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AFGHANISTAN AND THE ARAL SEA:
Learning to swim together

1. BACKGROUND AND THE BASELINES

1.1. Central Asia: Swimming without

The economic development and cooperation over the water resources of the Aral Sea Basin in modern era has been largely associated and limited to the five countries of Central Asia that used to be part of the former USSR. Linkages and flow contributions of few other countries that are in one way or another also associated with the basin were assumed but not really considered as far as the actual planning, development and management of shared water resources were concerned. Interests of such other states most frequently emerged in the past in a foreign policy context whenever the need to clarify, delineate or settle the borderline matters arose. This was normal as soon as all five former Soviet republics were part of the same political system and space.

Internationalization and securitization of what used to be subnational boundaries and economies that followed shortly after the breakup of the USSR has put the system of water allocation under the constantly increasing pressure of coordinating, agreeing and making mutually satisfying decisions in a situation where the setting of national priorities became totally independent. The other important factor to have triggered the search and the need for new cooperation mechanisms over the shared water resources was the emergence and universal spread since the early 1990's of the integrated water resources management (IWRM) paradigm in planning and implementing water sector reforms both nationally and across national divides. This was further strengthened by the growing sophistication, proliferation and acceptance of the international water law regulation in the form of influential water conventions that strongly suggest all riparian countries to explicitly seek and agree on joint arrangements over shared water resources in a responsible, reasonable, equitable and no-harm manner (ILA, 1967; UNECE, 2013; UN, 2014).

While all five CA countries upon gaining their independence started early on revisiting their previous water sharing arrangements to conclude new agreements and establish coordination mechanisms at a new level, the countries that used to be outside this close circle of core basin states continued to remain so, except for some notable bilateral cases: e.g. the 1999 water-sharing agreement between Iran and Turkmenista resulting in jointly constructed dam of 0.82 km^3 in 2005 (Thomas & Warner, 2015); the 2004 Panj river bridge construction agreement and 2010 water cooperation agreement for the rivers of Panj and Amu Darya between Tajikistan and Afghanistan (SIC-ICWC, 2017); the 2015 Kazakh-Afghan cooperation agreement for emergency situations (Kazakhstan-Afghanistan Agreement, 2015).

The outsiders normally associated with the Aral Sea basin less directly include Afghanistan, Iran and China where some basin's headwaters originate (FAO, 2013; Priscoli & Wolf, 2010; White, K. 2013). Most significant of these three is Afghanistan contributing based on different estimates up to 25 km^3 of water annually including up to 22 km^3 through the Amu Darya River in the country's northeast where its two major inland tributaries – the rivers of Kokcha and Kunduz confluence with the borderline Panj river shared with Tajikistan; and around 3 km^3 annually through the rivers of Harirud and Murghab in the northwest corner both crossing over to Turkmenistan (FAO 2013). In

fact, this makes Afghanistan the third biggest single contributor to the overall river flows in the Aral Sea basin as a whole after Tajikistan and Kyrgyzstan, and the second biggest if only the Amu Darya river basin is considered. However, the sharing of the latter river's water resources is still based on the 1987 Soviet era Protocol that does not explicitly include Afghanistan (Wegerich, 2008). The table below briefly summarizes flow contributions by all Aral Sea basin states and major rivers.

TABLE 1.

Mean annual runoff in the Aral Sea basin (km^3/year, adapted from FAO 2013)

	River basins			Total for Aral Basin	
Country	Syr Darya	Amu Darya	Harirud-Murgab	km^3	%
Kazakhstan	3.30			3.30	2.8
Kyrgyzstan	27.42	1.93		29.35	24.8
Tajikistan	1.01	59.45		60.46	51.0
Turkmenistan		0.68	0.3	0.98	0.8
Uzbekistan	4.84	4.70		9.54	8.1
AfghanistanIran		11.70[1]	3.1	14.80	12.5
Iran			n.a.	–	–
China	n.a.			–	–
TOTAL	**36.57**	**78.46**	**3.4**	**118.43**	**100.0**

