



TASK FORCE
on
**WATER GOVERNANCE
AND POLICY**
REPORT - I
2026



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Executive Summary

Pakistan's water woes have two distinct dimensions. The first is the water distribution dispute with India, which worsened following India's decision to place the Indus Waters Treaty (IWT) in abeyance in April 2025; the second concerns domestic hydro politics arising from a badly mismanaged water sector. Concisely, the hydrological story of Pakistan makes one conclusion unavoidable: water security is determined as much by how much water enters the Indus Basin as it is by how intelligently water is managed, measured, and incentivized within it. Policy must therefore align basin-level realities with farm-level behavior, turning millions of local decisions into a system-wide resilience strategy.

Immediate action on water is no longer a choice; it is an imminent compulsion. Pakistan's legal case on the IWT is quite strong, as India's suspension of the Treaty and the Law of Treaties. Pakistan's most viable way forward on this front is to seek the constitution of a fresh Court of Arbitration on this matter, supported by sustained and active diplomacy to bring the issue into the domain of concern of major powers. Pakistan should also be open and willing to enter into inter-governmental negotiations with India, possibly through the good offices of the World Bank, for a revision of the Treaty according to Article XII of the Treaty.

The potential role of China utilizing its leverage to bring India onto negotiation table should not be underestimated; rather, it must be carefully deliberated and actively pursued. Pakistan's elevated position internationally after May 2025 provides a unique opportunity to agitate this issue at all levels, which will not be the case for long. There is no doubt that India seeks to fully exploit the waters of the River Chenab and, with passing time, it will be in a position to have control over its flows, given the pace at which it is undertaking projects on this river. This way forward will only be strengthened by drastic reforms in the domestic water sector.

There is also a need to strengthen inter-provincial coordination and cooperation in water management through the effective implementation and operationalization of Provincial Water Acts in Punjab, Khyber Pakhtunkhwa, and Sindh. This should include harmonization of regulatory frameworks, data sharing mechanisms, and coordinated planning for water conservation and utilization. A structured inter-provincial water dialogue aimed at resolving existing water distribution grievances should incorporate modern technical methods for water measurement, monitoring, and distribution, alongside an objective reassessment of the 1991 Water Apportionment Accord where necessary. Furthermore, the dialogue must address the current status of groundwater extraction, unaccounted usage, and develop a comprehensive regulatory and monitoring mechanism to ensure sustainable groundwater management.

PAKISTAN'S WATER CRISIS: THE WAY FORWARD

REPORT I

1. Background

Water is among Pakistan's top national security challenges, as the country is becoming a highly water-scarce and faces the risk of sliding towards absolute water scarcity. In addition, climate change-related factors have resulted in Pakistan facing incessant floods, cloudbursts, and torrential rains, bringing country-wide destruction with severe social and economic consequences.

In recent years, Pakistan's water management has been further complicated by India's consistent violations of the Indus Waters Treaty (IWT) of 1960. The IWT was designed as a crucial water-sharing mechanism between the two countries. Consequently, India's unilateral decision on April 23, 2025, to hold the IWT in abeyance, the four-day war between the two countries in May 2025, and the resulting total breakdown of communication with India have all made Pakistan's water issues even more problematic and acute. A holistic approach to addressing Pakistan's water challenges is therefore imperative and no longer a matter choice.

Towards this end, in October 2025, the BNU Center for Policy Research (BCPR) established an independent Task Force for Diplomacy and Politics on Water¹ to discuss a comprehensive approach to addressing Pakistan's water security challenges. The Water Task Force thus aimed to formulate policy recommendations beyond the existing IWT framework, focusing on diplomatic, legal, and domestic measures. The Terms of Reference (ToRs) of the Task Force stipulated a focus on two key dimensions: (i) the vitality of IWT as a credible instrument for regulating water issues with India in the future; and (ii) substantive reforms in Pakistan's water management system to address water scarcity, its challenges, and the impact of climate change.

¹ This is an independent Task Force with all its members joining in their individual capacities.

2. Composition of the Task Force

Conveners

- **Dr. Moeed Wasim Yusuf**
Vice Chancellor, BNU; Chairperson, Task Force.
- **Ambassador (R) Mansoor Ahmad Khan**
Director BCPR; Convener, Task Force.
- **Dr. Zainab Ahmed**
*Deputy Director, BCPR; Assistant Professor/Program Lead, Political Science, BNU;
Secretary Task Force.*

Distinguished Members

- **Ambassador Jalil Abbas Jillani**
Former Foreign Secretary of Pakistan.
- **Mr. Danyal Hashmi**
*Advisor Water Resources, NESPAK; former Project Director, Glacier Monitoring
Research Center, WAPDA.*
- **Mr. Feisal Naqvi**
International Law Expert.
- **Mr. Ali Sultan**
International Law Expert.
- **Dr. Saleem Ali**
Professor of Energy and Environment, University of Delaware.
- **Dr. Daanish Mustafa**
Department of Geography, King's College London.
- **Dr. Humayoun Akram**
Assistant Professor of Hydrology, Institute of Environmental Sciences and Engineering.
- **Dr. Afreen Siddiqi**
Research Scientist, Massachusetts Institute of Technology.

- **Dr. Maira Hayat**

*Assistant Professor of Environment and Peace Studies, Keough School of Global Affairs;
Concurrent Faculty, Department of Anthropology, University of Notre Dame.*

- **Dr. Erum Khalid Sattar,**

*SWM Program Director; Lecturer, Tufts Institute of Environment; Water Diplomacy Track
Leader, Tufts University.*

- **Dr. Syed Mohammad Ali**

Lecturer, Advanced Academic Programs, Johns Hopkins University.

The Task Force may invite additional members based on their expertise or relevance as its work makes progress.

3. Methodology and Proceedings

During the sessions of the Task Force, experts undertook an in-depth analysis of Pakistan's water challenges, including hydrological dependencies, water consumption patterns, the strengths and constraints of IWT, and the development of sustainable governance strategies in the short, medium, and long-term through an integrated approach involving collaboration among relevant federal and provincial institutions and other multiple stakeholders. The Task Force held three online meetings between October and December 2025, focused on the following two key questions:

- 1) Given the Indian decision to hold the IWT in abeyance, what are Pakistan's options in political, legal, and diplomatic spheres with regard to the Treaty?
- 2) What are the challenges and gaps in Pakistan's water management, taking into account major factors such as population growth, efficient uses of water in agriculture, domestic and industrial consumption, inter-provincial water apportionment accords, ground water extraction, impact of climate change, excess water or flood management? How can a balanced, forward-looking approach be developed to address these challenges and resolve Pakistan's water crisis?

The members shared their perspectives, supported by data and evidence-based arguments. The deliberations of the Task Force – including arguments and counter-arguments, areas of agreements and divergences, and recommendations on possible solutions – are summarized in the following

sections of this report. The final report has been prepared by Ambassador Mansoor Ahmad Khan and Dr. Zainab Ahmed and individual task force members may not concur with all statements and analyses presented here.

4. Indus River Basin

Pakistan's water system is fundamentally shaped by the Indus River Basin, one of the largest and most intensively irrigated river systems in the world. Since the major tributaries of the Indus River originate in India and flow into Pakistan, India's stoppage of the water flows into Pakistan in 1948 led to a prolonged process of negotiations. Starting in 1951, the World Bank became involved in the negotiations, and that process eventually resulted in the Indus Waters Treaty of 1960.

For the first four decades of its existence, the IWT served as a rare beacon of accord between India and Pakistan. However, after India decided in the late 1990s to push ahead with the construction of the Baglihar and Kishenganga projects, discussions between the two countries became increasingly fractious. This resulted first in proceedings before a Neutral Expert regarding the Baglihar Project (decided in 2007), and subsequently in proceedings before a Court of Arbitration regarding the Kishenganga Project (decided in 2013). Further, as India pursued its plans to construct multiple new projects on the Western Rivers, the nature of the dispute evolved from disputes "under" the IWT to disputes "about" the IWT. India and Pakistan thus became engaged in a prolonged debate as to whether certain issues were to be resolved by either a Neutral Expert or a Court of Arbitration.

Notwithstanding this debate, India's decision on April 23, 2025, to hold the Treaty in abeyance was still an unprecedented development with far-reaching implications. Following a meeting of India's Cabinet Committee on Security, the Foreign Secretary of India announced at a press briefing that India had decided to hold the Treaty in abeyance "until Pakistan credibly and irrevocably abjures its support for cross-border terrorism." This decision was subsequently communicated in writing through a letter dated 24 April 2025 from the Secretary to the Indian Ministry of Jal Shakti (Water).

