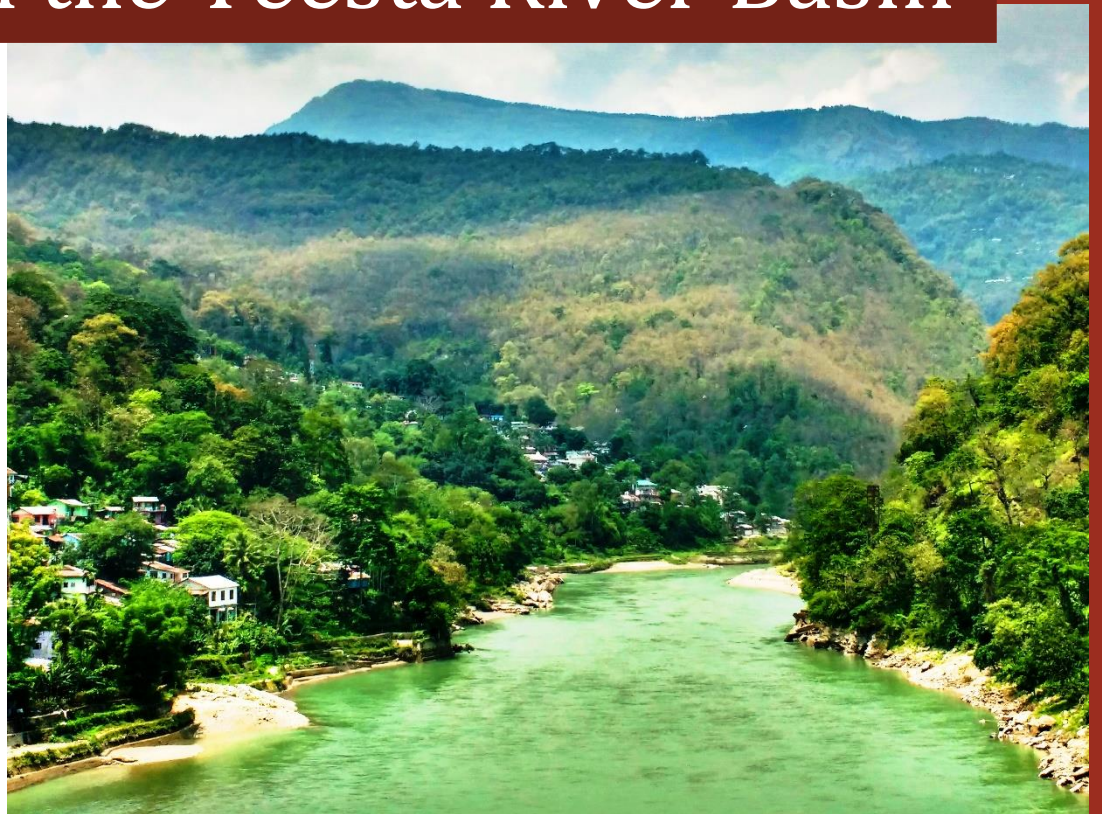


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Geopolitics of Water Conflicts in the Teesta River Basin



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Abstract

The Teesta basin is among the more underdeveloped areas of South Asia and deals with numerous issues spanning across economy, governance and politics, culture, environment, gender, security, and its riverine ecosystems. All these issues varying greatly in intensity and nature are nevertheless linked together by the Teesta which acts as a common thread running through them all.

The basin is known for the lack of an agreement between India and Bangladesh over sharing its waters, however, internal disputes such as the anti-dam movement in Sikkim, the struggle for Gorkhaland, and the 'Save the Buri Teesta' movement in Bangladesh are also significant issues tied to the bilateral relations between the two riparian nations.

The paper focuses on the geopolitics of water conflicts of the Teesta basin. Geopolitics is the study of the relationship between geographical factors and variables, and politics. Water conflicts are disputes over access, ownership, control and use of water resources between any two or more groups. Thus, this paper attempts to look at the current major conflicts within the Teesta basin from a political perspective based on their geographic profile.

