

Q1:

India unilaterally held IWT in abeyance after Peshawar attack. Critically evaluate the impacts. What policy options Islamabad must adopt to stop India from violations.

Introduction: Indus basin River system is the World's largest contiguous network with its tributaries to irrigate millions of hectares. It is the lifeline for Pakistan's irrigation, industrial and agricultural use.

Historical background: After independence in 1947, the partition of British India divided the Indus River System between India and Pakistan. The headwaters of Indus originated from it while agricultural lands and most of the canal system located in Pakistan. On 1st April 1948, India cutoff the water supply from the upper Bari Doab, leaving the lower riparian country in extreme water stress condition. Upon this escalated tension, prompting both countries to seek the third-party mediation.

IWT was signed between Ayub Khan and Jawaharlal Nehru in 1960. According to this, the three Western Rivers Indus, Jhelum, and Chenab

were allocated to Pakistan while three Eastern rivers were assigned to India (Article 2). India could use the western rivers only for non-consumptive use such as navigation, hydropower projects (Article 3).

In case of dispute both countries should turn to Permanent Indus Commission as a first party dispute resolver or in case of legal and technological disputes, it will be mediated by neutral Observers such as Court of Arbitration and neutral experts respectively (Article 9, 8). Both countries will cooperate on the infrastructure projects for mutual benefits (Article 7). Continuous exchange of data regarding hydropower establishment or operational framework annually between permanent Indus Commission (Article 6).

Pehlgam attack and abrogation of IWT.

Following the Pehlgam attack in April, 2025, India suspended Indus water treaty, citing Pakistan's alleged involvement in terrorism. Both nations witnessed 9-10 days war between India and Pakistan, but not escalated.

into full scale war, leading to ceasefire by third party mediator.

Impacts of Suspending IWT by India unilaterally:

According to a Wilso center analyst

" Micheal Kugelman:

" The treaty is more than a Water sharing mechanism, it is a peace treaty in disguise "

Indus Water treaty perceived as a most resilient treaty between a two hostile nations. IWT has survived 60 decades though numerous times military standoff took place between them. Despite historical conflicts, territorial disputes and complicated relationships, this treaty considered to be the most enduring treaty globally.

But during the recent May, 2025 War escalations, India unilaterally abandoned the treaty violating article ~~IX~~ and ~~X~~. According to Aljazeera Analyst Maheen malik:

" India's upstream advantage could easily turn water into Strategic weapon "

and this proved true. India

Weaponized the treaty and hold in abeyance unilaterally
It could to potential impacts on Pakistan, India

(a) Impacts on Pakistan:

Pakistan could experience these impacts

(i) Water Scarcity:

Being Pakistan a most vulnerable country regarding climate. According to global Climate Risk Index (CRI), Pakistan ranked 5th most vulnerable country to climate change. Suspending TWT could potentially compound the situation, leading to more water stressed.

According to PCRIIR (2022) report, Pakistan is utilizing large portion (93.1%) of river water which accounts more than 60% of crops dependent on it. In addition, more than 90% of our domestic use water is dependent on rivers and industrial usage. Pakistan's dilapidated ^{also for} infrastructure contributes 60% of water loss according to Pakistan water governance outlook report (2020), which exacerbate the water scarce condition of Pakistan. So, India's unilaterally suspension of could pose serious challenging threats to Pakistan's Agriculture,

domestic and Industrial sector.

(ii) Agriculture and food security risk:

Pakistan's GDP's 23% is contributed by agriculture, according to Food and Agriculture Organization (FAO).

Pakistan's 60% labour's employment depends on agro-farming. As 93% of agricultural irrigation depends on Chenab and Sutluj, majorly on Indus, analysts warned that cut to flow could potentially lead to risk of food shortage. Export-oriented food can decline, even aggravates the local population's marginalized by not fulfillment of their basic necessities of life.

(iii) Worsen power generation.

Hydropower plants utilize Indus River basin to generate $\sim 40,000$ MW.

A disruption in water supply could cut the energy and also worsen the financial conditions of Pakistan.

(iv) Financial constraints and Social unrest:

Major Metropolitan cities draw water from the Indus Water System for domestic and industrial

use, draw from the Indus system could lead to shortage of needs and resources. It can collapse the industrial sector and agriculture sector. Financial constraints would aggravate, lead to mass unemployment and financial burdens on economy.

(v) International relations and Security:

As treaty has no unilateral suspension clause, Pakistan views the move as hostile. There are warnings of war type rhetoric and the risk of escalation is prophesied.

(b) Impacts on India:

There are also some implications on India, strategically, economically and regionally.

(i) Diplomatic Impacts:

India's suspension of the treaty is interpreted as a bargaining tool in its broader relationship with Pakistan, especially linked to terrorism. The move marks a deterioration of trivial cooperation between the two countries; the

IWT has survived Wars and other tensions. The suspension signals a shift in rare cooperative instrument.