1.2. Central Asia and Afghanistan: Ready to swim together, but…

Including Afghanistan among the active basin states is not something that comes unexpected. Just the opposite, this has been taken for granted and explicitly acknowledged by all CA countries and their regional basin organizations on many occasions… with some reservations though. The latter would always boil down exclusively to the continuous security situation and political instability in Afghanistan. Lack of hydrological data in this country for the same reason is also frequently mentioned among the obstacles for getting this country aboard (EastWest Institute, 2009). Nevertheless, the draft Regional Water Strategy of the Interstate Commission for Water Coordination (ICWC) of the IFAS prepared as early as in 1997 explicitly emphasized that "the inclusion of Afghanistan among the parties to the international Aral Sea basin agreements will be necessary and in the interests of all basin countries as is its future membership in both IFAS and ICWC" (ICWC, 1997). Afghanistan geographically occupies a strategically important location right in the center of four distinct parts of the Asian continent – Middle East in the west (bordering Iran), Central Asia up north (bordering Turkmenistan, Uzbekistan and Tajikistan), South Asia down south (Pakistan) and China to the east. The fact that makes this Asian country a unique natural hub and a land bridge linking all possible geographic directions. However, massive security concerns and political instability continue to dominate and slow down the involvement of this war-torn country in integrative processes with all its neighbors, both

[1] This estimate seems to include only the runoff of the two inland Amu Darya tributaries – Kokcha and Kunduz. Other sources estimate the total runoff originating in the Afghan part of the Amu Darya basin at 22 km^3 including the Panj river (FAO, 2013).

riparian and non-riparian. The 2009 declaration of the Regional Economic Cooperation Conference on Afghanistan (RECCA) while recognizing the centrality of Afghanistan for peace, prosperity and stability of the entire geographical region surrounding it, also emphasizes the need for a comprehensive approach and participation of the international community in the economic development (RECCA, 2009).

Massive international presence and support both humanitarian and military after almost two decades of continuous peace building and economic development effort in this country seems still to be struggling though. With the renewed emphasis on the Afghan-led and owned peace and country development processes most recently the period of 2014 - 2025 was declared Afghanistan's transformation decade (Azamy, 2017). Before this, it took more than a decade for Afghanistan to finally forge its National Unity Government (NUG) and make regional connectivity and integration among its top priorities. Yet the national unity is still raising serious concerns given the most recent disagreement over the results of the 2019 Presidential elections and the need for the major political factions to work out an agreeable power-sharing arrangement. With this finally settled earlier in mid-May 2020, the unity government in the rest of the ongoing transformative decade claims readiness to make major advances in negotiating peace and turning Afghanistan into a vibrant regional transit and infrastructural hub of Asia. Much still remains to be seen how things will evolve and succeed under the newly reset government collation. At least the two-part Afghan leadership of today confirms the readiness, on the one hand, to start long-awaited peace-building talks with the other key political rival force, the Taliban, while, on the other hand, to continue reforming government, governance and economic development areas of top priority including a series of earlier announced cross-continental infrastructural initiatives with direct involvement of Central Asian countries such as (CAISS 2016):

- Turkmenistan-Afghanistan-Pakistan-India (TAPI) gas pipeline of 1814 km and construction worth US$ 10 bln and 33 bln m3 gas started in Dec-2015;
- CASA1000 electricity transmission line of 1222 km from Kyrgyzstan and Tajikistan to Afghanistan and Pakistan - unveiled in May-2016 and worth US$1.17 bln and 1300 MWt in capacity;
- Turkmenistan-Afghanistan-Pakistan electricity transmission known as TAP-500 KV Line;
- Lapis Lazuli Corridor – aimed at connecting Afghanistan to the Caspian, the Mediterranean, and the Black Sea through Turkmenistan, Azerbaijan, Georgia, and Turkey;
- The Five Nations Railways Corridor connecting China, Kyrgyzstan, Tajikistan, Afghanistan and Iran;
- China-Afghan Special Train project to connect Afghanistan with China via Kazakhstan and Uzbekistan.

Despite that success of all these initiatives will be conditional on the outcomes of the impending peace-building talks the cooperation development process has been launched and seems fully set to start making, hopefully, major advances in the rest of the transformative decade and beyond. At least the universally shared understanding that Afghanistan can either, help to connect, or, if instability continues, disconnect the region is fully there.