Water resources in South Asia have been directly connected to national sovereignty and security for many reasons such as growing demand due to overpopulation and rapid urbanisation, consequent scarcity of the resource, mutual distrust among riparian neighbours, lack of multilateral and holistic initiatives for cooperation, and lack of robust dispute resolution mechanisms. The Teesta basin has a rapidly growing and urbanising population dealing with poverty and a low standard of living. The river, due to heavy damming, chemical contamination, deforestation and climate change, is experiencing erratic flows with a sharp decrease in the total volume of water. There is a dearth of trust and serious efforts to cooperate jointly over conservation of the river and development of the basin. Also, comparing the discourse on the Teesta with the actual conditions of the river and her riparians leads to the conclusion that the interests of the local stakeholders and the health, sustainability, economic value and spiritual importance of the river have not been prioritised in the negotiations over the Teesta. Thus, it can be seen that the Teesta issue is much more than a signature on an agreement.

This paper hypothesises that the phrase 'Indo-Bangladeshi conflict over the Teesta river' is inaccurate, for the Teesta conflict is neither about the river nor a conflict between India and Bangladesh (who share a good rapport), but a product of domestic politics and regional geopolitics, and has little to do with the river and her health. It does not negate the discontent over intense damming upstream and severe reduction in water flow downstream of the Teesta but states that the causes and effects of this discontent are rooted in socio-cultural and economic forces; after an extent, it is no longer about the river and her environment. On closer scrutiny, one can observe that disputes over the Teesta are a façade for various political, social, economic and geopolitical interests playing out at domestic and national levels in both countries. The consequences are borne by the river and her people in the form of environmental damage, low level of development and low resilience towards the effects of climate change. The paper attempts to unearth these interests and provide pragmatic solutions that would not only solve the political disputes, but also promote environmental sustainability, economic efficiency and social justice in the Teesta river basin.

Preface

Water conflicts are rarely just about water. On the surface, they are about ownership, distribution, access to, and use of water resources. However, beneath the surface are multiple layers of historical, cultural, religious, political, ethnic and economic conflicts, which manifest themselves time and again through the water conflict. Water conflicts are further complicated by the fact that they occur not only *for* water, but also *through* water and *at the cost of* water i.e. water can be not only a reason for conflict, but also a weapon for and victim (intended, or collateral damage) in conflict. This is exactly what a solo backpacking trip along the entire length of the Teesta river taught me. As I set out from the confluence of Teesta and Brahmaputra at Chilmari, Bangladesh, I met numerous locals, activists, NGOs, bureaucrats, academicians, farmers, businessmen and youngsters who spoke of various issues that beset their region. We discussed history, culture, society, politics and the environment, and the Teesta figured in each of them. For each person I spoke to, the Teesta was a mother, a goddess, a tyrant, a city landmark, a powerful resource, and nature's gift in distress. Her dwindling flows and the tussle to harness as much of her waters as possible for their farms, homes and hydropower stations formed the central theme of any discussion on the Teesta. While everyone had their own narrative depending on their profiles and locations, there was a general consensus that every riparian of the Teesta should be able to access her waters and prosper because "they too are human beings just like us".

In the wider picture, the role of geopolitics was subtle but permeating. Be it the strategically located Chicken's Neck buffered by Sikkim, or the drought-prone northernmost region of Rangpur far away from the markets and growth of Dhaka in Bangladesh, geopolitical conditions played a huge role in shaping the dispute over sharing the Teesta. Moreover, the goodwill and friendly sentiment for India among Bangladeshis, and the insistence of Indians that Bangladesh should get a fair share of the Teesta's waters made me realise that the dispute was not bilateral, but a summation of domestic friction, economic constraints, and political imperatives based in wider geopolitical realities of the South Asian neighbourhood and global phenomena such as climate change.

During my research on the Teesta, I came across a lot of papers that focused on the social, cultural, economic and scientific aspects of the Teesta basin, but very little on the geopolitics of it. I also read many articles that outlined Indo-Bangladeshi relations, the chronology of the Teesta talks and their importance for India and Bangladesh, the local dynamics of Rangpur division, West Bengal's stand on the Teesta issue, the struggle for Gorkhaland, and the anti-dam movement in Sikkim – but each issue was dealt in isolation. Nowhere could I find a comprehensive piece of work that linked together domestic issues of the Teesta *and* bilateral negotiations on sharing the river *and* the geopolitics of the region. This paper is an attempt to establish these connections and provide a clearer picture of water conflicts in the Teesta basin from a geopolitical angle and at the same time, spur more comprehensive and sophisticated work on these lines in the Teesta basin.