(ii) Regional and international backlash:

India being the World's largest third economy has numerous trade agreements with regional and international countries. India's Oil and gas dependence is majorly on Middle eastern countries. Pakistan being the member of **OIC** has friendly relations with Qatar, Saudi Arabia, UAE and other muslim Arab states. Recently, the Pak-Saudia defence pact in September, 2025 signals a strategic collaboration of both countries. Iran being the trade partner with Pakistan and collaborator in **TAPI**, **CASA-1000** project of Pakistan with Central Asian countries demonstrates substantial diplomatic, economic and military relations of Pakistan with them. On the account of declaring IWT by India, it could face severe backlash, which can potentially pose a risk of trade decline, economic marginalization and rivalry regionally and globally. As, this abhorrent

act is severely criticized by international organizations and World bank.

(c) Geopolitical implications:

This dispute adds a Water Weaponisation dimension to India-Pakistan rivalry. Given both a nuclear-armed and shared contested border, analyst warns of escalatory risks when water becomes a geostrategic risk.

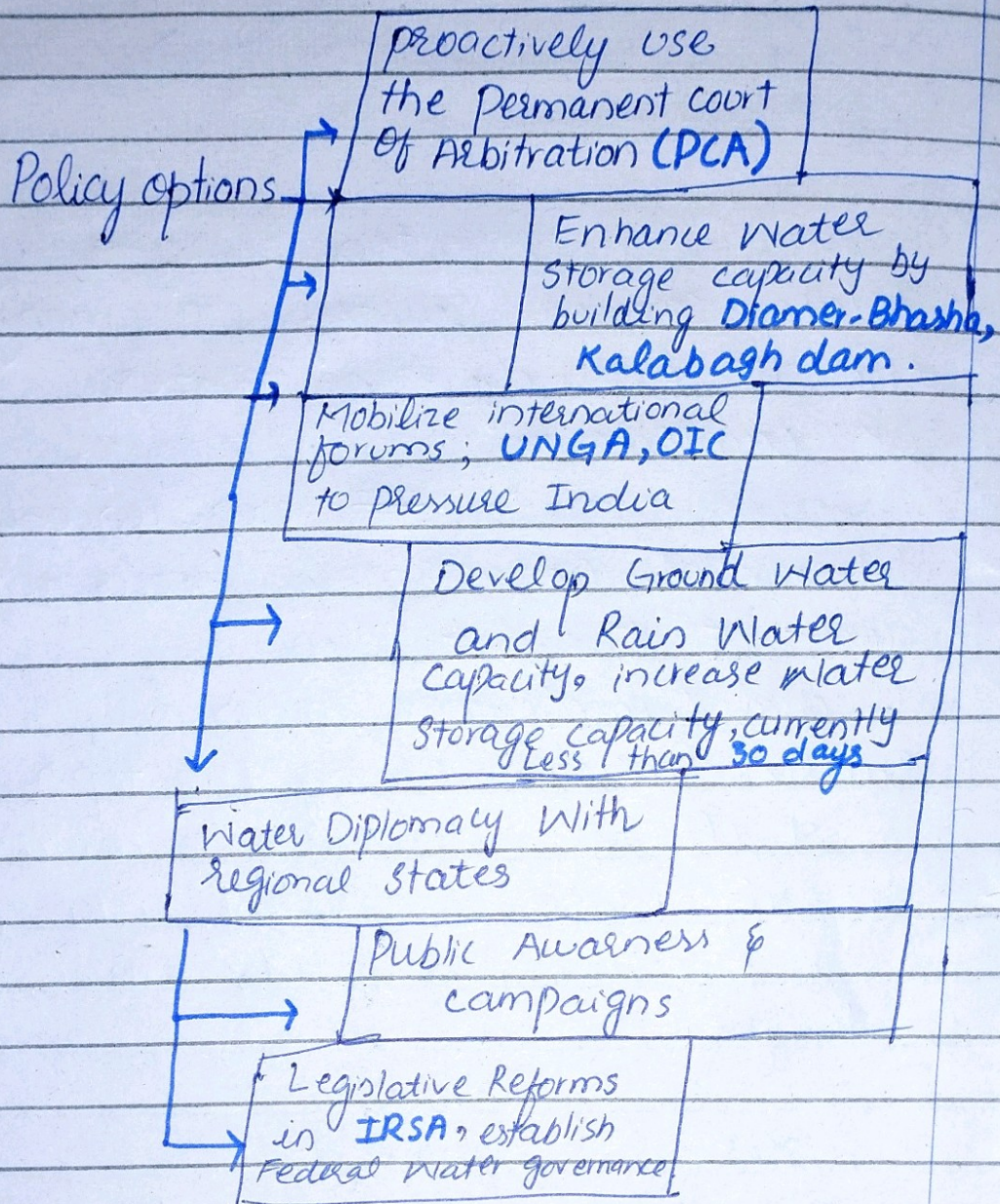
Regionally this may shift how states think about upstream vs downstream rights and cooperation framework.

(d) Legal / Institutional implications:

The Suspension downgrade the credibility of the treaty and questions about the role of International Organizations; World bank.