1.3. Afghanistan: While swimming alone

With ongoing international military, humanitarian and development effort the need to restore, rebuild, renew and further expand the much dilapidated water resources sector has been among the top priorities for the Afghan Government in the post-Taliban period. Agriculture being the backbone for people's livelihoods contributing over 30% to GDP is the biggest single water user accounting for 98% of all water withdrawals. Coupled with power generation these are the two main sectors of economy that currently drive water resources development in this country. President Ghani when first elected in 2014 and his national unity government made water management and construction of dams a priority for economic growth and development. To closely supervise water regulation and reforms in 2016 the Supreme Council of Land and Water headed by the Afghan President was founded (Danish, 2017). The actual rollout of water sector reforms began with the adoption in 2009 of a new Water code and a new Water Strategy based on which the boundaries of five river basins were determined, delineated and five river basin organizations established in Afghanistan (MEW, 2008). As earlier mentioned, the Ministry of Energy and Water was rested with main responsibilities for water sector reforms in cooperation with other concerned line ministries and funding support from multiple international donor community. At the same time considering the transboundary nature of most water resources in Afghanistan the infrastructural

donor support increasingly becomes conditional on avoiding "significant harm" to other riparian neighbors as prescribed by the 1997 UN Water Convention (Kakakhel, 2017).

From this perspective learning how to negotiate and come to terms with multiple riparians surrounding Afghanistan is another important task and priority that has to be performed. So far no major water sharing agreements or relationships have been concluded between Afghanistan and its neighbors, except for one with Iran signed in the remote 1973 on the Helmand River. However, even the latter is not much helping in sorting out the long-lasting disputes with Iran who is co-riparian on two river basins – the other being the Harirud River. The breaking news on grievances and disagreements about water allocation and harmful water infrastructure development with regard to the both shared Afghan-Iranian rivers are plentiful these days. Similarly with the Kabul River which is part of the larger Indus River Basin in South Asia. With Afghanistan unveiling ambitious plans to construct multiple dams and water reservoirs especially on the Kabul, Helmand and Harirud rivers in the attempt to harness its much untapped water potential, both Iran and Pakistan increasingly appeal to the international water law with strong objections and concerns that this is an infringement on their riparian rights. Similarly, strong are the objections of Afghanistan when something similar is planned or considered either upstream or downstream across its borders. Hence, water diplomacy and water disputes become a very hot topic these days in both internal and foreign politics in all countries sharing same water source regardless of their location along it (e.g. Karimi and Hulpachova, 2015; Mojtahed-Zadeh 2006).

On one such occasion in 2018, the Regional Environmental Centre for Central Asia (CAREC) as a neutral party hosted in Almaty a 3-day stakeholder consultation meeting between water sector experts and stakeholders from Afghanistan and Pakistan representing government, policy-makers, international donors, academia, non-governmental organizations, private sector etc. The aim was to explore the options and potential for Afghan-Pak cooperation over water sharing and management of the Kabul River Basin. Both parties generated a series of promising insights and prospects aimed at forging mutual trust, cooperation and benefit sharing in water resources management between Afghanistan and Pakistan including expanding regional cooperation with Central Asian countries to the benefit of both countries (LEAD-Pakistan, 2018).

1.3.1. Transboundary and very riparian

Afghanistan is predominantly mountainous and a water-rich country being home to 5 major river basins of which four are transboundary (FAO, 2013). Only a group of small mountainous rivers originating from the northern slopes of the Hindu Kush ridge and flowing towards the Amu Darya make up the only internal and smallest river basin of Afghanistan with less than 2 km^3 in annual flows, or 3% of the total renewable surface water resources endowment. Despite this, the irrigated farmland area in this basin is almost 20% of the country's total which is second only to the Helmand River. The other four major Afghan river basins are all transboundary with an estimated annual runoff of 55 km^3 (FAO, 2013). FAO provides the following water and irrigable land endowment characteristics for the five Afghan river basins.

TABLE 2.

