



Conflict Factsheet

Kalabagh Dam Conflict in Pakistan

Type of conflict Sub	Intensity 1
Conflict Locality Southern Asia	Time 1984 –ongoing
Countries Pakistan	Resources Water



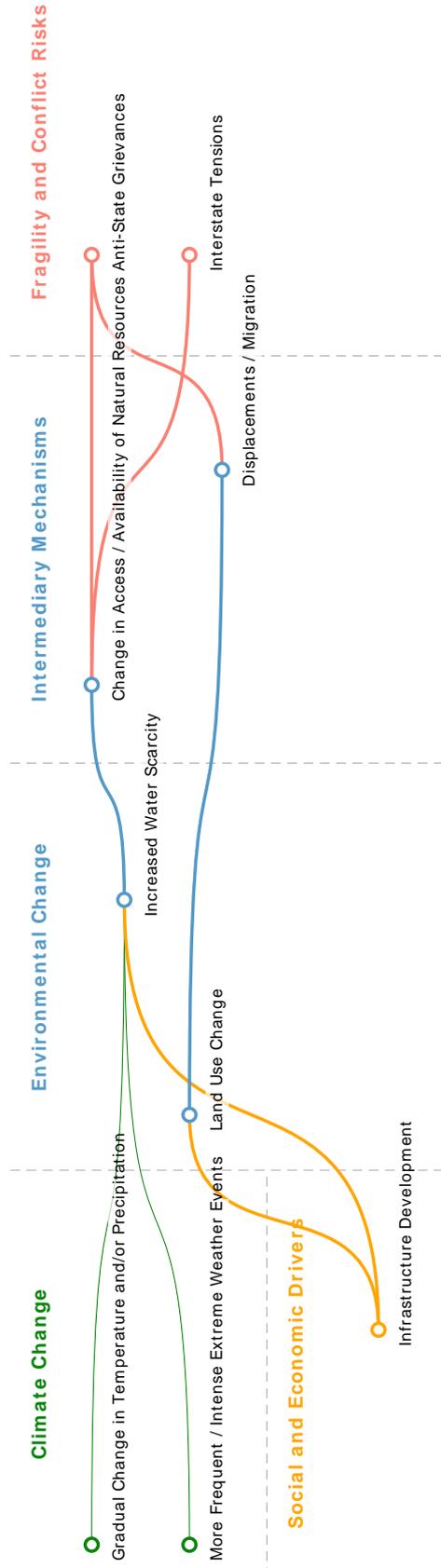
Transboundary
water
management

Conflict Summary

For over three decades, plans to construct the Kalabagh dam on the Indus River in western Punjab have been the source of recurring disputes. Proponents present it as a way to mitigate the pressures of shrinking water resources and meet increasing national energy demands. However, efforts to build the dam have been repeatedly shot down due to concerns over its potential effects on downstream water access, ecology and livelihoods. Opposition is led by downstream provinces, especially by politicians and groups from Sindh. The current political conflict is primarily over changes in the regional distribution of water and has centred on ambiguities in the 1991 Water Apportionment Accord (WAA) which allocates water between provinces.



Conceptual Model



Context Factors



Water



Water-stressed Area



Conflict History

Plans to build the Kalabagh dam, have been the source of tensions between regional states in Pakistan for more than thirty years. However, water tensions between upstream Punjab and downstream Sindh stretch back much further, at least to the time of British colonial rule (Akhter, 2015). Politicians in Sindh have described the dam as a “water theft” by the Punjab region (Niazi, 2018; Dawn, 2018) and construction of water infrastructure in Punjab is a source of recurring protests in Sindh (e.g. see Rizvi, 2006; Dawn, 2018).

Many disputes over dams on the Indus stem from a power asymmetry between upstream and downstream riparians, where the tendency is for upstream riparians to take more water than their share in times of shortage (IUCN, 2010). Arguments around Kalabagh are no exception, however there is also opposition to its construction from the upper riparian province, Khyber Pakhtunkhwa (KP). Although the dam will be built in the Punjab region, much of the water catchment is situated in KP province as the border between the two states is directly north of Kalabagh. This means KP risks losing a large area of agricultural land. In absence of detailed benefit sharing plans between regional states, politicians fear that proper compensation will not be paid (Mustafa, et al 2017; Alam, 2019).

