection and capacity building. In this direction, the UN Watercourses Convention can offer support by addressing legal weaknesses, providing guidance for policy coherence, facilitate the work of bilateral and multilateral institutions in promoting transboundary cooperation by creating an impartial level playing ground among riparian states, and integrate social and ecological concerns into the management and development of transboundary watercourses. I would recommend ratifying the Watercourses Convention as a first step to resolving water sharing issues and considering the ratification of the UNECE Water Law – as that may enable a common understanding of the ecological principles and instruments.

9.5.3 Instruments in the Multilevel Governance Framework

Instruments in the multilevel governance frameworks include instruments from the transboundary normative frameworks; instruments of the 2009 Water Law in Afghanistan; and the 2018 National Water Policy in Pakistan. As there is no regulatory mechanism at transboundary level (see 6.6.3), there is no instrument in the existing framework. However, the 2009 Afghan Water law has some regulatory, economic, suasive and management instruments which can prevent pollution from agriculture and industries as well as meet the growing demand of population and cities (see 7.6.2). Similarly, the recently approved National Water Policy of Pakistan also has instruments in all four categories which can address the drivers and change the behaviour of some relevant and non-relevant actors towards the sustainable use of freshwater resources (see 8.6.2).

| Categories | Instruments | Transboundary | Afghanistan | Pakistan | Multilevel |
|------------|---------------------|---------------|-------------|----------|------------|
| Regulatory | Permit | | X | | |
| | Procedures | | | | |
| | Penalties | | Х | | |
| | EIA | | | X | |
| | Fines | | Х | Х | |
| | Licences | | | Х | |
| | Metering | | | Х | |
| | Mapping and zoning | | | Х | |
| Economic | Property rights | | | | |
| | Taxes | | | | |
| | Tradable quotas | | | | |
| | Tariffs | | Х | | |
| | Subsidies | | | Х | |
| | Grants | | | | |
| Suasive | Education | | | | |
| | Awareness trainings | | | Х | |
| | Award schemes | | | | |
| | Disclosure | | | | |
| | requirements | | | | |
| Management | Self-regulation | | Х | Х | Х |
| | Voluntary | | Х | х | Х |
| | management | | | | |
| | processes | | | | |

 Table 9.4:
 Multilevel instruments inclusion/exclusion

Source: Modified from Conti 2017

My analysis shows that none of the instruments are present at the transboundary level due to the absence of a treaty. Afghanistan's water frameworks comprise only a few regulatory instruments (permits, penalties and fines), one economic instrument and two management instruments without any suasive mechanisms for awareness creation. However, Pakistan's water policies and legal frameworks are more comprehensive and a cover a range of all the four types of instruments. At the multilevel only two management instruments are present.

9.6 THE MULTILEVEL LEGAL PLURALISM ANALYSIS

The legal pluralism analysis of the transboundary and national governance framework is discussed in detail in Sections 6.7, 7.7 and 8.7). In Pakistan's case, there are three levels of water governance (national, provincial and local) as well as three types of legal frameworks (local customs, Sharia and state laws) that further complicate water governance and reduce the effectiveness of water policies and their implementation. Similarly, there are different laws for water, energy, land, food and agriculture that treat water differently, which in turn reduces their effectiveness and implementation. Despite the presence of formal legal frameworks for water, the local customs and Sharia laws are historically grounded in local contexts which undermines some elements within the formal laws that contradict the local customs. At the transboundary level, there are only three political, three sociorelational and one ecologically normative principles based on colonial and existing practices which are unlikely to address the direct and indirect drivers of freshwater problems within the KRB. It can be concluded that there are only a few normative principles and colonial era treaties which may not be sufficient for transboundary cooperation at multiple levels, however, global institutions (e.g., 1997 UN WCC) include a number of effective instruments that can provide guidance where both countries can start dialogues for cooperation.

9.7 APPLICABILITY OF ARTICLE 5 AND 6 FOR ENHANCING MULTILEVEL WATER GOVERNANCE IN THE KRB

In line with addressing the issues of quality, quantity and climate change in the KRB, the UNWCC, especially Articles 5 & 6 on equitable and reasonable utilisation, have the potential to enhance cooperation in transboundary water issues. For example, adapting similar principles can bring harmony in the national level legal and policy frameworks that can improve future cooperation. Both countries will also benefit when their sub-national and national level legal and policy frameworks are harmonised on similar principles of equitable and reasonable use. Similarly, Article 6 on considering relevant factors is helpful in identifying the similarity of drivers of water issues in both countries of the KRB. When similar drivers of water issues (e.g. agriculture development, industry, economic growth, environmental degradation, unemployment and militancy) are identified, it can help in common problem framing and pave the way for mutual strategies and policies in addressing them through, for example, cooperation and information exchange to address these drivers.

Article 6 on factors relevant for equitable and reasonable utilisation is of particular relevance given the similarity of identified drivers of freshwater problems in the KRB. For example, due to lack of cooperation, no information is shared between Afghanistan and Pakistan in terms of population growth, urbanisation, the areas under cultivation, nor other changes along the river and catchment areas, especially in times of crisis and disasters caused by climate change and environmental variabilities such as the floods of 2010 and GLOFs in the region. The 2010-2013 monsoon floods were massive and unprecedented, killing hundreds of people, affecting land area and millions of people, that caused losses of billions of dollars because of damages to infrastructure, agriculture and livestock, housing, and other family assets in both Afghanistan and Pakistan. Human lives, infrastructure, economy and livelihoods could have been protected on both sides of the border if there had been an effective information sharing mechanism in the basin. The floods and GLOFs also damage the already weak irrigation and other related infrastructure due to the non-exchange of information.