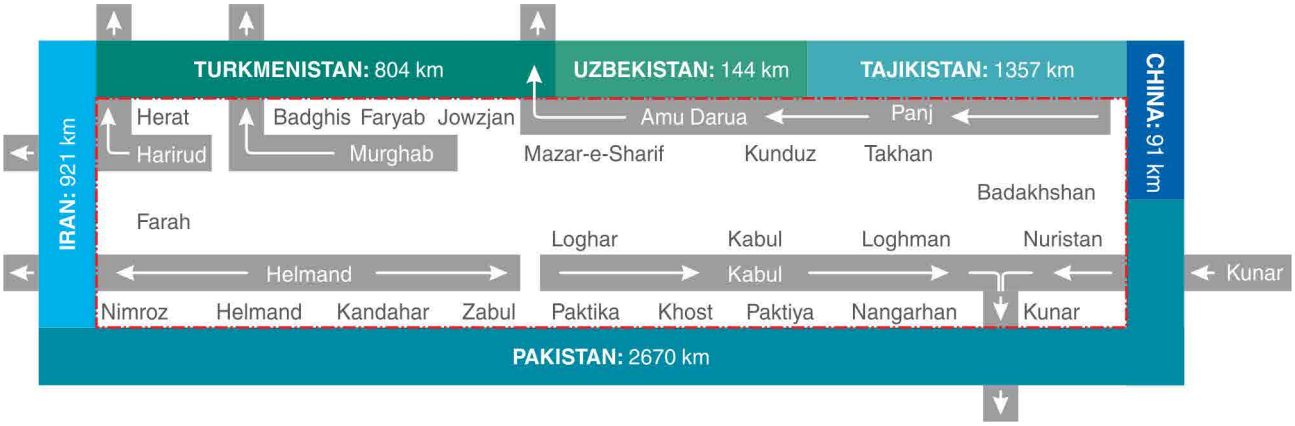
River basins of Afghanistan (adapted from FAO, 2013)

River Basin	Annual flow, km^3		Irrigable Area, ha	
	Available	Used	Available	Used
Amu Darya	22.0	5.3	402,100	354,000
Harirud-Murghab	3.1	1.3	300,900	172,500
Helmand	9.3	5.4	1,376,000	475,800
Kabul	20.8	5.2	484,100	306,000
Northern rivers	1.9	1.9	624,800	237,800
Other			20,580	13,880
TOTAL	**57.1**	**19.1**	**3208480**	**1,559,980**

On all these rivers the country enjoys an upstream location to almost all its five riparian neighbors. Only along the Afghan-Chinese border in the extreme north-east corner there are no rivers crossing or flowing along it. It is only 91 km long which is negligible comparing to the total border length with all the other surrounding countries of almost 6,000 km (CIA, 2020). The streamlined map below provides a simplified view of all Afghanistan's borders and the four transboundary river basins that the country directly shares with five riparian countries – Tajikistan, Uzbekistan and Turkmenistan in the north, Iran in the east and Pakistan in the south and south-east.

FIGURE 1.

Streamlined map of Afghanistan's borders and transboundary river basins



2. CAREC AND AFGHANISTAN

2.1. An overview of the CAREC approach to water governance and river basin reforms

As far as water resources are concerned IWRM is particularly the framework that came to prominence in the last thirty years to inspire both governments and development actors in devising and implementing water sector reforms world-wide. Since the early 2000's this important framework is increasingly adopted in all countries of the Aral Sea basin including Afghanistan. The pace of adoption by each country, however, varies and takes time to fully operationalize. We have already pointed elsewhere on commonalities and differences that the countries of the region have while going through the reform processes (Yakubov, 2020). The most frequent difficulties that countries experience when operationalizing their river basin reforms are scale-related. CAREC has been consistently stressing on the need for rescaling in certain situations for better fit and reach. Water governance which is normally operationalized by large river basins is a particular point in case. This has become most common practice in river basin management reforms especially as far as the involvement of multiple public and sectoral interests is concerned. As a result many pubic groups and sectoral interests and needs at lower sub-basin levels remain largely ignored increasing the risk for potential conflicts and disagreements. This is equally relevant for in-country and transboundary basin contexts. In transboundary situations the issue gets even more sensitive and complicated when interests and needs of riparian sides sharing one cross-border water source continue to be ignored. Transboundary areas with multiple small and mid-size rivers associated with large international river basins such as in the Ferghana, Chu, Herat and other similar valleys across the region are especially fraught with water sensitivities and the frequent breaking news that raise concerns. One way of approaching the issue would be to split such river basins into smaller natural hydrological units for

better identification, organization, consultation and involvement of multiple stakeholder groups that might be there. The methodology and local expertise to do this is well-developed by now and available for further dissemination. Known as the Small Basin Governance and Planning Scheme it has been tested and applied in multiple rivers and country settings across the entire region including Afghanistan (Yakubov, 2020). The thing which is probably required in addition to boost the wider spread of the scheme is more explicit recognition and support from the governments of the ASB states and major regional cooperation organizations such as IFAS, the Central Asia Regional Economic Cooperation Program and the like. Otherwise, fully operational exemplars, blueprints and the methodology coupled with required people's capacities are established and available for further replication in each country. What is also important as far as transboundary settings are concerned is that the scheme proves extremely useful as a water diplomacy tool to effectively prevent the emergence of disputes and disagreements that are otherwise commonplace in much volatile cross-border grassroots situations.