Following mass protests and strong opposition from the state of Sindh, the project was suspended in 2008. However, planning re-opened in 2012 and the project currently awaits assessment from the Federal water ministry (Dawn, 2019). Concerns over the potential negative impacts of the dam have led to renewed protests from Sindh.

The proponents' arguments

Punjabi officials and the National government often present the dam as a way to benefit the national economy as a whole - even though it was first proposed as a measure to address water and energy supply gaps in Punjab. The Kalabagh hydro-electric dam has been defended as a necessary means of supplying water for agriculture in the context of Pakistan's shrinking reserves, and existential threats to Pakistan as a nation (Rizvi, 2006, Tribune news desk, 2018). Benefits are often presented at the national scale and refer to national level data.

In 2005, Pakistan's water supply was 29% short of what was required and, with current water supply infrastructures, this is estimated to reach 33% by 2025 (Feyyaz, 2011).

The Kalabagh dam is also seen by proponents as a climate-friendly method to provide Pakistan with renewable energy. The Pakistani government argues that the extension of hydropower is central to its intended nationally determined contribution to climate change mitigation (INDC) as set out in the Paris Agreement (UNFCCC, 2016). In 2011, the supply-demand gap in electricity was calculated to have ranged between 1500 and 2500MW per day (Feyyaz, 2011).

It is also presented as a way of controlling floodwaters for disaster risk reduction and as a way of adapting to climate change, which has also become a priority given predictions of increasingly unpredictable and destructive monsoon seasons (Feyyaz, 2011). Monsoonal rains often swell the banks of the Indus River, causing devastating flooding. This occurred in 2010 when floods caused at least 2000 fatalities and wiped out 1.1 million hectares of crops (Farmer, 2010). Moreover, climate related water stress has been used



as an argument in favour of construction. Water availability during the winter cropping season has been dwindling across Pakistan ([Feyyaz, 2011](#)), suggesting a need for additional water storage capacities.

Disputes surrounding the dam

Opponents to the plans are generally suspicious of ideas of *national* unity and development citing regional disparities in both the economic development of Pakistan and the negative effects of large water projects. Sindhi politicians have been particularly outspoken in the past over the construction of large dams (e.g. Tarbela dam). Further conflicts date back to the development of irrigation canals by colonial authorities in the late 1900s and post-independence water allocations between India and Pakistan as agreed in the Indus Waters Treaty ([Ahkter, 2015](#); [Mustafa, et al 2017](#); see also [Interstate Conflict in the Indus River basin](#)). Dams have arguably intensified tensions between regional blocks and worsened regional fragmentation ([Ahkter, 2015](#)). Sindh claims the Kalabagh Dam the dam would further strip them of their rights to water and decimate downstream water access and quality for farmers and urban centres.

These political tensions are reflected in ideological differences between dominant political leaders in the various provinces. Some have noted a tendency in Sindhi and Balochistani politicians towards discourses of regional identity, equity and ecology; situating them in opposition to the “national” “developmentalist” agenda in Punjab, which favours large scale infrastructure and the modernisation of the country as a national unit ([Mustafa, et al 2017](#)).

Construction is also opposed due to its likely impact on communities on the planned construction site. It is predicted that 10,200 acres of land will need to be inundated, displacing an estimated 120,000 people. Politicians in KP are sceptical of Kalabagh. Even Punjabi citizens of the Mianwali district near the planned dam argue that the benefits of the dam will be unevenly distributed ([Dawn, 2010](#)).

Some argue that increasing water demands used as justification for dams is drawn primarily from powerful landowners resisting limitations on their water use. While negative impacts are felt foremost by poorer downstream communities in cities like Karachi who already lack access to sufficient drinking water ([Pasha, 2018](#)). Some large landowners downstream may also be affected. While they may be compensated, landless people are often less likely to receive compensation for the loss of their livelihoods ([Mustafa, et al 2017](#)). The disparities in the distribution of risks and benefits of the dams are thus well reflected in the disputes over its construction.