In this letter, India cited fundamental changes in the circumstances requiring a reassessment of obligations under the Treaty. These alleged changes include significantly altered population demographics, the need to accelerate the development of clean energy and shifts in the assumptions

underlying the sharing of waters under the Treaty. India further contended that the obligation to honour a Treaty in good faith is fundamental, and alleged that “sustained cross-border terrorism” by Pakistan targeting the so-called “Indian Union Territory of Jammu and Kashmir” has impeded full utilization of India’s rights under the Treaty. India also alleged that, apart from other breaches it claimed Pakistan had committed, Pakistan refused to respond to India’s request to enter into negotiations as envisaged under the Treaty and was therefore in breach of its obligations.

5. Functioning of the Indus Waters Treaty (IWT)

The IWT established a new pattern for both the availability and management of river water resources to Pakistan’s essential water needs. The Treaty devised a comprehensive system of overseeing the sharing of water between India and Pakistan.

- According to Article II, India was granted exclusive rights on the Eastern Rivers (Sutlej, Ravi, and Beas) while Article III provided Pakistan with the right to receive for unrestricted use all water of the Western Rivers (Indus, Jhelum, and Chenab) except for domestic use, non-consumptive use, agricultural use and generation of hydroelectric power as set out in the Treaty. Both parties have an obligation to allow the natural flow of respective rivers, except for domestic and non-navigational uses, without any intervention.
- In pursuance of Article IV, an alternative infrastructure was built in Pakistan on three Western Rivers to replace the supplies for the uses earlier met from supplies received in the Eastern Rivers during the transition period (April 1, 1960, to March 31, 1970). This Article binds both parties not to inflict any material loss to the other party’s allocated water flows and drainage systems in the case of non-consumptive uses and development. Pakistan was also under compulsion to maintain the four drains (Hadiara, Kasur, Salimshah, and Fazilka) flowing from India into Pakistan. The Treaty regards the usage of natural channels for draining excess or flood water as the right of both parties, and in case of damage none is under obligation to pay damages.
- The Treaty also defined procedures for the sharing of water flows, requiring both parties to communicate extraordinary discharges to the maximum practicable extent. Under Article VI, both parties are under an obligation to share the data of daily discharges, extractions and withdrawals, escapages from canals, and deliveries from link canals.

- Article VII addresses the commitment of both parties to future cooperation in the installation of hydrologic observation systems, new drainage works, and engineering projects, as mutually agreed.
- Article VIII establishes the Permanent Indus Commission, comprising Indus Waters Commissioners from both countries, appointed by and responsible to their respective governments. The Commission is mandated to ensure continuous communication, exchange of data, issuance of notices, responses, study the hydrological infrastructure by one party that may affect the other, and the resolution of questions and problems arising under the Treaty.
- Article IX mandates at least one compulsory meeting of the Commission annually, along with a general tour or inspection of relevant sites and projects once every five years to ensure regular and effective coordination for the functioning of the Treaty. This Article also specifies detailed procedures for the settlement of questions, differences, and disputes that may arise in the implementation of the Treaty.
- More specifically, Article IX of the IWT sets up two independent and parallel dispute resolution mechanisms, the first being the resolution of differences by a Neutral Expert, and the second being the adjudication of disputes by a Court of Arbitration.

Article IX of the IWT thus provides in relevant part as follows:

- Any “question” which arises between the Parties shall first be examined by the Indus Waters Commission, which shall endeavor to resolve the question by agreement.
- If the questions cannot be resolved by agreement, a “difference” will be deemed to have arisen.
- If that “difference” falls within the competence of a Neutral Expert as set out in Annexure F of IWT, then it shall be decided by a Neutral Expert.
- If the “difference” does not fall within the jurisdiction of a Neutral Expert, then it shall be treated as a “dispute” and decided by an ad hoc Court of Arbitration to be established as per the provisions of the IWT.
- If the two countries do not agree as to whether a particular difference falls within the competence of a Neutral Expert, then Annexure F, Para 7 of the treaty provides that a Neutral Expert shall determine whether or not such matter falls within his competence.

- Article XII provides that the treaty may be modified by a duly ratified treaty concluded for that purpose between the Governments. However, unless so modified, the Treaty shall continue in force until terminated by a duly ratified treaty concluded for that purpose between the two Governments.
- The IWT has Annexures from A to H, which address various matters provided for in the Articles of the Treaty. Annexure A deals with the procedure of exchange of notes between both parties, Annexure B is about the usage of water from a few tributaries of Ravi for agricultural uses, while Annexure C authorizes India for agricultural usage of waters from Western Rivers. Annexure D and E deal with the development of hydro power and storage projects of India on the Western Rivers, outlining a technical design to abide by. Annexures F and G pertain to the detailed procedures of appointing a Neutral Expert and Court of Arbitration in cases of differences and disputes. Annexure H provided the Pre-Treaty to post-Treaty transitional arrangements.

Table 1: Limited Storage allowed to India on the Western Rivers²

River System	General Storage (MAF)	Power storage (MAF)	Flood Storage (MAF)
The Indus	0.25	0.15	Nil
The Jhelum (excluding Main)	0.50	0.25	0.75
The Jhelum (Main)	Nil	Nil	As provided in para 9 of IWT
The Chenab (excluding main)	0.50	0.60	Nil
The Chenab (Main)	Nil	0.60	Nil

6. Post-IWT Water Flows in Pakistan

In the post-IWT period, Pakistan has received, on average, about 134 million acre-feet (MAF) of river inflows each year, based on post-Tarbela records from 1976–2024. Nearly 95% of this water

² Provided by Syed Jamat Ali Shah, Former Indus Water Commissioner of Pakistan, 2018.

comes from the Western Rivers—Indus, Jhelum, and Chenab – while the three Eastern Rivers—Ravi, Beas, and Sutlej—now contribute only about 6.2 MAF annually following the IWT. As a consequence of the Indus Waters Treaty, Pakistan’s water security is deeply dependent on a small number of rivers and, therefore, highly sensitive to upstream, climatic, and operational shocks.

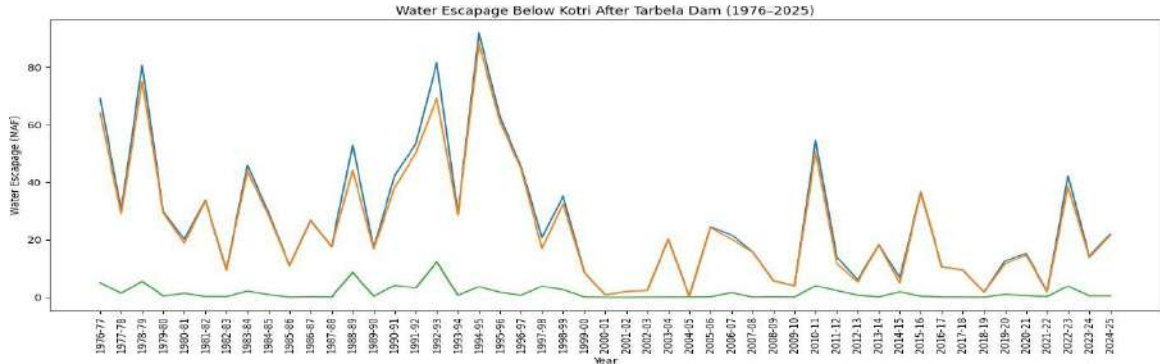
However, Pakistan’s water system also contains the elements of resilience: mountain storage, groundwater buffers, large infrastructure, and experienced institutions. What it lacks is alignment. When hydrology, institutions, and farmer behavior are connected through measurement and incentives, the system can move from crisis management to risk management. Water security, in this sense, is not built only with dams or canals—it is built by turning millions of everyday water decisions into a shared national strategy.

It is also important to underline the distinction between the water flowing into Pakistan from upstream sources in the territories under Indian control and those originating inside Pakistan. The data indicates that almost half of the water into Pakistan’s territory is coming from India, while the other half is domestically originated. River Chenab is 100% flowing from India into Pakistan, while the Indus is 70% domestically originated, the Jhelum is 44% within Pakistan, while the rest enters from India.