2.2. Building the case for regional integration of Afghanistan

Building on the earlier mentioned global, regional and national development efforts, plans and initiatives as well as the general anticipation for successful transformative process in Afghanistan in the coming years, the Regional Environmental Centre for Central Asia (CAREC) as a regionally recognized integrative platform and development cooperation actor has been consistently taking steps since the early 2010's to widen its geographical reach and presence beyond the five founding CA states by engaging with Afghanistan in a number of ways to shape and secure long-term relationships, commitments and cooperative actions. The engagement followed a simple logic along the following lines:

- Initiate contacts using well-established tools to generate interest and longer-term involvement
- Identify key governmental and non-governmental in-country partners for regular communication, interactions and exchange on issues of mutual interest
- Establish in-country presence and step up engagement and exposure of the key partners to regional matters and processes
- Consolidate engagement making it more meaningful and comprehensive

Each of these are elaborated in the following sections.

2.3. Initiating contacts: Educating and linking new generation of leaders

The steps that evolved from this simple logic perfectly fell under CAREC's regional mandate and its role as a regional change agent. The entry point for engagement became the Central Asian Leadership Program (CALP) that CAREC runs annually since 2010 with support of different international development partners to strengthen the capacities of young environmental leaders from across the region. It is a two-weekly intensive, highly competitive and popular training course that brings together and exposes the young leaders to the most up-to-date environmental knowledge, experience and expertise. CAREC started inviting applications from Afghanistan from CALP-4 in 2013. While initially, the focus was on those who represent non-governmental sector and academia, starting from CALP-7 (2016) and with support from USAID-CAREC Smart Waters project it is governmental agencies and organizations that provide most of the participants. Up until now, CAREC has organized 10 CALP events including seven attended by the young leaders from Afghanistan. The procedure would normally involve posting an open call to invite online applications through a very competitive process and selecting the ultimate participants – five per each country. Considering the last seven CALPs attended by Afghan representatives, CAREC is proud to have contributed up until now to the capacity development of 27 young Afghan leaders of which five are females. They come from a whole range of different sectors and organizations representing national government, non-governmental organizations, research and academia. With 280 people who have graduated from the program since its launch in 2010, the Afghans make up a healthy 10% of the total. Particularly important is that all these different young people from across the region are part of a close alumni network that they maintain through regular communication, exchange and periodic reunions at both professional and casual levels.

2.4. Identifying key in-country partners and establishing in-country presence

A wealth of useful contacts and relationships resulting from the flagship leadership program allowed CAREC to identify key governmental, non-governmental, research and academic actors in Afghanistan dealing with natural resources, environmental issues, agriculture, international relations etc. and establish regular communication and exchange with them. Among these are a whole range of ministries and national agencies responsible for energy, water, environment, agriculture, finance, foreign affairs, municipalities as well as multiple universities, think tanks and other organizations from across Afghanistan (e.g. Kabul, Mazar-e-Sharif, Balkh, Nangarhar, Kandahar, Herat).

In the course of regular communication and information exchange with the Afghan partners, water sector reforms and regional cooperation over shared water resources emerged among the most important topics of mutual interest around which specific actions started to evolve, jointly developed and implemented. In fact, this allowed to build a strong case for including Afghanistan in one of the regional water cooperation projects and start ground level engagement in this country with specific focus on one of its transboundary river basins shared with Central Asia – the Lower Harirud which is part of the larger Murghab-Harirud river basin. Thus, Afghanistan became the sixth country to join the five CA states in an innovative capacity development, trust building and river basin management reform activity with funding support from USAID. To support the ground level operations and successful implementation of the USAID - CAREC project, CAREC in 2016 established a fully staffed and operational office in Kabul on the premises of one its key national partners in Afghanistan the National Water Regulation Authority (formerly, the Ministry for Energy and Water until February 2020).