This conflict compels one to take a position. Throughout my travel and research, I have noticed the Teesta, at the heart of all disputes and yet silently accepting and nurturing the civilisation squabbling over her - in that lies her divinity. As I prayed at Tso Lamo, origin of the Teesta, I realised I stood for the Teesta, her environment, and their conservation, wellbeing and protection.

Being an outsider, I humbly accept that I have just about scratched the surface of the political, geopolitical, social and cultural dynamics of the Teesta basin. While I am immensely grateful for the valuable insights and help provided to me by the locals of the Teesta as well as all those I met and spoke to during this research, I apologize for any insensitivity or offense that could be perceived through the research and analysis in this paper as it is purely unintentional. Any feedback is welcome.

Gauri Noolkar-Oak

Acknowledgements

This paper is the result of a very precious opportunity granted to me by the Joke Waller-Hunter Initiative (JWHI) at Both ENDS, The Netherlands. The JWHI Fellowship has opened doors to so many learnings, opportunities and friendships! My sincere gratitude to JWHI and Both ENDS; without them, none of this would have been possible.

I am extremely grateful to Prof. Vijay Paranjpye of Gomukh Trust, Pune, who has been guiding me for the past two years. His support, teaching and inputs right from the very beginning of this research, have been immense and invaluable. I am also grateful to Mr. Remi Kempers of Both ENDS for his support and feedback throughout the fellowship and helping me sail through it quite smoothly.

This paper is preceded by a solo backpacking trip along the Teesta river, right from the Teesta-Brahmaputra confluence at Chilmari, Bangladesh, all the way up to Teesta's origin at Tso Lamo lake, India. I was able to undertake this adventure all by myself thanks to the wonderful people I met on the way, who generously offered me a place in their homes, lots of help, and friendships to cherish. For their heart-warming hospitality and support, I am indebted to –

Dr. Abdul Matin of Bangladesh Poribesh Andolon (BAPA), Dhaka, who looked after me like his daughter all the while I was in Bangladesh;

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Before, during and after my trip along the Teesta, I met many people who helped me generously with information and contacts. Their appreciation and encouragement kept me going. I am very grateful to –

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Mr. L. S. Tamsang, President of Myang Lyang Lepcha Development Board, Kalimpong who sent books and journals all the way from Kalimpong to me in Pune, despite Gorkhaland tensions prevailing in Kalimpong and surrounding areas.

Mr. Bimalendu Majumdar of Jalpaiguri, and Mr. Dinesh Roy of Mainaguri who shared with me valuable contacts and insights on the environmental, cultural and social issues of the Teesta basin.

Mr. Raj Basu, a Siliguri-based film-maker who introduced me to the history and religious makeup of the Teesta basin as well as more people who helped me through the rest of the journey.

And there were more who helped me out of tight spots, confusions and tiring situations, making my journey a smooth, blissful, and an unforgettable experience. In no particular order, I am thankful to –Mr. Sharifbhai Jamil (Blue Planet Initiative), Mr. Rahul Agrawal, Mr. Niraj Pradhan, and Kamran, Mahbub and Javed, and the many, many locals who helped me on the way.

My journey along the Teesta has been inspired by the book ‘Empires of the Indus’ written by Ms. Alice Albinia. I would like to thank her for writing this wonderful book and for her tips which helped me greatly during the trip.

While writing this paper, I did refer to many books, journalistic articles and government statistics, however many significant points and observations have been gathered from academicians, activists, scientists, journalists and locals I spoke to during this research. In no particular order, I greatly appreciate the help given by – Dr. Kalyan Rudra, Mr. Deoashish Mothey, Mr. Neeraj Vagholikar, Mr. Shripad Dharmadhikary, Ms. Nikita Das (Prayas), Mr. Arfan Uzzaman, Mr. Samir Mehta, Mr. Siddharth Patil (ACWADAM), Dr. Amit Ranjan, Mr. Md. Tanvir Rahman Nishad, Dr. Mona Chettri, Mr. K. J. Joy and Dr. Shrikant Gabale. I am also thankful to Ms. Prachi Sathe who has designed the maps, Mr. Hrishikesh Gupta who has designed the diagrams for this paper, and Mr. Sumedh More for helping me create the “Tussles over Teesta” website.