This could affect investor confidence in cross-border water infrastructure, raise legal issues and challenge the global order of trans-boundary water governance.

(2) Policy options Islamabad must adopt:



Conclusion:

The Indus Water treaty suspension by India marks a critical juncture in South Asia's hydropolitics. For Pakistan consequences are profound. For India move serves as strategic leverage to assert its hegemony but could face diplomatic criticism. Reforms in policies and strong diplomacy can renewed stability.

Question 3

Pakistan is repeatedly hit by devastating floods. Critically evaluate the reasons and recommend policy options for the nation to follow.

Introduction: Pakistan being a Water Stressed country, 14th among the 17 extremely high water risk countries by Global Water security Assessment (2023), ~~still~~ experienced deteriorated catastrophic floods further exacerbate the situation.

Global Climate Risk Index (GCRI) ranked Pakistan among the top 5 most climate vulnerable countries. Signals water assessment risk in the form of floods and drought.

Historical background:

Pakistan's flood history shows a dynamic shift from rare monsoon events to more frequent rains, glacial melting, glacial-lake outburst leads to severe floods.

Since the 2000s, Pakistan's flood history marked by frequent floods, "Super floods" of 2010 and record breaking in 2023 in which 33 million people

displaced and loss of \$40B infrastructure strained the already fragile and collapsed economy.

Recent 2025 floods impacted various regions of Pakistan, leads to mass migration from rural to urban, decline in agro-farming, food shortage, wastage of water exposed and highlighted water risk.

(A) Reasons and contributing Factors:

1) Erratic Climate Pattern:

Extreme monsoon rainfall have become heavier and variable. Experts indicated more likely of increased rainfall in future. Rising global temperature, intensify monsoon, leading to heavier rainfall and accelerates glacier melt in the Himalayas which increases the risk of GLOFs (Glacial lake outburst floods).

2) Deforestation and loss of Natural barriers and absorbers:

Forests are major contributor in absorbing moisture and water from air and land. Rampant and illegal construction in flood plains and near river beds exacerbate the impact of floods and more human settlement in

vulnerable areas.

3) Dilapidated infrastructure:

Pakistan's water storage infrastructure is dilapidated. **Water governance outlook (202)** report highlighted the fragile infrastructure of Terbela dam which accounts for 20% loss of water due to dam siltation and sedimentation.

Similarly, Mangla dam's water storage capacity has severely reduced to weak governance and low maintainance.

(4) Institutional and governance gaps:

Flood risk is managed by multiple overlapping authorities (federal/provincial/district agencies) with weak data management system and no data sharing framework.

Bureaucratic hurdles and delayed policies aggravate the flood disaster management, risking loss of valuable lives and already fragile infrastructure.

(5) Obsolete monitoring Mechanisms:

Manual data monitoring and obsolete overseeing policies are high risk to the disaster management

System. Outdated operational systems and old technical framework constrained financial capacity at local level.

(6) Socio economic vulnerability:

High poverty, population explosion and rural dependence on flood-plain areas for agricultural farming and settlement. According to MPDI

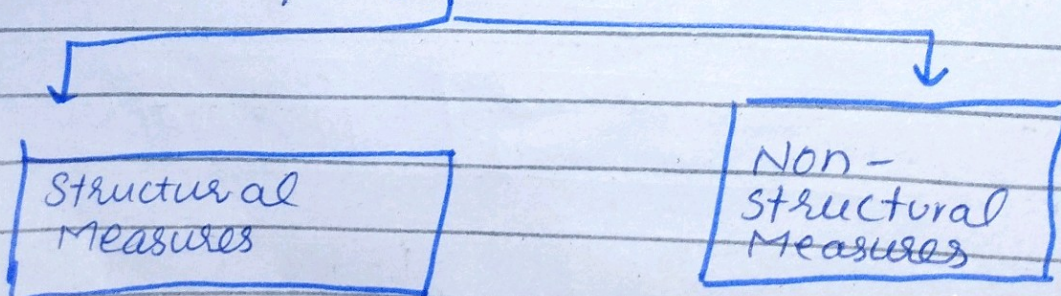
(2021), ~ 14 Million hectares

of the Indus River is used for irrigated agriculture. About 138 million people depend on this livelihoods.

Floodplains are naturally susceptible to flooding and the risk is increasing due to population boom and climate change.

(B) Policy Recommendations:

There are several policy recommendations that could save Pakistan from catastrophic flood risks:



Structural Measures

→ Resilient Infrastructure
→ Investment on infrastructure

→ Afforestation and
deforestation could
strengthened the soil holding
capacity

→ Levees and embankments
to contain River/Bypass
or diversion channels

→ Reconstruct Dilapidated
infrastructure of
Dams

→ Rain Water Storage
by constructing New Dams
Damer - Bhasha, Kalabagh

Non-Structural Measures

Flood Forecasting

Flood Warning

Flood Mapping

Governance and
Policy Strengthening

Community
Preparedness

→ Institutional
Coordination

→ Flood plain
Management