Currently, donor organisations in both countries work individually on irrigation improvement where the lack of information exchange and cooperation can cause damage due to disasters (such as floods and GLOFs). These losses can be minimised and it will save their investment by enhancing transboundary cooperation and information exchange especially in times of disasters. Moreover, cooperation on the KRB can enhance the bargaining power of both countries with donor organisations to invest in beneficial infrastructure projects for enhancing water use efficiency and utilisation. Since climate change has regional implications, including for the KRB, transboundary cooperation is urgently needed. The formation of a River Basin Organisation (RBO) can directly contribute towards institutional strengthening that can last beyond the short-term political priorities of different parties that come into power in both countries. Despite some problems, the Indus Water Treaty and the Indus Water Commission is one such example that has withstood some serious and longstanding conflicts between India and Pakistan for over five decades now. Independent transboundary institution on the KRB may be able to endure the political pressure of the ruling governments to contribute towards long-lasting water cooperation in the region. These kinds of institutions can be strengthened through sustained support for capacity building by the donor countries that have strategic interest in the region for reducing militancy and promoting peace and stability through dialogues and cooperation.

As highlighted in chapters 7 (Afghanistan) and chapter 8 (Pakistan), water related biodiversity and ecosystem services (ESS) are vital for survival of millions of people on both sides of the border in the KRB region. In this direction, the principles of equitable and reasonable water utilisation can be translated into allocating sufficient water for protection and sustainability of these ESS. The importance of the ESS can be highlighted by application of reasonable water use principle for ESS, which sometimes is considered as waste of water. For example, a large number of people depend on forests and related biodiversity for their livelihoods which are directly dependent on sustained water supplies in the KRB, which can be enhanced by applying the principles of equitable and reasonable utilisation.

9.8 INFERENCES

This chapter has integrated elements of freshwater governance at various geographic levels of the KRB in order to answer the question of how power and institutions influence multilevel freshwater governance in the KRB to facilitate the achievement of inclusive and sustainable development. It has done so by looking at (1) how various characteristics including biodiversity, ESS and drivers of freshwater problems are taken into account at multiple governance levels in the KRB; (2) how freshwater governance frameworks have evolved at multiple levels of governance in the KRB; (3) which governance instruments address the drivers of freshwater problems at multiple levels of governance in the KRB; (4) how legal pluralism can be observed at multiple levels of governance levels in the KRB; (5) how power and institutions influence water sharing at multiple governance levels in the KRB; and (6) how the current designs of the KRB multilevel institutional architecture can become consistent with the key global institutions to achieve inclusive and sustainable development. Through answering these sub-questions, the chapter draws four conclusions.

First, due to four decades of conflict in the KRB, the ideological-based insurgencies have seriously influenced the foreign policies of Afghanistan and Pakistan. These long-standing border disputes – such as rejection of Durand Line by Afghanistan as an internationally recognised border, Taliban proxies supported by Pakistan, and use of extremist ideologies by both the countries to destabilise

each other – restrict both countries in initiating dialogues and solving various bilateral issues including transboundary water issues. Currently cooperation over transboundary water in the region is minimal due to power asymmetries between Afghanistan and Pakistan. Water issues are seen through the lens of territorial sovereignty where water data is treated as state secrets prohibiting information sharing. Pakistan, being a hydro-hegemon in this case can use its powerful position to initiate dialogue for transboundary water cooperation, also by involving international players.

Second, since both Afghanistan and Pakistan are signatories of many international environmental conventions and treaties (e.g. SDGs, CBD, Ramsar, HRWS), the BESS based approaches can provide an enabling environment and common ground for cost-effective transboundary cooperation including water. My analysis shows that the hydro-energy (provisioning service) is governed at different levels in Afghanistan (federal) and Pakistan (provincial & local) can have negative consequences for transboundary level interaction since interests and administrative issues at different levels can undermine transboundary water cooperation. Therefore, new knowledge and evidence by applying the valuation of ESS can also inform the policy narrative of transboundary water cooperation by highlighting the win-win scenarios.

Third, highlighting the anthropogenic and natural drivers and linking them to similar issues of both the countries (e.g. agriculture development, industry, economic growth, environmental degradation, unemployment and militancy) can result in common problem framing at the transboundary level where solutions can be discussed at a similar understanding of issues, and ultimately feed into policy making processes. Moreover, other large regional projects (e.g. CPEC, TAPI)¹¹⁵ can potentially create an opportunity for powerful actors and donor countries to play their role in bringing stability and cooperation in the KRB which can protect their long-term investments in the region. This can ultimately lead to creating an enabling environment for cooperation including transboundary water issues.

Fourth, as no formal regulatory framework exists at transboundary level in the KRB, there are no goals on social and ecological inclusion. Pakistan's water goals, principles and instruments are mostly based on local priorities while Afghanistan's are heavily influenced by the donors and have some common elements with the global instruments. Pakistan's water goals emphasise increased productivity through better management while Afghan water laws (apparently) foster human rights, equitable distribution and conservation accordingly by incorporating local customs and Sharia. In this scenario, the UNWC can offer support by addressing the weak legal aspects, provide guidance for policy coherence, and facilitate the work of bilateral and multilateral institutions to foster transboundary cooperation by establishing a level playing field among riparian states, and incorporate social and environmental aspects for the management and development of international water resources.

¹¹⁵ Turkmenistan–Afghanistan–Pakistan–India (TAPI) gas pipeline project is a natural gas pipeline project connecting the four countries. The project is co-funded and jointly developed by the Asian Development Bank (ADB) and the Galkynysh Pipeline Company Limited (Joshi 2011).