The overall sources of water into Pakistan’s Indus River system are:

- Ice melt 20 MAF
- Snow melt 90 MAF
- Rainfall 30 MAF

Figure 1: Water escapages below Kotri after Tarbela Dam (1976-2025)



Additionally, the terrain of the Indus River System does not allow India to immediately stop the flow of water of Western Rivers into Pakistan, nor is economical despite the fact that significant fraction of water flow enters Pakistan from Indian-held Kashmir and surrounding Indian territories. But over a longer term, the building of structures upstream on the Western Rivers by India in violation of the IWT can be problematic for the sustainable water supply on the Pakistan side, which can be further aggravated if the water management issues are not effectively addressed. In other words, while at a glance, Pakistan does not have any immediate or major water crisis, but deep down, the reality is quite stark.

7. Differences and Disputes between Pakistan and India on the IWT

From the very beginning, Pakistan and India have approached the implementation of the IWT from totally different perspectives. In the decades following the signing of IWT, Pakistan, having surrendered all rights on the three Eastern Rivers, devoted its energy and focus on the diversion of adequate water from Western Rivers to make up for the water which it previously received from Eastern Rivers. India, on the other hand, having completely tapped the waters of all three Eastern Rivers, gradually shifted its attention towards the storage of water on the upstream on Western Rivers while adopting a narrative as if the only resource apportioned between the Parties was in the form of the Western Rivers and Pakistan was hindering India from benefiting from its legitimate rights.

Initially, on the Eastern Rivers, India built a series of hydraulic infrastructures for not only maintaining its existing irrigation system and achieving a mega expansion of canal irrigated area in the states of Punjab and Haryana, but also diversion of the Eastern Rivers' waters to the non-riparian state of Rajasthan. Consequently, it developed capacity on the Eastern Rivers for generating 10,000 MW of hydropower, irrigating 20 million acres of agricultural land, and water storage of over 16 MAF.

On the Western Rivers, exploiting the treaty's provisions, India developed a series of hydropower projects on the upstream Chenab, Jhelum, and Indus rivers, such as 690 MW Salal, 390 MW Dul Hasti, 900 MW Baglihar, 105 MW Lower Jhelum, 480 MW Uri-I, 240 MW Uri-II, 330 MW Kishanganga, 45 MW Nimoo Bazgo, and 44 MW Chutak. Pakistan's objections to these projects were limited to compliance with the design criteria laid down in the IWT. Except for Baglihar,

Kishanganga, and Ratle, all other projects on Western Rivers were resolved at the bilateral level, which indicates the efficacy of the IWT's dispute resolution mechanisms.

Water-sector experts in Pakistan believe that after tapping almost all the waters of the Eastern Rivers, constructing projects like Baglihar (completed in 2008), Kishanganga (completed in 2018), Pakal Dul (near completion), Ratle, Kiru, and Kwar (under construction), and plans to develop another 5000MW in the next ten years, is part of a cascading approach to disrupt flows in the Western Rivers. Gradually, India began to escalate the water issues by using the bogey of terrorism. The Indian Prime Minister threatened to disrupt the flow of water to Pakistan. A debate on the possibility of revoking the IWT has also been prevalent in the Indian media. In 2016, the Indian government formed an Inter-ministerial Task Force to look into all the strategic aspects of the Treaty.

The annual meetings of the Permanent Indus Commission have not taken place since 2022. Furthermore, India has been refusing to arrange the General and the Special Tours of Inspection since 2019 and 2014, respectively. The complete exchange of data, as mandated by the Treaty, has also not been taking place for some years. On the other hand, India is pursuing the construction of new projects on Western Rivers. These actions constituted breaches and violations of IWT.

In January 2023, India addressed a letter to Pakistan asking to review and modify the treaty, alleging "material breach", but claiming in its letter to the World Bank that Pakistan had not followed the graded approach to dispute settlement as envisioned in the IWT, and the World Bank has also breached it by initiating simultaneously two processes of dispute settlement. Pakistan responded that any concerns relating to the Treaty should be raised at the level of the Permanent Indus Commission.

After two more letters, on August 30, 2024 India provided a list of the reasons for the IWT's review and modification, including fundamental and unforeseen changes of circumstances since signing of Treaty such as population demographics; India's obligations to generate clean energy; significant alteration of security landscape through alleged "cross-border terrorism"; reconsideration of dispute settlement mechanism; some transitional provisions of Treaty becoming obsolete; and undue restrictions on India's rights as upper riparian.

On October 8, 2024, Pakistan expressed its openness to hearing India's concerns at a neutral venue, with the caveat that such a discussion would not be construed as the start of formal negotiations unless the Parties develop a comprehensive understanding of the grounds for the Treaty's modification. Following the exchange of more letters, the Indian letter of April 8, 2025, set the deadline of May 8, 2025, for Pakistan to propose two sets of dates during May-June for holding government-to-government negotiations in New Delhi or Islamabad. But after the Pahalgam incident, on April 23, 2025, India held the Treaty in abeyance.

8. Shortcomings and Gaps in Pakistan's Approach to IWT Dispute Settlement

(i) Institutional Deficiencies

For the past six decades, the IWT has been the lifeline of Pakistan's water security and water needs. The IWT is a comprehensive international treaty that was negotiated by the World Bank with the support of eminent international water experts. Under the framework of the IWT, the donor countries and institutions injected huge funds into the alternative structures in storage dams, link canals, and associated engineering works for ensuring the replacement of water from Western into eastern rivers. However, since the signing of the IWT Pakistan has not devoted enough resources and attention towards strengthening its institutions relating to implementation of the Treaty including the office of the Indus Waters Commissioner. Despite the sensitive nature of the work, the Indus Waters Commissioner's Secretariat is relatively small and not resourced and equipped well to ensure timely, high-quality input/advice to the government on key decisions relating to Pakistan's response to challenges arising from India's aggressive approach towards Pakistan in the context of the IWT. At times, delays in the appointment of the incumbents have also impeded Pakistan's timely responses to many IWT issues. In comparison, India's Indus Waters Commissioner's office is more organized and well-resourced as it is part of the Central Water Commission (CWC), responsible for overall management of its water resources and policies.

(ii) Legal capacity deficiencies

The IWT is not just a simple bilateral agreement, but also a comprehensive international instrument involving the Treaty's mechanisms for resolving the questions, differences, and disputes that may arise in its implementation. Many analysts argue that in the decades following the signing of the IWT, Pakistan should have developed a strong legal team and institutional capacity for overseeing

the implementation of the IWT from a legal point of view. In practice, however, Pakistan has remained complacent in developing a strong legal capacity to anticipate and counter Indian moves to develop infrastructure on the upstream side, particularly on the Western Rivers in violation of the Treaty. In retrospect, on many key Indian projects, Pakistan's legal teams were not fully prepared to comprehend and respond to actual Indian intentions and machinations. This often puts Pakistan at a disadvantage while facing India's detailed engineering arguments. At times, Pakistan's legal positions were not formulated promptly and were also quite deficient substantively. Due to the legal deficiencies, on many instances, Pakistan's official processes lacked clarity to select the mechanism of the Neutral Expert or proceed towards utilizing the Court of Arbitration, which had repercussions for the final verdict not according to expectations. The bottom line is that Pakistan has not been able to craft a credible pool of its own homegrown legal expertise, compelling the authorities to rely upon ad-hoc measures or expensive international legal experts. To take but one example, the recent decision dated 7 January 2025 by the Neutral Expert notes 13 different lawyers for Pakistan, all of whom are foreign counsel. India, by comparison, was represented only by Harish Salve, an Indian lawyer (though one who splits his practice between the UK and India).

A strong legal team is also essential for the necessary follow-up once the IWT mechanisms announce their verdicts. It has been observed that the implementation of IWT verdicts has been a major issue. In the cases where India lost, it resorted to remaining quiet and continuing with the construction on the sites, totally disregarding the verdict. Two such cases in point being 2025 Court of Arbitration and Kishanganga rulings of 2013. This aspect indicates that Pakistan's legal strategy on IWT has continued to remain ineffective in dealing with Indian intransigence.

The lack of domestic legal assistance in relation to the IWT is not an aberration but a general problem in relation to international disputes. To elaborate, Pakistan is party to a number of international disputes that involve some of the most important interests of the nation, both commercial and otherwise. As is evident from the Reko Diq and Broadsheet cases, the costs of engaging unsuitable counsel can be very high. Hence, there is a dire need to rationalize the process of engaging counsel (both domestic and foreign) for international matters.