2.5. Stepping up engagement, in-country expertise and regional exposure

As a result, Afghanistan over the last five years is constantly in the radar of major bilateral, regional and international interactions, communications and events in addition to its own country-specific component. The activities range from full-time university studies for Afghan students to short-term summer schools, training workshops, study tours, conferences, webinars, academia network gatherings, steering committee meetings in addition to major regional and international events such as International Environmental Forum, Regional Climate Change Conference, World Water Weeks, Global Water Summits etc. What is remarkable and noteworthy in the context of global water events participated by Afghanistan side-by-side with other CA countries is that every time the parties have to work out and come up with a regionally agreed and shared position towards issues and topics discussed and debated globally.

All these activities target a whole variety of different audiences at different levels and scales from Master students attending their full-time studies side by side with their CA peers to high-level policy-makers and a whole range of professionals, educators, researchers, service providers and users at national, subnational and very grassroots levels. Quite remarkably, on many occasions the initiative to conduct joint events would emerge from dynamic demand when something new is learnt during some scheduled or random event that further triggers interest and requests for fuller coverage of the topic. Just to illustrate, during a networking event professors from Turkmenistan and Afghanistan get to know each other due to commonalities in their research work resulting in the Turkmen side asking the Afghan professors to deliver a series of online webinars for their specialists. On a different occasion, a Ministry of a Central Asian country would host an Afghan delegation of water engineers for a study-tour in their country when so requested by the Afghan Ministry that was earlier impressed by experiences of that CA country in managing and maintaining hydraulic structures etc. Similar requests come also from a range of donor organizations that CAREC is cooperating with in the region. On many occasions they are interested in inputs and insights from our Afghan partners as part of their ongoing projects, events or consultations elsewhere. CAREC have been always happy and ready to leverage such inputs and contributions. For instance, in 2018 CAREC facilitated the inclusion of Afghanistan first as observer and later as permanent member in the Regional Platform of the representatives of Foreign Ministries and Parliaments of CA countries as part of projects and events supported by the EU and SIWI.

Similarly, in 2019, representatives of Afghanistan participated in the Budapest Water Summit as part of the SDC-supported Blue Peace for Central Asia Initiative to present the regional case of cooperating over shared waters. All these come in addition to the Regional Steering Committee (RSC) meetings of the USAID-CAREC Smart Waters project that are held twice a year since 2016. The RSC is made up of representatives of four to five ministries from each of the 6 project countries with Afghanistan always represented by the Foreign Ministry, Ministry of Energy and Water, National Environmental Protection Agency, Ministry of Agriculture, Irrigation and Livestock and a number of Afghan Universities. So apart from project matters the RSC members, donors, project staff and beneficiaries spend 2-3 days together with ample opportunities for various exchanges, discussions and exposures on both personal and institutional levels. Such meetings and discussions have already resulted in a whole range of joint initiatives, signed MoUs and long-term commitments on topics and issues of mutual interest to the agreeing parties.

In other words, the close engagement and exposure of CAREC's key partner organizations, their representatives and beneficiaries from Afghanistan to different contexts, issues, experiences and events in Central Asia of both regional scale and more country-specific, has much increased in the last couple of years and become a norm. It is still much less so, however, with the exposure of Central Asian countries and their representatives to similar contexts and issues (let alone events) in Afghanistan except through regular communications and meetings, both formal and informal, with Afghan representatives whenever they come to Central Asia as well as through their reports, presentations and other materials. As Afghanistan is still pictured and considered an insecure place for visitors, none of the regional events so far could be held in this project country despite the multiple invitations and assurances that would regularly come from the Afghan side. Nevertheless, the indirect exposure of Central Asian partners to water sector reforms, issues and in-country activities in Afghanistan is continuously in the rise and much appreciated at different levels.

2.6. Consolidating and focusing the engagement action

To better understand the needs and opportunities as the basis for consolidating and making the engagement with Afghanistan more meaningful and targeted a number of initiatives have been undertaken in the last couple of years that among other things included a number of country-specific fact-finding studies.