This paper has been improved and fine-tuned by Prof. Paranjpye, Mr. Remi Kempers and a number of peers who very kindly invested their time and energy in providing me with thoughtful and encouraging reviews and feedback. In no particular order, I would like to offer my special thanks to - Mr. Samir Mehta, Mr. Arfan Uzzaman, Dr. Abdul Matin, Mr. Himanshu Thakkar, Dr. Partha Sarathi Datta, Ms. Ashwini Dabadge, Mr. Chinmay Bhandari, Dr. David J. Karl, and Mr. Mark Kinra.

As a part of my JWHI fellowship, I also studied a short course in water conflict management at UNESCO-IHE, Delft, The Netherlands, which helped me build the conceptual base and understanding of transboundary water conflicts. I am greatly thankful to JWHI for providing me with the opportunity to study at UNESCO-IHE, as well as to my professors at UNESCO-IHE, particularly Prof. Aaron Wolf and Ms. Zaki Shubber. I am also very grateful to Ms. Mukta Bapat, Mr. Akshay Mahashabde and their two lovely daughters for opening the doors to their wonderful home and making me feel more like a member of the family than a guest throughout my stay at Delft.

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List of Abbreviations

ACT – Affected Citizens of the Teesta
BCM – Billion Cubic Metres
BJP – Bhartiya Janata Party
BNP – Bangladesh Nationalist Party
BWDB – Bangladesh Water Development Board
CCS – Concerned Citizens of Sikkim
CFS – Citizens Forum of Sikkim
CLOS – Concerned Lepchas of Sikkim
CPEC – China-Pakistan Economic Corridor
CPI – Communist Party of India
DGHC – Darjeeling Gorkha Hill Council
EIA – Environmental Impact Assessment
GBM – Ganga-Brahmaputra-Meghna
GDP – Gross Domestic Product
GJM – Gorkha Janmukti Morcha
GLOF – Glacial Lake Outburst Flood
GNLF – Gorkha National Liberation Front
GoB – Government of Bangladesh
GoI – Government of India
GoS – Government of Sikkim
GoWB – Government of West Bengal
GST – Goods and Services Tax
GTA – Gorkhaland Territorial Administration
HCR – (Poverty) Head Count Rate
HEP – Hydroelectric Project
HuJI-B – Harkat-ul-Jihad-al Islami Bangladesh
HYV – High Yielding Varieties
IUCN – International Union for Conservation of Nature
IWT – Indus Waters Treaty
JCE – Joint Committee of Experts
JMJB – Jagrata Muslim Janata Bangladesh
JRC – Joint Rivers Commission
JTG – Joint Technical Group
m³/s – Cubic Metres per Second
MASL – Metres above Sea Level
MoU – Memorandum of Understanding
NDA – National Democratic Alliance
NGT – National Green Tribunal
RBO – River Basin Organisation
SOD – Sangha of Dzongu
TBP – Teesta Barrage Project
TMC – Trinamool Congress
ToR – Terms of Reference
UPA – United Progressive Alliance

Research Methodology and Layout of the Paper

This paper presents a geopolitical analysis of water conflicts in the Teesta River Basin. The analysis is qualitative in nature and based on both primary and secondary sources of data. The primary data has been collected through a month-long journey in the Teesta basin, and various interviews, meetings and conversations with experts and stakeholders in India and Bangladesh. The secondary data has almost entirely been collected through online research.

Conflict mapping of the Teesta basin in this paper is based on a matrix of geographical space and political processes over time. Major stakeholders and their positions have been identified and through analysing the power dynamics between them, an attempt has been made to identify their underlying interests. A historical approach has also been taken to understand not only the main transboundary issue over the Teesta, but also domestic problems in Sikkim and northern West Bengal. The role of domestic politics in shaping bilateral relations on the Teesta has been analysed through the lens of Putnam's two-level game theory. The solutions provided are realistic and political in nature, but with the intention to promote environmental sustainability of the Teesta river basin, and efficient use and equitable allocation of its resources.