Before examining different options, certain preliminary points need to be noted:

1. It is in Pakistan's interest to develop domestic capacity to deal with international disputes. At present, such capacity is extremely limited.
2. To develop such capacity, it is important that domestic lawyers are teamed effectively with foreign counsel so that the domestic counsel handles as much of the work as possible.
3. Most of Pakistan's international commercial disputes arise out of contracts which are either based on UK law or on Pakistani law.
4. In such disputes, Pakistan often engages both a senior barrister as well as a firm of solicitors (in addition to Pakistani counsel). In terms of billing, though, the solicitors are likely to account for the majority of the legal fees.
5. Solicitor firms make profits by leveraging the difference between what they charge for associates and what they pay associates. Solicitor firms thus have an incentive to maximize associate hours. Barristers have a similar incentive to maximize hours, but since they cannot outsource their responsibilities, their ability to expand their hours is comparatively limited.
6. While UK law requires solicitors to be engaged for cases in courts, there is no such requirement in relation to arbitrations. Thus, English barristers can be engaged directly for international arbitrations without engaging English solicitors.
7. Pakistan has enough lawyers and law firms available in the private sector who have both the technical capacity and the intellectual acumen to deal with complex matters involving voluminous documentation and complicated issues of facts and law. Such Pakistani lawyers with experience in commercial disputes also have experience in foreign law, in particular UK law, and are able to assist senior English barristers or other foreign law experts without the need to engage English solicitors.
8. The presence of private sector resources does not mean, however, that the problem can be solved simply by hiring people from the private sector. This is because senior private counsel with the requisite international counsel are generally not interested in working for the government, except as the Attorney General. And there can be only one AG at a time.
9. In light of the foregoing, the proposal is as follows:

- a. The International Disputes Unit (IDU) should maintain a limited panel of suitable Pakistani law firms with previous experience in international arbitration (maximum 15 names). If appropriate, the members of the panel may be divided into a maximum of two or three tiers in the same manner as the Treasury Counsel List of the UK.
- b. Note, members of the panel must be selected keeping in view their aggregate capacity to handle the manpower demands of an international arbitration. Individual counsels, by themselves, are unlikely to be suitable.
- c. To maintain the integrity of the panel, initial entry should be restricted based on prior recognition by international ratings agencies (such as Chambers & Partners) as well as prior experience in international disputes.
- d. The membership of the panel should be revised every two years (in a manner comparable to that of the Treasury Counsel List in the UK). At the time of revision, applications for inclusion should be considered from the open market.
- e. The IDU should set a consolidated hourly rate for each tier of the panel. The consolidated hourly rates should be comparable to the consolidated hourly rates charged by the top transactional firms in Pakistan.
- f. In cases where time is not of the essence, the IDU should inform members of the panel as to the initiation of an international dispute against Pakistan. Each member of the panel should then be allowed to submit bids in relation to the dispute in question (together with international counsel). Bids not including panel members should be excluded from consideration. Wherever possible, bids should be sought on a capped-fee basis, with the overall cap being further sub-divided over the different stages of a particular dispute.
- g. Appointments of panel members (and international counsel) should be determined by a committee composed of the following:
 - i. Law Minister
 - ii. Attorney General for Pakistan

iii. Secretary Law

- h. Once a local counsel (or team of counsel) is appointed to handle an international dispute, it should be the responsibility of that team to brief the IDU and the AGP as to the progress of the case (as well as to coordinate with the relevant government entities). If necessary, as in the case of the Reko Diq dispute, a separate stakeholder committee should be set up to monitor the progress of a particular dispute.
10. All policies have their weaknesses, and the proposal above is no exception. The key here will be whether or not the panel is kept small and selective. If the panel is expanded to include unqualified favorites (or individuals who lack the necessary support teams), the result will be disastrous. Hence, great care must be taken in framing the qualifications for inclusion in the panel and in keeping the numbers restricted.

(iii) Data, Scientific and Academic Research

Pakistan lacked robust scientific data and academic and institutional capacity to develop a knowledge-base on multiple dimensions of the Indus River Basin which could have played a vital role in the implementation of the IWT to protect Pakistan's crucial water interests. The lack of scientific and academic research in the area of water in official and educational institutions had a net effect of putting Pakistan at a disadvantage compared to the vast expertise India was able to develop in academic and research endeavors on its water sector.

(iv) Public Diplomacy, Narratives and Civil Society

One of the key gaps in Pakistan's capacity on the issues relating to the IWT has been ineffective public diplomacy and narratives on Pakistan's positions on the projects has been building on the Western Rivers in violation of the IWT. On many such projects, India was able to create an opinion internationally that these projects conform to the requirements of the IWT. Similarly, a number of Indian or Indian-sponsored civil society organizations focusing on water issues have been working to advance the Indian legal and political position on the IWT and Indian water sector projects. This shortcoming has also been one of the contributing factors to Pakistan's incoherent strategy on the IWT.

One way to address this problem is by engaging an individual to act as a focal person in relation to Pakistan's position on the IWT. That person should be responsible for integrating all of the different workstreams relating to the IWT (i.e., political, diplomatic, legal) and further should be able to present Pakistan's case at international forums. At present, the IWT issue is only being raised at multilateral conferences like the UNGA. What Pakistan also needs is a consistent voice at the sector-level, for example, in conferences and institutions dealing with international law and water issues.

9. Legal and Political Way Forward for Pakistan on the Indus Waters Treaty

The Task Force examined the legal, political, and technical aspects of Pakistan's position with a view to suggesting a way forward in response to India's arguments and justifications underlying its decision to hold the Treaty in abeyance.

For many years, India had been building a case for the revision of the IWT, citing alleged fundamental and unforeseen changes in circumstances, including: (i) population demographics; (ii) climatic changes, including India's obligations to generate clean energy; (iii) alleged "cross-border terrorism"; (iv) reconsideration of the dispute-settlement mechanism; (v) certain transitional provisions of the Treaty becoming obsolete; and (vi) undue restrictions on India's rights as an upper riparian.

Pakistan's legal position on these points, in the context of the IWT, is rooted in the provisions of the Treaty as well as in international law. According to Article XII (3) and XII (4), revisions, modifications or termination of the Treaty can only be achieved through mutual consent. The Indian decision is also a violation of the Vienna Convention on the Law of Treaties, requiring that the treaties remain in force until terminated by mutual agreement. IWT is a self-contained instrument and hence it is more than likely that extraneous grounds for suspension of treaties found in the Vienna Convention on the Law of Treaties, such as material breach and fundamental change of circumstances, are inapplicable to the IWT.

The Permanent Court of Arbitration endorsed Pakistan's position in its ruling in June 2025 (Supplemental Award on Competence) that India's unilateral decision to place the IWT in abeyance in April 2025 was not legally supported and did not affect the court's jurisdiction to continue arbitration proceedings on Pakistan's complaints. The Court found that the Treaty's text

does not allow unilateral suspension and that such actions undermine its core purpose, affirming that proceedings must continue until mutual consent for termination, a decision India rejected, calling the tribunal illegally constituted.

Similarly, there are firm legal grounds to challenge India's contention that fundamental changes in circumstances, such as population demographics and water uses, have made the existing IWT irrelevant. Changes in population demographics were foreseen at the time of the Treaty's signing, and Pakistan has also experienced significant population growth over the past six decades. These changes in no way have altered the primary fact that IWT was devised as an instrument to ensure the sharing of water between India and Pakistan as upper and lower riparians and effectively manage the demographic as well as consumption-related factors.

Indian arguments regarding the purported effects of climate change are also legally invalid. The entire world has been adversely affected by climate change, and during recent years, Pakistan has suffered more than any other country in the region. Addressing climate change through effective measures and accelerating the development of clean energy is as important for Pakistan as it is for India. In any case, the Treaty does not bar India from developing run-of-the-river hydropower projects under the prescribed design parameters, as India has been developing and has attained so far, a cumulative capacity of more than 3,500 MW on the Western Rivers. The goal of dealing with climate change factors is possible through the existing treaty or its revisions within the framework of the Treaty.

The Indian allegation of cross-border terrorism by Pakistan and its linkage to hold the Treaty in abeyance is a politicization of a legal and technical instrument and tantamount to weaponizing water. The IWT is essentially a technical document, apportioning water between upper and lower riparian states. Both parties – India and Pakistan – do not have the legal recourse to walk out of the Treaty based on political motives. That is why the IWT has been able to remain functional even during times of war between the two countries in 1965 and 1971. The treaties are instruments of peace and should not be used as a tool to achieve political advantages. The recent Court of Arbitration ruling has also supported Pakistan's contention on this point that allegations of terrorism or security factors are legally irrelevant concerning the functioning of the Treaty.