- Country-specific studies

Needs assessment is one of them. Conducted in 2017 as part of the USAID-CAREC Smart Waters project the study reveals a number of important gaps and priority needs for Afghanistan's water sector reforms with focus on national and basin level institutions, educational and professional training system, human resources, their skills set as well as lacking expertise and technical capacity (AREU, 2017). It also allowed important inputs from the national partners and other key stakeholders regarding a specific transboundary river case where a first ever IWRM-based water governance and basin planning scheme in Afghanistan could be tested. This was required because in the earlier stages the Amu-Panj river basin was considered as the best option due to direct transboundary implications for CA basin countries. However, due to the worsening security situation in the basin the national partners thought the locality was not safe enough to start the ground level operations immediately. Therefore, the second best option had to be considered. Ultimately, the lower part of the Harirud river basin was confirmed instead for piloting the new basin governance scheme.

Launching the new governance scheme in the basin required an additional diagnostic study to look into a series of important salient features and characteristics of the Lower Harirud that was commissioned in 2018 and fully completed in 2019. The study among other things provided the primary data and information to allow comprehensive stakeholder analysis, public consultations, drafting the basin plan and conducting an important capacity building series for both local trainers and the ultimate basin beneficiaries (Balina Global Group & Aqua Engineering, 2019).

- A roadmap for targeted actions

Based on identified gaps, needs and background data allowed putting together a comprehensive action plan and a roadmap for Afghanistan to start consolidating its water sector reforms with wider transboundary agenda in mind and focus on a regionally shared system of

- water education and professional development,

- peer networking through regular regional exposure and communication,
- targeted support in key national policy and water sector reform needs, and
- a pilot launch of a complete river-specific basin governance and planning scheme package.

- Educating a new generation of water managers

As per the roadmap for Afghanistan in addition to the above basin level institutional and capacity support, eight (8) Afghan students nominated by their respective line ministries between 2017 and 2019 were admitted and enrolled for full-time two-year IWRM Master Program at the Kazakh-German University in Almaty studying side-by-side with their peers from across Central Asia with support from the USAID-CAREC Smart Waters project. Some of them have already returned back to their nominating employer organizations to resume their jobs, some still continue studying while some most talented even qualified for full-time PhD studies elsewhere.

- Facilitating peer networks

Region-wide peer-to-peer communication and exchange initiated by CAREC in the frames of different development projects is currently taking place on a regular basis at different levels and scales, both personal and institutional, from students to water professionals to policy-makers to academics, researchers etc. Many of them are professionally networked on a community of practice basis as was earlier exemplified by the CALP alumni network. Similar networks and community of practices have been established and function among students, academia and basin councils. For the latter, for instance, the USAID-CAREC Smart Waters project initiated a Forum of Small Basin Councils two years ago which is conducted annually. The forum is open to all multi-stakeholder river basin institutions and platforms in Central Asia and Afghanistan to join, gather, exchange, raise and discuss issues and topics of common interest and concern. So far two such forums were conducted – in 2018 in Bishkek, Kyrgyzstan and in 2019 in Mary, Turkmenistan. The third SBC Forum was initially scheduled for June, 2020 in Almaty, Kazakhstan. However, due to the still ongoing COVID-19 restrictions world-wide the event is currently postponed until the quarantine measures are fully lifted and international travel is resumed.

In the meantime to support, maintain and further sustain in the long-term communication and exchange of all the established networks, the Smart Waters project supported the establishment of modern communication room facilities equipped with IT equipment and high-speed Internet connection in a number of less fortunate countries where communication and travel is frequently compromised for various reasons. Afghanistan being one of them was supported in establishing two such facilities – one in the Water Resources Department of Kabul Polytechnic University and one in the National Agency of Nature Protection (NEPA) of Afghanistan. The experiences so far suggest high efficiency, convenience and flexibility that such facilities provide from many perspectives including time, costs, logistics etc. Also, communication of the sort proves very dynamic and demand-based. All what is needed is just for people to know each other and get along well. Everything else can be easily arranged and organized at one's fingertips using internet connection and modern means of communication. No visas, no long travels, no tiresome border-crossings. The still ongoing massive outbreak of coronavirus world-wide following by global lockdown is a good case in point proving the exceptional utility and convenience of online communication.