Taking climate change into consideration

Climate change is predicted to have multiple effects on water in Pakistan which is already considered one of the world’s most water-stressed countries ([Kugelman, 2016](#)). The Himalayan Glaciers which feed the Indus basin, are predicted to diminish more in the coming years. This may increase water flow in the short run while depleting ground water recharge in the long run, thus reducing de-facto energy production ([Jayaram, 2016](#)). Meanwhile heavy rains during the monsoon are predicted to become more irregular bringing challenges for addressing potential flood risks ([Stolbova, et al., 2016](#)). This could potentially affect the dams ability to block surges, and is also likely to aggravate tensions around issues of water distribution and timing flow management and reduce water availability along the Indus basin ([Diamond, 2014](#)).

The dam has been presented more recently as a strategy to adapt to climate change while increasing economic growth and meeting energy demand. However, potential benefits of the dam could be



undermined by the effects of climate change on the Indus basin and could multiply the effects of climate change on some regions adding to the likelihood of conflict.

Resolution Efforts

Authorities involved in the conflict resolution

Water conflicts in the Indus Basin, particularly between the Sindh and Punjab regions, are a reoccurring phenomenon. To mitigate conflict surrounding the distribution of water from the Indus Basin, the Indus River System Authority (IRSA) was established in 1992 to judge and regulate the distributions of water resources between provincial states. This authority monitors usage compliance of Indus waters, as set out in the Water Apportionment Accord (WAA) of the previous year ([Razzaq, 2013](#)).

The IRSA investigated provincial concerns over the Kalabagh dam in 2007 and asserted its feasibility. Due to opposition, the decision was referred to the constitutional body, the Council of Common Interest (CCI). The CCI ruled in favour of the federal government's plans for the dam. The topic was then referred to parliament and, as finally as a result of heated politicisation, the Federal Minister for Water and Power postponed construction until 2008 ([Razzaq, 2013](#)). The Lahore High Court declared the government legally obliged to build the dam in compliance with the ruling of the CCI in 2008 and plans were subsequently re-released. After protests in Sindh the project was dropped but reopened four years later.

Recent Developments

Acknowledging an emerging water crisis, the Pakistani provinces signed a National Water Policy and water charter in 2018 with the objective of and providing a more comprehensive response plan of action and policy framework ([Ministry of Water Resources, 2018](#)). The national water policy's main targets between 2018 and 2030 refer to the development of infrastructure which would increase water storage capacity (such as large dams, although Kalabagh is not mentioned), develop new cultivated and canal irrigated areas as well as increasing efficiency, data, and open up private sector investment. This is based on an idea that the water needs of Pakistan as a whole are paramount and to be met by increasing storage through dams.

However, questions remain as to how it would solve ongoing distributional conflicts between provincial regions as it fails to describe a benefit/risk sharing mechanism between states beyond the WAA. This means further negotiations will be needed at the provincial level. The National water policy reiterates that transformational water infrastructure will be developed in an equitable way and the 1991 Water Apportionment Accord will be met, but does not provide detailed guidelines for resolving recurring tensions over the agreement ([Alam, 2019](#)).

One concern about the water policy and charter is that they are not within the mandate of the CCI, which comprises of the prime minister and federal government members, unlike the Water and Power Development Authority (WAPDA) and Indus Rivers System Authority (IRSA), which are. Thus the policies proposed within the charter such as developing large dams do not correspond to what can be



implemented by the WAPDA or the IRSA. As the documents are not the product of an agreement between provincial governments and the national authority, they do not provide a detailed formula for hydropower benefit sharing and thus are not fit for addressing subnational disputes over large dams such as Kalabagh ([Alam, 2019](#)). Overall it seems the conflict will need to be negotiated between the provinces. This could happen in various ways.

Aligning national and regional water legislation

Legal negotiations are often a key route to conflict resolution. However, current legal arrangements on a national level may bring difficulties as water law is not clearly defined in Pakistan. For lack of there being a national law there are numerous arrangements at the level of the province and local governance. This makes it difficult for the national government to oversee issues related to national development such as sanitation, drinking water and water security and differentiated implications for different social groups and regions. As national policy is often deemed to favour Punjab, conflict may continue if national policies are not in line with these interprovincial arrangements ([Alam, 2019](#)).