Indian objections on IWT relating to dispute settlement mechanisms, some transitional provisions of the Treaty becoming obsolete, and undue restrictions on India's rights as the upper riparian are

also legally contestable. The Treaty had anticipated that questions, differences, and disputes would arise between the parties in the course of implementation and, therefore, instituted a comprehensive and graded framework for settlement of differences and disputes – Permanent Indus Commission, Neutral Expert and Court of Arbitration – which has worked effectively. As a matter of fact, the majority of the decisions/rulings on disputes and differences referred to either Neutral Expert or Court of Arbitration have favored the Indian position, allowing it to move forward on its proposed projects either with or without any modifications.

On the rights as riparians, IWT has established a water sharing system allowing India unrestricted use of the waters of the Eastern Rivers in lieu of India's narrow, limited, and restricted rights on the Western Rivers to ensure Pakistan's rights to unrestricted use of the waters from the Western rivers and their diversion to the Eastern rivers basin. International legal experts regard the IWT as a successful framework of water sharing between India and Pakistan despite complexity of the relations between the two neighbours.

While deliberating the vitality of the Indus Waters Treaty from Pakistan's perspective, all members of the Task Force (except a divergent opinion by one member) expressed the view that the IWT was immensely important for securely receiving Pakistan's share of water in the Indus River Basin vital for its agriculture, industry, domestic and all other uses and preventing India as upper riparian from stopping or diverting the natural patterns of flows in Western Rivers. However, it was also observed that since last April, Pakistan, despite its strong legal position, has not evolved a coherent and proactive approach aiming at exhausting all possible legal and political options for restoration of the Treaty and has not launched an aggressive narrative at the international level on the subject. Since it decided to hold the IWT in abeyance, India has fast-tracked its various controversial projects on the Chenab River, which will cumulatively give it the capacity to control the flows downstream. Under the Vienna Convention on the Law of Treaties, too, such Indian actions remain questionable. Not only do they represent material breaches of the Treaty, but they also violate Article 72 (2) of the Vienna Convention on the Law of Treaties, which states: "During the period of the suspension the parties shall refrain from acts tending to obstruct the resumption of the operation of the treaty." Pakistan, therefore, needs to immediately develop a way forward on the IWT.

In particular, Pakistan should closely examine which forums are relevant for challenging the legality of the Indian decision to hold the IWT in abeyance. The World Bank President, Ajay Banga, has pronounced the World Bank's opinion that the Indus Waters Treaty cannot be suspended or held in abeyance unilaterally by one of the parties; it can only be terminated or modified through mutual agreement. He further clarified that the World Bank's role was only that of a facilitator in dispute resolution by appointing neutral experts/arbitrators and managing the trust fund for their fees. Despite this position by the World Bank, it should be quite plausible for Pakistan to approach the World Bank to play a mediatory role, as it did in bridging Pakistan-India positions in the 1950s that led to the signing of the Treaty. The World Bank cannot just dissociate itself from the brewing crisis between Pakistan and India on water.

Some experts would suggest Pakistan to consider the option of taking up the case at the International Court of Justice (ICJ), but since it would require consent of both parties to invoke the contentious jurisdiction of the ICJ and in this case India is not likely to accept such jurisdiction of the ICJ and also that ICJ's rulings under its Advisory jurisdiction are not binding, it would not be feasible for Pakistan to approach this forum.

The IWT itself has binding dispute resolution mechanisms, and the Court of Arbitration (CoA) should be a suitable forum for this purpose. However, the existing CoA may not be an option as its legitimacy is already in dispute because of differences between India and Pakistan. It would, therefore, be required to seek the establishment of a fresh CoA as the legality of suspension/abeyance falls indisputably within the jurisdiction of CoA.

The IWT itself has binding dispute resolution mechanisms, and the Court of Arbitration (CoA) should be a suitable forum for this purpose. However, the existing CoA may not be an option as its legitimacy is already in dispute because of differences between India and Pakistan, and its jurisdiction is limited to matters preceding India's unilateral decision of holding the Treaty in abeyance. It would, therefore, be required to seek the establishment of a fresh CoA as the legality of suspension/abeyance falls indisputably within the jurisdiction of CoA. In this regard, it is also noteworthy that, notwithstanding India's unilateral decision of holding the Treaty in abeyance, the dispute resolution provisions of the Treaty remain valid and functional. Therefore, the World Bank, as facilitator of constituting dispute settlement mechanisms under the Treaty, including the

CoA, would have no legal justification to deny Pakistan's request to constitute a fresh CoA to determine the legal merits of India's decision to hold the Treaty in abeyance.

Since 2017, India has not shared flood data with Pakistan with a primary focus on revision of the Treaty to address its reservations. One of the underlying reasons is to get a higher share of water from the Western Rivers than originally allocated to India in the Treaty. There are reasons to believe that India wants to divert water from the River Chenab. There are also indications that India would like a change in the ratio of distribution of water of the Indus River System. From Pakistan's perspective, there are no grounds for revision of this ratio given that Pakistan has already surrendered all its share of water in the Eastern Rivers and is, therefore, totally dependent on flows in the Western Rivers. Also, the ratio of water decided under the IWT is based on the proportional area of the basin for each country, which has not changed by the IWT. The basis of the distribution of water has to remain the same.

However, there are some other Indian concerns where a way forward can be worked out through mutual engagement and renegotiation of some clauses within the spirit of the Treaty. Pakistan must prepare for the renegotiation of some clauses. A legitimate problem that India has continued to face is that many of its planned hydro projects become technically and economically unviable, as under the treaty, the designs of India's hydro projects on the Western Rivers have to be compliant to the requirements of the Treaty. This concern can be addressed by bringing necessary procedural changes in the IWT so that the adverse impact on design and timelines of the projects can be minimized.

Sedimentation on the upstream dams and storage structures, causing drawdown limitations, is another genuine issue whereby India cannot carry out drawdown flushing, but only sluicing on its side. In the absence of drawdown flushing, reservoir sedimentation is inevitable (e.g., Salal project). One of the ways of addressing this problem could be to develop an agreed flushing protocol between the two countries, which would result in the acceptance of the low-level outlets. However, compromising on low-level outlets means compromising on a core design aspect of the IWT, thus accepting continuous vulnerability. Therefore, the focus has to be on finding workable solutions that enhance the effectiveness of the IWT.

One of the mutual interests of India and Pakistan should be to pay attention to the rights of the Indus River Basin. The ecological needs of the basin, environmental sustainability, and preserving

its health are vital for both India and Pakistan as the riparian states. The impact of climate change on the Indus River Basin in the past decades, resulting from various factors such as increasing population, global warming, industrial and infrastructure developments, is substantial and requires both India and Pakistan to engage with each other and collaborate in the efforts for increasing the long-term sustainability of the Indus water system for future generations. Pakistan and India are signatories to various treaties and agreements relating to the environment and climate change, which should be linked to the IWT.

There is a need for reviewing the role of the Permanent Indus Commission and increasing and enhancing this role in the light of the experience of the two parties during the past decades. The experience suggests that the Permanent Indus Commission has played a role in exchanging and coordinating the positions of the two governments, but beyond that, the Commission has remained constrained to play an assertive and proactive role in addressing/resolving differences and disputes. Revision of Article VIII for a more robust Permanent Indus Commission should be helpful for effective future working of the IWT.

Water and climate issues in South Asia are not confined to India and Pakistan. It is also imperative to look for involving China in the efforts for long term preservation of the Indus River Basin. China accounts for 8 % of the Indus River Basin, yet there is a need to examine how China's constructive role can be beneficial for Pakistan-India discourse on water issues. Engaging China on water issues should be a precursor to evolving a larger regional dialogue on water and climate issues involving countries of the region, including India, Pakistan, China, Bangladesh, Nepal, and Afghanistan.

Finally, while the above proposals tend to address legal and technical issues between India and Pakistan on the IWT, the dispute between the two countries on the IWT is essentially rooted in their political differences. Therefore, to achieve the desired goals Pakistan, while preparing itself for moving forward effectively on legal and technical footing, requires a well-directed political approach supported by a proactive narrative building and public diplomacy. Pakistan should be ready to take advantage of its increased international stature and posturing internationally and in the region during last one year for increasing pressure on the Indian government to come on the table for a purposeful engagement to revive the Treaty and undertake necessary revision/modification in its articles within the scope of the Treaty.

