



Conflict Factsheet

India and Bangladesh Conflict Over the Ganges River

Type of conflict Main	Intensity 2
Conflict Locality Southern Asia	Time 1957 –ongoing
Countries India, Bangladesh	Resources Fish, Agricultural / Pastoral Land, Water



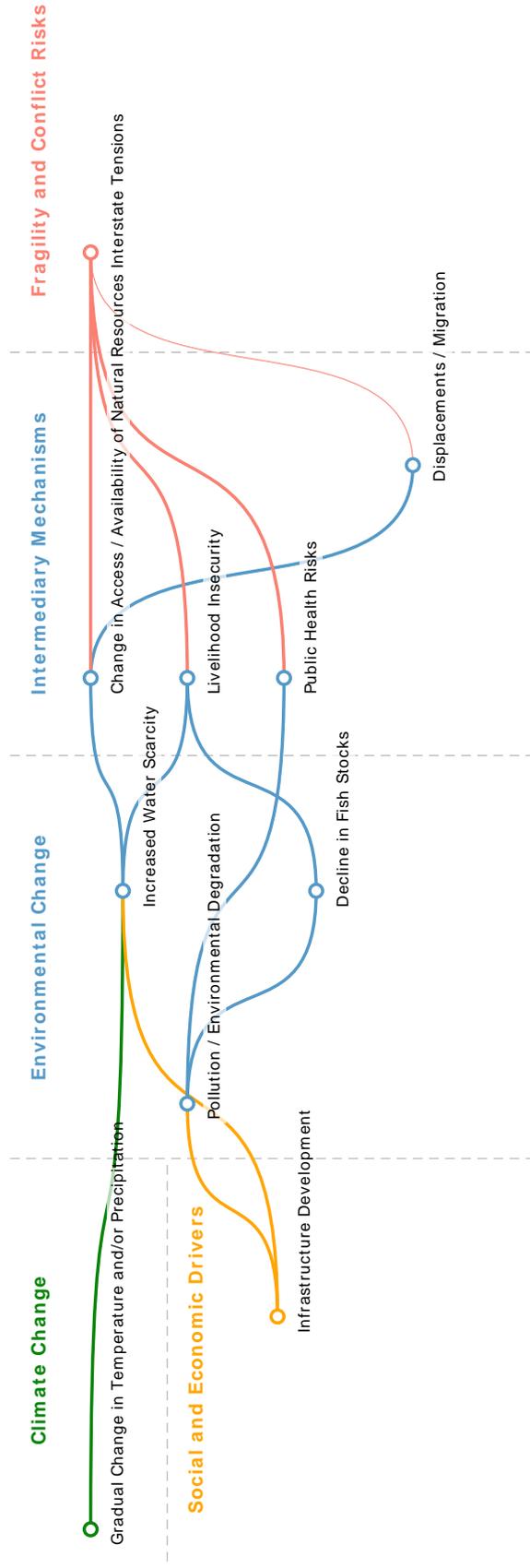
Transboundary
water
management

Conflict Summary

The construction of the Farakka Barrage in India along the Ganges has created water stress in Bangladesh by exacerbating the dry season and increasing the likelihood of flooding. The two countries have engaged in various levels of negotiations but have not yet agreed upon a solution to augment the Ganges to meet the needs of both states, particularly in the context of changing climate conditions.



Conceptual Model



Context Factors



Fish, Agricultural / Pastoral Land, Water





Conflict History

In 1961, India released plans to build the Farakka Barrage seventeen kilometres upstream from the border of Bangladesh. The purpose of the barrage was to divert water from the Ganges in order to reduce silt build up in Calcutta Port. Diversion of water from the Ganges had severe consequences on water availability downstream in Bangladesh. Changing rainfall and water use patterns upstream in Nepal have since further exacerbated water stress along the Ganges, leading to the inequitable distribution of water based on the requirements of the 1996 treaty. Diplomatic relations regarding water cooperation remain contentious.

Indo-Bangladesh Joint Rivers Commission

India and Bangladesh established the Indo-Bangladesh Joint Rivers Commission in 1972, following Bangladesh Independence in 1971 (Wolf & Newton, 2014). In 1974, it was realised during periods of low flow, that there would not be enough water in the Ganges to be diverted by the barrage without having severe impacts on water access in Bangladesh. Both sides agreed that the Ganges should be augmented to meet the needs of both states but the decision should be handed over to the Joint Rivers Commission.

Adverse impacts of the barrage operation

In 1975 during negotiations, India activated the barrage at full capacity (Wolf & Newton, 2014). The resulting adverse impacts felt in Bangladesh from reduced river flow included: degradation of surface and groundwater, degraded fisheries, increased salinity, and contaminated/reduced water supplies, which began to affect public health (Wolf, 1998).

Regulation of water distribution

In 1977, the Ganges Waters Agreement was negotiated, which regulated water distribution for five years. It was not until 1996 that a formal treaty was signed. The treaty is known as the Ganges Water-Sharing Treaty and regulates water distribution from Farakka Barrage over a thirty year period (Thomas, 2012). However, the basis of this agreement was framed on average water flow at the Farakka site between 1949 and 1988 (Wolf & Newton, 2014). Since the agreement, climate change impacts on rainfall, combined with increased uses of water for agriculture and hydro-power in the upper Ganges in Nepal, have changed water levels, thus, effecting the distribution of water according to the requirements of the 1996 treaty.