The paper has evolved through the following stages of geopolitical reasoning –

- a) Identification of the conflict and delineating its geographical space.
- b) Identification of major parties, their positions, intentions and interests.
- c) Analysis of the geopolitical factors related to the problem.
- d) Identifying the opportunities and constraints provided by these geopolitical factors to the major parties involved in the conflict.
- e) Formulating solutions that are pragmatic as well as promoting holistic conservation and development of the Teesta River Basin.

The paper is divided into seven parts. The first part gives a comprehensive view of the Teesta basin and its historic, geographic, demographic and economic features. The second part deals extensively with the conflicts in the Teesta basin. It is further divided into two sub-parts; the first gives a detailed account of the transboundary issue over the Teesta agreement and positions of parties in the conflict, and the second part analyses domestic conflicts on both sides of the border, namely in Sikkim, Gorkhaland and potentially in Rangpur. The third part of the paper presents collectively the case of the local communities across the Teesta basin. The fourth and fifth parts speak of two crucial aspects, namely groundwater and climate change, which have not been addressed in the overall Teesta issue. The sixth part analysis the position and impact of domestic conflicts on the bilateral relations over the Teesta. The seventh part provides a summary with pointed conclusions, and lists out probable solutions and measures from the point of view of each of the major parties involved in the Teesta dispute.

A. Introduction

The Teesta river originates at Tso Lamo, India and flows through the states of Sikkim and West Bengal in India and the Rangpur division in Bangladesh before pouring into the Brahmaputra river at Chilmari, Bangladesh. Her total length is 414 kilometres with an average annual flow of 60 billion cubic metres (BCM) of water – roughly the amount of water carried by 24 million Olympic level swimming tanks. Over 30 million people live in the Teesta river basin and are dependent on the river for drinking and domestic use, irrigation, industry, domestic needs and cultural and religious activities.

A.1. Nomenclature and History

The Teesta has various versions to her name. In the upper reaches i.e. in Sikkim, the indigenous Lepchas call her ‘Tee-sa-tha’. When she hits the plains, her Sanskrit name is ‘Tri-srota’ which translated literally means ‘three streams’ – Punarbhaba, Atreya and Karatoya – through which the erstwhile Teesta flowed and emptied into the Padma River near Rajbari, Bangladesh (Bhattacharyya A. , 1974) until 1787 when massive floods, most likely caused by an earthquake, led her to shift her course and migrate south-east and empty into the Brahmaputra instead. The Teesta rose to importance as the eastern frontier of the Mughal empire but for most of history, she played second fiddle to the Karatoya River, her easternmost stream, which is mentioned in ancient texts such as the Puranas, Mahabharata, Ramacharitmanas and Chinese traveller Hsuan Tsang’s writings. The Karatoya, once known to be “impassable” in the rainy season (Bhattacharyya A. , 1974) gradually dried up after the Teesta changed course in 1787 and is now reduced to a small stream in Bangladesh.

A.2. The River

Among the 54 rivers shared by India and Bangladesh, Teesta is the fourth largest. The total area of the Teesta river basin is 12,159 km² i.e. roughly thrice the size of the Indian state of Goa, with 2,004 km² or about 17% of it in Bangladesh and the rest in India. Within India, 6930 km² or 86% of the basin lies in Sikkim; in fact, it drains almost the entire state. The flow of the river is highly variable. At the Dalia barrage¹ in Bangladesh, the average maximum flow of the Teesta has been recorded to be as high as 7900 m³/s while the average minimum flow has been recorded to be as low as 283 m³/s. Further damming and control of the river has reduced the flow to 28 or even 14 m³/s, especially in times of drought (Mondal & Islam, 2017). The average annual flow of the Teesta is about 60 BCM. The seasonal variation rate of the Teesta is about 1:10, i.e. 90% of her water, roughly 54 BCM, flows in the rainy season from June to September. This means that the flow through the rest of the year is a mere 6 BCM. It is this phenomenon – reduction of Teesta flow during lean season – which is the bone of contention between India and Bangladesh.

The Teesta flows through three states/divisions of two countries, namely the states of Sikkim and West Bengal of India and the Rangpur division of Bangladesh. The Tso Lamo lake, located 5280 metres above sea level (masl), is the origin of the Teesta river, which is fed by the Teesta Khangse glacier descending from the Pahaunri peak located on the India-China border in North Sikkim. The river first flows as a small stream named Lachen Chu up to Chungthang where it joins Lachung Chu and takes the name Teesta.