Pakistan's close relations with Trump Administration and the latter's lingering differences with India provide a window whereby Pakistan should be using this leverage. Pakistan's effective balancing of political relations with other major powers such as China, Russia, Turkey, Saudi Arabia, EU and the regional countries including Bangladesh, Nepal and Sri Lanka should also be employed effectively in support of Pakistan's political strategy for negotiations with India on the IWT. The international fora like UNSC, UNGA, UN's Special Procedures Mandate Holders, and other relevant water-related multilateral organizations as well as regional organizations like SCO should also be used as avenues for projecting Pakistan's logical and balanced approach for seeking resolution of the dispute through dialogue.

In addition, it is important for Pakistan to utilize leading international conferences on water to disseminate its perspective at the global level. Global Water Summit 2026 scheduled to be held in Madrid from 18-20 May 2026 is one such forum. Later, the UAE will also co-host the 2026 United Nations Water Conference in December 2026 wherein Pakistan should present its case on water including the status of the IWT.

The considered view of the Task Force is that the IWT is an important legal instrument for Pakistan's water sector. Although Pakistan enjoys rights under customary international law as a lower riparian State, the criticality of a treaty-based water sharing agreement between India and Pakistan cannot be overstated given the nature of Indo-Pak relations. Not only does a treaty bring stability and predictability to water relations between India and Pakistan, it also enables Pakistan to effectively exercise its legal rights through the dispute resolution mechanisms of the Treaty. However, what off-ramp has to be offered in order to bring India on the table is certainly a political decision by the government. The legal ground can pave some ground for Pakistan, but a strong political intervention is a must to achieve the objective.

Diverging opinion:

The Task Force had one completely divergent opinion on Indus Water Treaty from Dr. Daanish Mustafa who argued that the Indus Water Treaty was a historic mistake that Pakistan made in 1960. According to him, the process of negotiations from 1954 to 1960 makes it clear that it was more a political decision than technical. He claimed that later because of the funding of USD 800 million that Pakistan received for dams and other infrastructure which is equivalent of USD 26 billion in present terms an opinion was generated in support of the Treaty by vested interests. He

maintained the Treaty actually deprived Pakistan of its eastern rivers and the resultant diversion infrastructure disturbed the hydrology of Pakistan. The feasible way forward in his view should be to approach International Court of Justice and ask for equitable apportionment of water between India and Pakistan as riparians of the Indus River Basin. According to Dr. Daanish Mustafa, another catastrophe that resulted for Pakistan from the IWT was an obligation to receive industrial and agricultural waste from Punjab and Haryana side, as specified in the Article IV (paras 4 &5) of the IWT. He argued that those drains should be closed and blocked by Pakistan on the Indian side, which should not be continued. He suggested for re-introducing the subject of geography in the school's curricula in Pakistan to disseminate awareness about Pakistan's natural resources including water and promoting urban horticulture using organic and native trees and plants for aesthetic purposes. Failing that, he strongly held that Pakistan should withdraw from the Treaty, by formally writing to the World Bank and citing India's effective withdrawal from the Treaty.

Dr Mustafa, maintained that thanks to the physical geography of the headwaters of the three Western Rivers of the Indus Basin it was technically not feasible for the India to make any significant modifications to either the timing or volume of surface flows to Pakistan. He further argued that the cost inherent in construction of infrastructure on part of India could not yield any comparable economic returns.

Another diverging view is from Dr. Afreen Siddiqi who shared the view that the IWT created ecological, geophysical, and social harm to Pakistan. The construction of large infrastructure to divert and store water from the Western rivers was necessitated by the treaty that allocated the entire flows of the Eastern rivers to India. The large-scale storage adversely altered the hydrology of the Indus Delta has significantly declined. Sea water incursions has increased due in part from upstream storage and diversions that became necessary due to loss of water rights in the Eastern rivers. Revisions in the treaty, based on incorporating hydrological uncertainties and ecological implications, should be made. Water use across all tributaries (i-e., Eastern and Western rivers) should be considered in new negotiations.

10. Pakistan's Imminent Domestic Water Management Reforms

For many years, there has been a consensus in Pakistan that, beyond engagement with India on the Indus Waters Treaty, the country requires comprehensive reforms in the water sector to holistically manage its water resources. These reforms are necessary to meet the needs of the entire nation,

address climate change and environmental challenges over the long term – including flood and hazard management – establish a sustainable system of water availability linked to efficient use and rational pricing, and install modern scientific data-management systems.

What makes the Indus system unique is that it is not rainfall-driven in the conventional sense. Its lifeblood is the Upper Indus Basin (UIB), where water is stored naturally as snow and ice. The UIB alone holds an estimated 1,604 MAF of frozen water, accumulated over centuries. This storage is unevenly distributed, with the Shyok ($\approx 45\%$) and Shigar ($\approx 28\%$) basins dominating the cryosphere, followed by Hunza, Gilgit, Zaskar, Shingo, and Astore. Each year, this frozen reserve releases water through melt processes, contributing roughly 80 MAF from snowmelt and about 20 MAF from glacier melt, together accounting for over 110 MAF of annual river flow. In practical terms, Pakistan's rivers are summer rivers, flowing when crops need water because mountains release it—an alignment that is increasingly under stress.

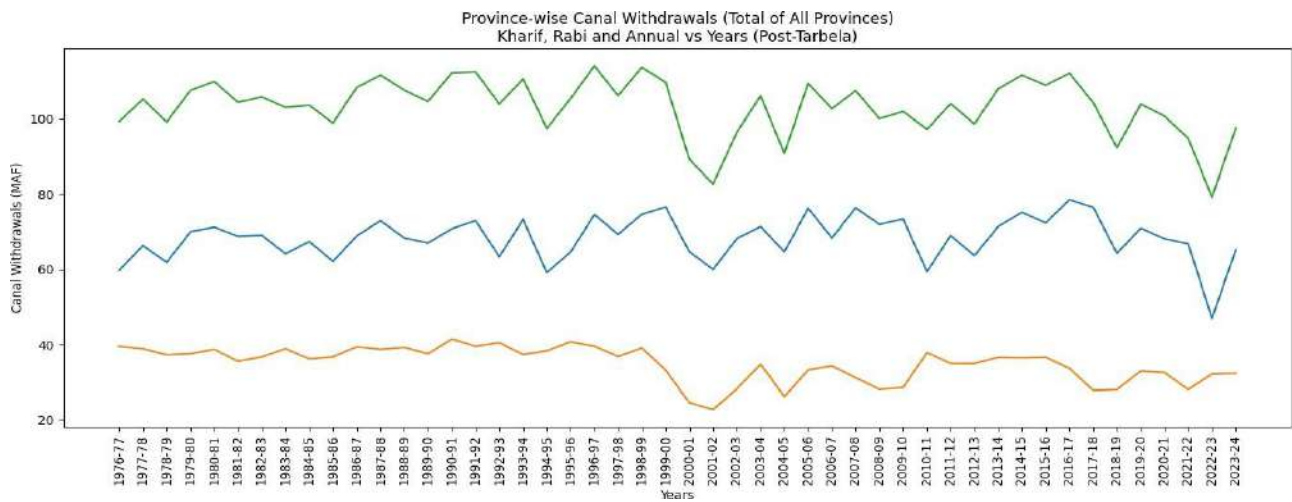
Climate change is now reshaping this delicate hydrological timing. Observed data already shows rising temperatures and an overall increase in annual precipitation, though unevenly distributed across seasons and regions. Climate model ensembles project warming of around 3°C by 2050 and over 4°C by 2080, with stronger warming in the plains than in the mountains. While precipitation projections remain uncertain, there is growing agreement that summer rainfall may increase while winter precipitation declines, particularly in southern Pakistan. This matters because winter precipitation feeds snowpack, which later becomes summer flow. The net effect of climate change is not simply less water, but earlier snowmelt, sharper flow peaks, higher flood risk, and greater mismatch with irrigation demand. Planning based on “average years” is therefore becoming increasingly unreliable.

Once water enters into Pakistan's plains, it flows into a vast but obsolete and inefficient human-made system. Of the country's 75 million acres of arable land, nearly 60 million acres are irrigated, making irrigation the dominant water user. Each year, approximately 103–105 MAF of water is withdrawn through canals, supplying the world's largest contiguous irrigation network. Rainfall contributes only about 13.3 MAF directly to cropped land, useful, but insufficient to replace irrigation. Despite these large withdrawals, around 60–61% of water (≈ 65 MAF) is lost within the system due to seepage in unlined canals, evaporation, flood irrigation practices, and weak on-farm

management. In effect, Pakistan already uses enormous volumes of water but has low productivity per unit of water, especially in agriculture.