- Pilot launch of a river-specific basin governance and planning scheme

As earlier mentioned the Lower part of the Harirud river basin was proposed for piloting a complete water governance and basin planning scheme package under the USAID-CAREC Smart Waters project . Upon completion of the situational analysis the process started with the development of local capacities through a series of training of trainers workshops. Once fully qualified they took it over further to start training the key basin stakeholders on the ground. A series of step-by-step organizational and basin planning workshops were conducted in the city of Herat where the Lower Harirud River Sub-basin Administration is located. These were aimed at basic skills to identify, mobilize, consult and organize stakeholders around basin issues and jointly start preparing, prioritizing and planning the implementation of local solutions. All this led to the ultimate establishment in June, 2019 of the first ever Sub-Basin Council in Afghanistan. Following this it took another year to jointly draft, develop, prioritize and fully agree on the first ever Basin Plan for the Lower Harirud sub-basin. The document sets both the jointly agreed overall goals and objectives for the basin in mid- and short-term perspectives

as well as the priority list of issues to be addressed, hopefully in the first couple of years. With all this in place Afghanistan has set up a mechanism, approach and local capacities that can be further replicated in other river basins.

- Soliciting the full CAREC membership

One more result of the USAID-CAREC Smart Waters project which is worth mentioning regarding the successful engagement with Afghanistan and bringing it up to the next level is the recent solicitation by the CAREC management before the CAREC Board to consider giving this country the full membership status as a CAREC member state. The solicitation was based on formal request received in December, 2019 from the National Environmental Protection Agency (NEPA) of Afghanistan on behalf of the Afghan Government. The response from the CAREC Board is still pending during the nearest Board meeting later this year. The rationale behind this solicitation was while maximizing environmental and sustainable development cooperation with Afghanistan to seize multiple funding opportunities available in this country through the outlays of development funds by both the Afghan Government and the multiple donor community.

3. CONCLUSION AND THE WAY FORWARD

The case of Afghanistan being, on the one hand, one of the major headwater nations to the multiple international river basins that it shares with the other surrounding riparian countries, while on the other, not being part of any regional water cooperative mechanisms conjures the image of a fairly self-reliant and self-sufficient super-nation that does not want to commit itself beyond what is needed for its own personal existence and use… The perfect hydro-hegemon of some sort – the idea that any nation would probably fancy to indulge in at some point. Unfortunately the reality is different and most likely explained by the country's rather weak position on a number of fundamentals that make the surrounding countries fairly apprehensive to start readily integrating with this otherwise water-rich country using existing or new cooperative mechanisms and processes. Despite this rough reality things are changing with the world and the region slowly opening and warming up towards fuller integration and involvement of Afghanistan.

CAREC as a recognized regional development cooperation platform focusing on environment and sustainable development has been among the active promoters, supporters and facilitators of the early integrative processes with Afghanistan in a number of important environmental domains of both regional and national scale. Environmental and especially water cooperation being one of them where significant critical mass has been generated in at least the last eight years laying the firm foundation for a more comprehensive programmatic engagement and integration of Afghanistan in regional matters. These range from well-connected regional peer-to-peer networks established with key governmental and non-governmental actors in Afghanistan to dozens of young people and leaders completing Central Asia's flagship university and training programs to physical in-country presence to a whole range of locally facilitated water sector reform efforts, expertise, facilities and model river basin institutions.

In this transformative age where sustainable development much depends on the ways things are managed, good governance and inclusive institutions are increasingly seen as the way forward to solving massive underperformances that plagued the governmental sector in delivering public services across the board. Natural resources and environment are part and parcel of this global management crisis requiring change in the way they used to be managed. This particularly concerns common pool resources (CPRs) such as water whose management failures across the globe are well documented and have become notorious to the extent that "inspired" the use of some of the finest metaphors such as "the tragedy of commons" (Hardin, 1969). The fact that CPRs have to be shared in one way or another between people within a community or between different communities or different countries, led to the realization that managing CPRs is all about managing conflicts (Priscolli & Wolf, 2011). And that the best way to manage conflicts is to try to transform them in a way that allows people and countries to work out and agree on collective rules so that the use of shared resources is more predictable and bound by collectively agreed arrangements (Ostrom, 1990). As CPRs tend to often cross borders and jurisdictions, so does the

scale of "the tragedy" they are associated with if mismanagement or miscommunication continues. Building on this premise and the central geographic and headwater location of Afghanistan within Asia one can clearly see the great potential, treasures and benefits for both the country and the region as a whole that still remain much untapped for various reasons. With positive critical mass already in place and ready to serve as the starting ground for major advances in both peace-building efforts and economic development of Afghanistan CAREC will keep tapping the still hidden riches of truly regional cooperation so that they can be used and shared to the ultimate benefit of all cooperating countries.

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