Bangladesh's critical situation

This has worked in both directions, to deprive Bangladesh of water in the dry season and to increase flooding during the wet season (Thomas, 2012). Bangladesh is widely recognised as a state most vulnerable to climate change as it is low-lying and is traditionally prone to extreme wet and dry seasons (Thomas, 2012). With climate change comes greater seasonal variations in precipitation patterns and glacial melting, which affects the livelihoods of millions of farmers dependent on the Ganges (Thomas, 2012). The Farakka Barrage has caused a multitude of environmental and social consequences, including the increased likelihood of flooding during monsoon seasons and the mass influx of environmental refugees into India. Refugee flows have also created secondary conflict in India, particularly in the region of Assam (Gugoff, 2011; Wolf, 1998) (see [Assam violence in India](#)).

India has been criticised for using the 1996 treaty to solidify the status quo; neglecting to consider the differences in dependency on the Ganges (Hanasz, 2014). India has also continued to use the Farakka



Barrage at levels agreed upon in 1996, despite the detrimental effects this has had on the livelihoods of farmers in Bangladesh; causing floods during monsoon season and exacerbating drought in the dry season. Consequently, water disputes have become a source for anti-Indian political groups, such as the Bangladesh Nationalist Party (BNP).

Resolution Efforts

Decisions regarding the Ganges were excluded from the auspice of the Commission. There has been both international and bilateral attempts at solving the Ganges water dispute.

Bangladesh's formal complaint

After rounds of failed negotiations in 1976 with the Joint Rivers Commission, Bangladesh filed a formal complaint against India at the United Nations General Assembly. The UN General Assembly adopted a consensus, which encouraged India and Bangladesh to meet at a ministerial level to resolve the conflict. Negotiations followed, which culminated in the signing of the Ganges Waters Agreement in 1977. However, this was only temporary and after it expired in 1982, the need to amend the agreement to adapt to water levels in the dry season became apparent.

Memorandum of Understanding

Two Memorandums of Understanding were signed in 1982 and 1985 respectively. Both focused on short term regulation of water flow during the dry season only. Ministerial meetings continued in 1992, however the interests of both parties could not be reconciled. Bangladesh again attempted to internationalise the dispute by raising the topic at the Commonwealth Summit in 1993 and again at the UN General Assembly in 1995 ([Rahaman, 2009](#)). In 1996 a formal treaty was adopted, however, it was not a comprehensive approach.

Lack of a whole-of basin approach

Neither the treaty, nor any prior arrangement, considers the uppermost riparian state of Nepal. Although attempts were made in 1986 by Indian and Bangladeshi experts to include Nepal in water sharing negotiations, these consultations failed because the benefits of Nepal's participation in water storage and diversion could not be made clear ([Rahaman, 2009](#)). The 1996 treaty, nor any prior short term arrangements, do not take a whole-of basin approach and ignores the effects of upstream uses on water availability. Bangladesh continues to encourage Nepal's inclusion in questions concerning the Ganges, however, India has been focusing more on the actual deliverables in the form of bilateral arrangements ([Jayaram, 2013](#)).

An ambiguous treaty

Furthermore, the 1996 treaty lacks distinct dispute resolution guidelines ([Hanasz, 2014](#)). The 1996 treaty does attribute authority to the JRC to resolve conflicts. The JRC simply acts as a consultation body ([Rahaman, 2006](#)). The treaty is also ambiguous, stating that neither party shall inflict harm on the other through their use of the river, without defining what is considered "harm" ([Thomas, 2012](#)).



Intensities & Influences

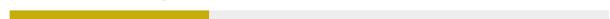


INTENSITIES

International / Geopolitical Intensity

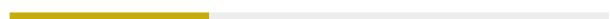


Human Suffering



INFLUENCES

Environmental Influences



Societal Influences



Diplomatic Crisis

Note of diplomatic crisis in case history, conflict purely verbal



Violent Conflict

No



Mass displacement

None



Cross Border Mass Displacement

Less than 100.000 and less than 10% of the population are displaced across borders.



Resolution Success

Resolve of displacement problems

Displacement continues to cause discontent and/or other problems.



Reduction in geographical scope

There has been no reduction in geographical scope.



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

There has been no reduction in intensity





Entry Points for Resilience and Peace Building

Mediation & arbitration

2

There have been both international and bilateral attempts at solving the Ganges water dispute. India and Bangladesh established the Indo-Bangladesh Joint Rivers Commission in 1972, with the purpose of negotiating an agreement on how to regulate water distribution. However, failed negotiations through the commission in 1976 led to the involvement of the United Nations General Assembly, which encouraged India and Bangladesh to continue negotiations at a ministerial level.

Treaty/agreement

3

In 1977, the Ganges Waters Agreement was negotiated, which regulated water distribution for five years. It was not until 1996 that a formal treaty was signed. The treaty is known as the Ganges Water-Sharing Treaty and regulates water distribution from Farakka Barrage over a thirty year period. However, the treaty fails to account for climate change impacts and their effects on the distribution of water.

Resources and Materials

References with URL

[Wolf, A.T, Newton, J.T. \(2014\). Case Study of Transboundary Dispute Resolution: The Ganges River controversy](#)

[Wolf, A.T. \(1998\). Conflict and cooperation along international waterways. Water Policy 1 \(1998\) pp.251-265](#)

[Thomas, K. \(2012\). Water Under the Bridge? Int'l Resource Conflict and Post-Treaty Dynamics in South Asia. In: South Asia Journal](#)

[Gugoff, C. \(2011\). Climate Change and Conflict in Migration from Bangladesh to Assam \(India\)](#)

[Hanasz, P. \(2014\). Sharing waters vs. sharing rivers: The 1996 Ganges Treaty. Global Water Forum](#)

[Rahaman, M.M. \(2009\). The Ganges water Conflict: A comparative analysis of 1977 Agreement and 1996 Treaty. International Water Law Project](#)

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Further information

<https://factbook.ecc-platform.org/conflicts/india-and-bangladesh-conflict-over-ganges-river>