¹ A barrage is a type of low-head, diversion dam which consists of a number of large gates that can be opened or closed to control the amount of water passing through. (From Wikipedia)

Figure 1: Total Area of the Teesta River Basin

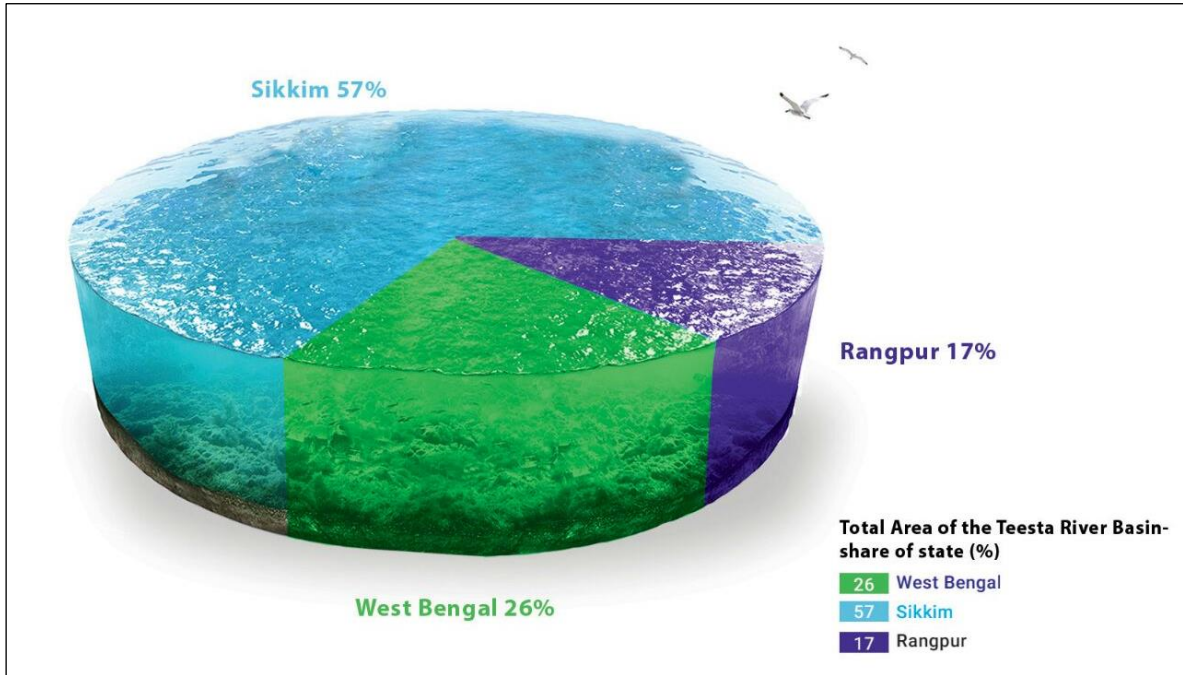
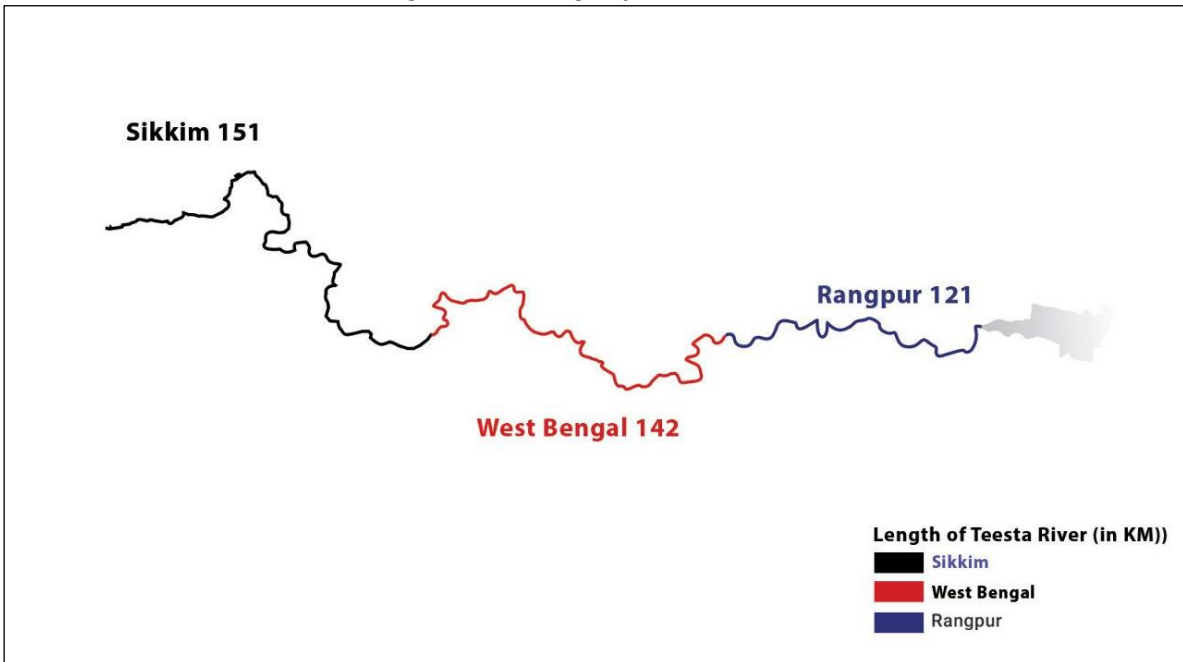