To compensate for surface water shortages and timing mismatches, farmers increasingly rely on groundwater. Fresh groundwater pumpage now supplies about 55 MAF annually, supported by roughly 1.4 million tube wells, particularly in Punjab’s sweet-water zones. Groundwater has become the system’s silent stabilizer—buffering droughts, enabling crop completion, and masking surface water inefficiencies. Yet it remains largely unregulated and formally excluded from allocation decisions, turning a strategic reserve into a growing long-term risk. Almost 60% of irrigation is also supported by groundwater. However, there is no authority with a mandate to regulate its usage across provinces.

Figure 2: Province-wise Canal Withdrawals (Post Tarbela)



Post-18th amendment water is the provincial subject which has further complicated the accounting and management of the uses of water whether for irrigation or industrial and domestic uses. Pakistan requires developing a digital water data management under a National Water Information System with continuous coordination between relevant water institutions at federal and provincial levels. For leakages, there is a need for developing digital twin modeling.

At the downstream end of the system lies another critical tension: water that must reach the sea. On average, about 26.7 MAF flows to the Arabian Sea, though this varies widely by year.

Ecological studies suggest that at least 3.6 MAF (≈ 5000 cfs year-round) is required to sustain the Indus Delta, with higher flows during floods needed for sediment transport, shoreline protection, and mangrove survival. Historical records show that only 20 out of 49 years have met or exceeded long-term average flows to the sea, highlighting the growing stress on deltaic ecosystems. The degradation of the Indus Delta does not have an ecological cost but also a grave human cost as it has led to severe socio-economic hardship of local communities.

Overlaying these hydrological realities is a water governance system designed primarily for distribution, not conservation. Water allocation follows historical rules, daily diversion formulas, and seasonal forecasts under the 1991 Water Accord, overseen by IRSA and implemented by provincial irrigation departments and WAPDA. While this framework has helped avoid open conflict, it is rigid and slow to adapt to variability. In low-supply years, the system manages scarcity by rationing water across farmers, while avoiding redesigning crop choices/patterns or focusing on improving efficiency. Wheat, for example, may receive three irrigations instead of five, reducing yields but not fundamentally changing water use behavior.

These weaknesses are most visible in the Chenab River Basin, Pakistan's most vulnerable basin. With an average annual flow of about 25 MAF, nearly 100% cross-border dependence, and a cultivated command area of roughly 7.5 million acres ($\approx 15\%$ of national irrigated area), the Chenab supports a large share of agriculture while remaining highly exposed to upstream diversions, climate variability, and limited storage. Proposed infrastructure such as the Mangla–Marala Link Canal reflects an attempt to redistribute risk within the system, not to create new water—an acknowledgment that flexibility matters as much as volume.

There is no dearth of reports and studies for a comprehensive reform in Pakistan's water sector. In 1991, a landmark water apportionment accord was reached among Pakistan's provinces. In 2018, the Government of Pakistan adopted a detailed and forward-looking National Water Policy reflecting national consensus for an approach towards integrated water resource management in the country. With this policy, a Pakistan Water Charter was also signed between the Prime Minister and the Chief ministers of the provinces. However, the major challenge remains implementation of the recommendations contained in the policy documents. The National Water Policy itself states that "...the real challenge is not just listing "what" needs to be done, because that is well-known, but "how" to do it, and "who" will do it, with clear timelines". This challenge not only has

remained there even after a decade but has exacerbated because of continued inaction on Pakistan's part for undertaking water sector reforms as well as Indian action of holding IWT in abeyance to harm Pakistan's interests.

The biggest factor impeding meaningful reform in the water sector and implementation of the national Water Policy is institutional dysfunction and disconnect. It's not possible to trace the work done by the National Water Council which was constituted as a major body to implement the water policy. The priority, therefore, has to be attached to reinvigorating the federal institutional mechanisms for laying out a work plan for comprehensive water reforms and implementation of the National Water Policy in essence. The work plan has to ensure close inter-provincial coordination on water issues with a view to ensure that water reforms and water translates to on ground actions in all provinces. The recommendations of this report are meant to facilitate this process.

11. Recommendations:

A. Institutional

- a. **DEVISE** a two-pronged strategy on water to lay down clear work plans for a dynamic approach on: (i) safeguarding Pakistan's interests on the IWT to counter Indian actions against the Treaty as well as to prepare for negotiations with India as and when required; and (ii) undertaking long-overdue substantive water sector reforms in Pakistan.
- b. **APPOINT** a strong **Focal Point on Water** in Pakistan (a person who understands technical, legal and political dynamics of Pakistan's water sector as well as trans-boundary dimensions).

B. The IWT

- c. **TAKE** immediate steps to make an offer to India for starting inter-governmental negotiations on revision of the IWT within the framework and spirit of the Treaty.

- d. **UNDERTAKE** comprehensive reforms in the IDU [on the lines of Section 8(ii) of this report] to strengthen capacities a high-level group comprising representatives from relevant institutions and water sector experts for steering Pakistan's approach/campaign on the IWT.
- e. **ENGAGE** a team of 4-5 leading international legal experts on water issues for an independent legal opinion on the IWT within next 3 months. This opinion can help crystallize Pakistan's comprehensive legal strategy on the IWT.
- f. **SEEK** establishment of a fresh Court of Arbitration to deliberate and decide the case of India's unilateral decision to hold the IWT in abeyance in violation of the Treaty.
- g. **STRENGTHEN** Pakistan's diplomatic campaign to effectively raise India's action of holding the IWT in abeyance in violation of the Treaty and international law with other countries bilaterally and at the UN (UNSC; United Nations Security Council & UNGA; United Nations General Assembly) and other international/regional fora. In this regard, favorable environment of Pakistan's relations with the US and other major powers needs to be utilized for mounting pressure on India for addressing the IWT as well as bilateral relations.
- h. **REVAMP** the IWT-related institutions including the Secretariat of the Indus Water Commissioner to play a more proactive role in the IWT implementation in future.

C. Domestic Water Reforms

- i. **REINVIGORATE** Pakistan's water sector institutional framework in pursuance of the National Water Policy to undertake substantive reforms in the water sector flowing from federal to provincial levels for achieving an integrated water management system.
- j. **STRENGTHEN** the inter-provincial linkages in water management by implementation of Provincial Water Acts in Punjab, KP, and Sindh.
- k. **INITIATE** immediate water dialogue among provinces to reach settlement on water distribution grievances, application of modern methods of technical reading and distribution and reassess Water Apportionment Agreement of 1991. This water dialogue must also undertake the current condition and unaccounted for usage of groundwater along with the deliberation on its regulation mechanism.

- l. **UNDERTAKE** studies to assess the impact of climate change on river water flows in the Indus Basin, ground water reservoir and flood management caused by irregular excessive flows, torrential rains and cloudbursts.
- m. **TAKE** measures for promoting climate-smart agriculture to help conserve water and reduce wastage along with nationwide public awareness campaigns to prevent wastage of water.
- n. **INSTITUTE** an effectively regulated ground water management system in Pakistan. Groundwater must be formally integrated into the water balance. Treating groundwater as an invisible supplement undermines long-term water security. Policies should recognize groundwater as a strategic buffer, regulate abstraction in stressed zones, and link pumping behavior to surface water availability through clear signals and conditional incentives.
- o. **MODERNIZE** water measurement and data management system as the foundation of water governance. Scientific data monitoring for river and canal flows, seasonal water availability, groundwater abstraction proxies (electricity or solar pumping indicators), soil moisture estimates, and crop water use should be routinely monitored and translated into simple, credible information for provinces and farmers. Without measurement, neither accountability nor incentives can function.
- p. **IMPLEMENT BEHAVIOURAL ECONOMICS** as an approach to incentivize the farmers and users. Farmers respond to risk, predictability, and immediate rewards. Small but reliable incentives, such as priority canal turns, energy rebates, insurance discounts, or input vouchers, should be tied to verifiable water-saving behaviors: improved irrigation practices, crop shifts, reduced pumping during critical periods, and adoption of scheduling tools. These incentives align individual benefit with collective resilience.
- q. **CHANGE** crop planting patterns according to local conditions and water sensitivity. Crop planning must reflect basin hydrology, not historical habits. Low-delta crops should be encouraged in water-stressed basins, while water-intensive crops should be gradually phased out of unsuitable zones. This transition must be supported through pricing signals, procurement policies, and risk-sharing instruments rather than coercion.
- r. **INSTITUTE** adaptive rules, procedures and practices to ensure that seasonal allocations should become scenario-based, with pre-agreed responses to different levels of scarcity. This reduces panic, political bargaining, and uncoordinated groundwater over- extraction during droughts.