As dam projects are highly contentious because they imply large discrepancies in the distribution of risks and benefits between different social groups and regions, the development of new integrated legislation could be a point for negotiation between the provinces.

Weaknesses of resolution efforts

The idea of the Kalabagh dam as a project to address water scarcity (increasing water storage) rather than unequal distribution of water resource have not aided attempts to disentangle how allocations of water, benefits and risks will be affected by the project. Sindhi politicians have argued that the central government did not take the water needs of Sindh into account when the Indus Waters Treaty was signed or in subsequent water infrastructure projects. Their claim is that it left the downstream region in a state of structural water scarcity rather than the whole nation facing absolute water scarcity.

The Pakistani government has as of yet not provided an assessment of how the Kalabagh dam will impact Sindh's social and ecological systems. As the Indus Waters Treaty may need to be renegotiated this could provide an opportunity to better align subnational concerns. However, if diplomacy between India and Pakistan breaks down, it is likely Sindh will be made more vulnerable to the upstream developments of both Punjab and India (see [Conflict in the Indus River basin](#)).

The Indus Waters Treaty is however a secondary concern. The current arrangement under the IRSA is the main issue contested by Sindh ([Alam, 2019](#)). This has been backed up by calls from communities in the Indus delta for an update to the Water Apportionment Accord of 1991 between provincial riparians to ensure all water needs are met while risks and benefits are more equally shared ([Hadi, 2019](#)). There may also be avenues for reforming water practices which uses resources more efficiently. According to research conducted by the American Institute of Peace in 2010, water problems in Pakistan are largely related to poor water management. Agricultural practices which recycle waste-water and do not over-consume, are therefore key in addressing concerns about water shortages expressed by Sindh province and should be integrated into hydro-policy discourse as they contribute to the structural scarcity and poor water quality in Sindh.



Intensities & Influences



INTENSITIES

International / Geopolitical Intensity



Human Suffering

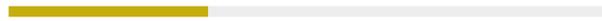


INFLUENCES

Environmental Influences



Societal Influences



Violent Conflict

No



Salience with nation

National



Mass displacement

Less than 100.000 and less than 10% of the country's population are displaced within the country.



Cross Border Mass Displacement

No



Resolution Success

Reduction in Violence

Violence has ceded completely.

Resolve of displacement problems

There is some success in accommodating the displaced.

Reduction in geographical scope

The geographical scope of the conflict has decreased.

Increased capacity to address grievance in the future

The capacity to address grievances in the future has increased.

Grievance Resolution

Grievances have been mostly addressed.

Causal Attribution of Decrease in Conflict Intensity

Conflict resolution strategies have been clearly responsible for the decrease in conflict intensity.



Entry Points for Resilience and Peace Building

Mediation & arbitration

3

The Indus River System Authority (IRSA) was established in order to mitigate the conflict surrounding the distribution of water from The Indus Basin. The IRSA brought the case to the constitutional Council of Common Interest (CCI), which was later referred to the Lahore High Court, both of which ruled in favour of the dam.

Treaty/agreement

1

The Pakistani provinces signed a National Water Policy and water charter in 2018 with the objective of and providing a more comprehensive response plan of action and policy framework. However, questions remain as to how it would solve ongoing distributional conflicts between provincial regions as it fails to describe a benefit/risk sharing mechanism between states beyond the Water Apportionment Accord (WAA). Current legal arrangements on a national level may bring difficulties as water law is not clearly defined in Pakistan. For lack of there being a national law there are numerous arrangements at the level of the province and local governance. As national policy is often deemed to favour Punjab, conflict may continue if national policies are not in line with these interprovincial arrangements. The development of new integrated legislation could be a point for negotiation between the provinces.

Improving actionable information

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The Pakistani government has as of yet not provided an assessment of how the Kalabagh dam will impact Sindh's social and ecological systems. As the Indus Waters Treaty may need to be renegotiated this could provide an opportunity to better align subnational concerns

Improving resource efficiency

1

The implementation of sustainable water consumption and agricultural practices is crucial to addressing problems of structural scarcity and poor water quality faced by Sindh. There may also be avenues for reforming water practices which uses resources more efficiently.

Resources and Materials

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Further information

<https://factbook.ecc-platform.org/conflicts/kalabagh-dam-pakistan>