Figure 2: Total Length of the Teesta River



A.2.1. India

A.2.1.1. Sikkim

The Teesta cuts vertically through Sikkim and drains almost the entire state, flowing fast and furiously for 151 kms through deep gorges and narrow valleys. In just 100 kilometres, she descends from 5280 metres above sea level (masl) to 213 masl, a steep drop considered favourable for hydropower development. As she travels, she is fed by innumerable rivulets and tributaries, and briefly, she forms the border between West Bengal and Sikkim before entering West Bengal near Kalimpong.

A.2.1.2. West Bengal (northern region)

The Teesta flows as the Sikkim-West Bengal border and then through West Bengal, primarily through the northern districts of Darjeeling, Kalimpong, Jalpaiguri and Cooch Behar. She hits the plains at the Coronation Bridge at Sevoke, about 22 kms from the town of Siliguri and transforms from the turbulent, narrow river of the mountains to a slow, wide, braided² river of the plains. After flowing for 142 kms, it enters Bangladesh near the town of Mekhliganj.

A.2.2. Bangladesh

A.2.2.1. Rangpur

In Bangladesh, the Teesta flows through the districts of Gaibandha, Kurigram, Lalmonirhat, Nilphamari, and Rangpur, all located in the Rangpur division, for 121 kms before joining the Brahmaputra near the town of Chilmari. Here, the river's braided course is further widened and varies from 300 to 550 m in width (Islam M. F., 2016).

A.3. Dams and Barrages on the Teesta River

The Teesta is a heavily dammed river. In its course of 414 kms, about 25 dams have been proposed or built, while 16 have been cancelled for various reasons. Most of these dams, with a total installed capacity of 4336 MW are planned/located in Sikkim.

Table 1: List of Dams in Sikkim and their Status³

Sr. No.	Name of Project	Installed Capacity MW	Latest Status
1	Teesta I (Teesta Stage I HEP)	280	MOU/IA cancelled as these areas fell within the vicinity of Kangchendzonga National Park
2	Teesta II (Teesta Stage II HEP)	330	MOU/IA cancelled due to non-performance of the developer.
3	Teesta III (Teesta Stage III HEP)	1200	Commissioned
4	Teesta IV (Teesta Stage IV HEP)	520	Major works still not started

² Braided Rivers exhibit numerous channels that split off and re-join each other to give a braided appearance. They typically carry fairly coarse-grained sediment down a fairly steep gradient. Additionally, the water discharge tends to be highly variable. Consequently, braided rivers usually exist near mountainous regions, especially those with glaciers (Braided Rivers, n.d.).