- s. **ENSURE** environmental flows as system insurance and not residual waste because maintaining minimum flows to the Indus Delta protects coastlines, fisheries, and livelihoods while preserving the long-term stability of the river system itself.
- t. **INTRODUCE** a thought-out system of water accounting and pricing at both federal and provincial levels.
- u. **DEEPEN** institutional coordination water sector institutions including Ministries of Water Resources, Climate change, Planning, Development and Special Initiatives as well as other federal and provincial water-related bodies.
- v. **FOCUS** on pre-emptive resilience-building as opposed to reactive responses to water-related climate events.

12. Immediate Way Forward

Questions under deliberation	Way Forward
Q1. Given the Indian decision to hold the IWT in abeyance, what are Pakistan’s options in political, legal, and diplomatic spheres with regard to the IWT?	<ul style="list-style-type: none"> i. Appoint a national focal point on water ii. Approach India for intergovernmental negotiations on IWT. iii. Initiate a request for constitution of fresh Court of Arbitration on India’s decision to hold the Treaty in abeyance. iv. Engage a team of four to five foreign and domestic legal counsel. v. Initiate proactive diplomacy with major powers on the water issue.
Q2. What are the challenges and gaps in Pakistan’s water management, taking into account major factors such as population growth, efficient uses of water in agriculture, domestic and industrial use, inter-provincial water apportionment accords, ground water, impact of climate change, excess water or flood management? How can a balanced, forward-looking approach be developed to deal with these challenges to resolve Pakistan’s water crisis?	<ul style="list-style-type: none"> i. Commence inter-provincial dialogue on water management and implementation of the National Water Policy (2018). ii. Modernize the water measurement and data management system as the foundation of water governance. iii. Take measures to promote climate-smart agriculture to help conserve water and reduce wastage along with nationwide public awareness campaigns to prevent wastage of water. iv. Evolve a thought-out system of water accounting and pricing at both federal and provincial levels.

Annexure A

Tabulation of India-Pakistan disputes on IWT structures

Project	River System	Pakistan's objections	India's responses	Mechanism under Article IX	Decision	Current status of project
Baglihar hydroelectric run-of-river project 900 MW. 147 KM upstream of Marala headworks. (Project could give upper hand to India due to some features in design that the flow of river could be controlled in case of conflict	River Chenab (Doda district)	Objections on design under Annexure D of IWT. Project could lead to inundation of area above Marala headworks. Objections were on free board, maximum pondage, location of power intake tunnels, spillways,	Requested secretary level talks thrice from 2003 to 2005 but continued constructions. Project was conceived in 1992 and Pakistan was informed.	Neutral Expert Raymond Lattife. Agreed that project was not in conformity with criteria set in (a), (c) and (f) of Paragraph 8 of Annexure D.	Pakistan's objection on pondage capacity (reduction in 13.5%), reduction in height of dam by 1.5 meters, and raising power intake tunnels by 3 meters was upheld. But concerns on spillways designs was totally rejected. Neutral Expert did not label any part of 'disference' as 'dispute'.	Baglihar power project is fully operational with 900 MW installed capacity.

<p>between both countries).</p>	<p>Kishanganga River/Neelum River</p>	<p>India's diversion of water into Bonar Badmati Nallah as one of the central elements of this project breached its obligation under Article III (2) of treaty. India to bring reservoir level below dead storage level in any circumstances except in case of unforeseen emergency. Electricity produced from this project was to be utilized outside the Jhelum Basin. Ecological implications of project too.</p>	<p>Under Annexure D, para 15 (iii) and para 29 of Annexure G and customary International laws India was required to maintain minimum flow in the river. No restriction on use of electricity outside the basin in IWT. Depletion of dead storage was limited. Heavy concentration of sediment released in flushing may have significant environmental impacts on</p>	<p>India could divert water from Kishanganga/Neelum for power generation. River immediately upstream is 9 cumecs. India shall release 100% of flow immediately upstream of KHEP into Kishanganga/Jhelum River below KHEP. Except in unforeseen circumstances treaty does not permit reduction below dead storage level. India not to employ drawdown flushing at reservoir.</p>	<p>Operational since 2018 with 330 MW of installed capacity.</p>
<p>Kishanganga hydroelectric power plant. 158 Km upstream of Neelum Jhelum hydroelectric power project. Conceived in 1988 as storage project. In 2006 was converted into run-of-river project</p>	<p>Kishanganga River/Neelum River</p>	<p>India's diversion of water into Bonar Badmati Nallah as one of the central elements of this project breached its obligation under Article III (2) of treaty. India to bring reservoir level below dead storage level in any circumstances except in case of unforeseen emergency. Electricity produced from this project was to be utilized outside the Jhelum Basin. Ecological implications of project too.</p>	<p>Under Annexure D, para 15 (iii) and para 29 of Annexure G and customary International laws India was required to maintain minimum flow in the river. No restriction on use of electricity outside the basin in IWT. Depletion of dead storage was limited. Heavy concentration of sediment released in flushing may have significant environmental impacts on</p>	<p>India could divert water from Kishanganga/Neelum for power generation. River immediately upstream is 9 cumecs. India shall release 100% of flow immediately upstream of KHEP into Kishanganga/Jhelum River below KHEP. Except in unforeseen circumstances treaty does not permit reduction below dead storage level. India not to employ drawdown flushing at reservoir.</p>	<p>Operational since 2018 with 330 MW of installed capacity.</p>

Wullar Barrage/Talbul navigation project. Largest freshwater lake in Asia in Bandipora District.	Through this lake water goes to Jhelum River then goes through Lower Jhelum HEP.	Controlled structure was a barrage capacity of 0.42 MAF of which 0.304 MAF would be live storage. Volume is 30 times more than specific maximum volume permissible under treaty. Barrage would damage triple canal project linking Jhelum and Chenab. Would enable India to control flow in Jhelum River and Indian military will be enabled with smooth navigation.	Under the treaty projects for navigational purposes was allowed. It will maintain 4000 cusecs for transportation of goods, fruits and people.	water quality and other aspects. Treaty allows 0.01 MAF storage incidental to a barrage on main stem of River Jhelum with discharge capacity of 50,000 cusecs.	Nil	Bilateral negotiations continued from 1986 to 1989 but deadlock continued until March 2012 when India stopped the project as due to natural expansion of wet lands the project was no longer doable. After suspension of IWT by India in May 2025 there is a new wave of discussion on reconstruction of project.	Under construction
Ratle hydroelectric power project in Kishtwar District IIOJK.850	Chenab River	Technical concerns including storage/pondage volume, freeboard, intake and spillway design —					

MW run-of-river project.					all seen by Islamabad as potentially reducing downstream flow and giving India control over water. Pakistan took the matter to the Permanent Court of Arbitration				
Pakal Dul Dam. Hunzar area in IOJK. 1,000 MW of capacity.	Upper Chenab Basin, Chenab Rier				Islamabad views this and similar Chenab projects as inconsistent with treaty rights because they could give India storage or control over flows on rivers allocated primarily to Pakistan.				Under construction. Expected commissioning around late
Kiru hydroelectric project, Kiru area in IOJK. 624 MW run-of-river project. Targeted commissioning by 2026-2027.	Chenab River				Similar to those for Ratle and Pakal Dul — effects on downstream flows and treaty provisions on storage/operations, especially given treaty suspension and India's				Under construction

<p>Kwar hydroelectric project. 540 MW hydro station. Targeted commissioning by 2026-2027.</p>	<p>Chenab River</p>	<p>accelerated construction</p>	<p>Pakistan fears it similarly could give India operational control affecting flows into Pakistan's portion of the Chenab.</p>	<p>Under construction</p>	<p>Under construction</p>
<p>Dullhasti stage II Hydroelectric power project with 260 MW of capacity</p>	<p>Chenab River</p>	<p>India approved this without proper treaty consultation, claiming it violates India's obligations under the IWT's provisions for western rivers.</p>	<p>Under construction</p>	<p>Under construction</p>	<p>Under construction</p>



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