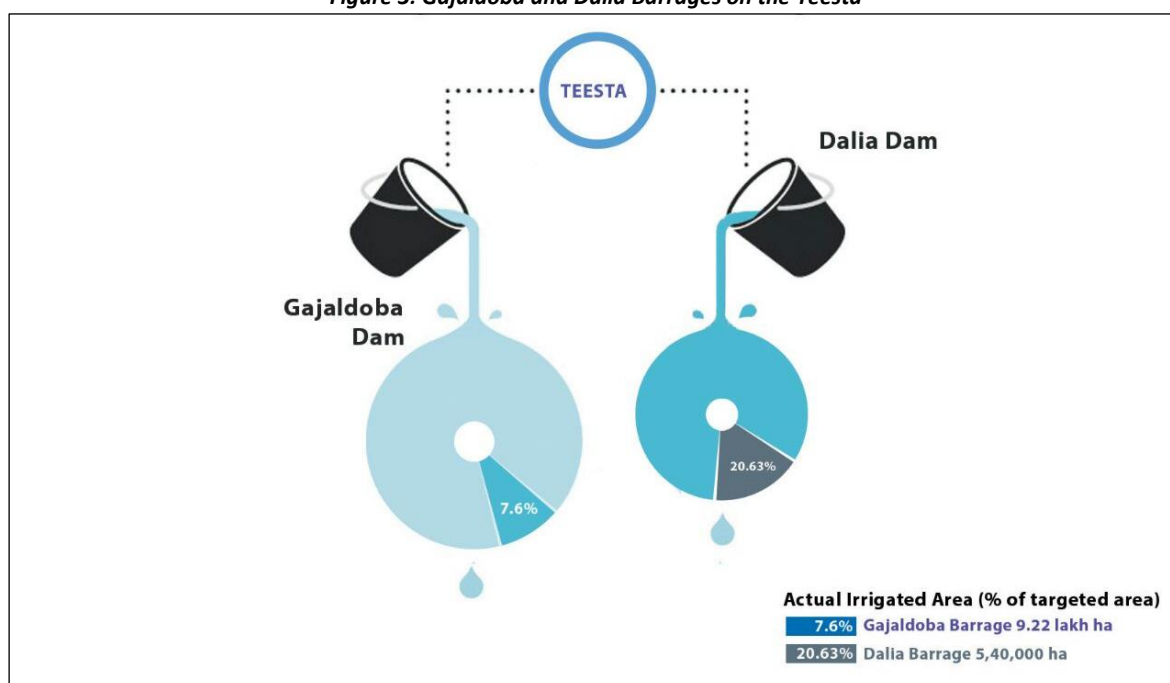
³ Obtained from Mr. Samir Mehta, International Rivers, Mumbai on 18-7-2017 and Energy and Power Department, Govt. of Sikkim.

5	Teesta V (Teesta Stage V HEP)	510	Project Commissioned
6	Teesta VI (Teesta Stage VI HEP)	500	Under construction (facing financial problems)
7	Lachen HEP	210	-
8	Panan HEP	300	Pre-construction works started
9	Rangyong HEP	117	Projects cancelled/not taken up as these areas fell within Dzongu area and in the vicinity of Kangchendzonga National Park.
10	Rongnichu HEP	96	Under construction
11	Sada Mangder HEP	71	MOU/IA terminated as no activities started at site.
12	Chuzachen HEP	99	Project Commissioned
13	Bhasmey HEP	51	Engineering and most items completed
14	Rolep	36	MOU/IA cancelled due to non-performance of the developer.
15	Chakhungchu	50	MOU/IA cancelled due to non-performance of the developer.
16	Ralong	40	MOU/IA cancelled due to non-performance of the developer.
17	Rangit II HEP	66	Under construction since 2005 (facing financial problems)
18	Rangit IV HEP	120	Under construction since 2005 (facing financial problems)
19	Dikchu HEP	96	Under construction since 2006
20	Jorethang Loop (HEP)	96	Commissioned
21	Lingza	120	Projects cancelled/not taken up as these areas fell within Dzongu area and in the vicinity of Kangchendzonga National Park.
22	Thankgchi	40	-
23	Bimkyong HEP	99	Revised timeline awarded
24	Bop HEP	99	Revised timeline awarded
25	Ting Ting HEP	99	Project cancelled vide Govt. Notification No. 12/Home/2012 as milestones as per MOU not achieved.
26	Rateychu Bakchachu	40	LOI Issued
27	Tashiding HEP	97	98% completed
28	Lachung HEP	99	Revised timeline awarded
29	Lethang HEP	96	Project not granted clearance by National Wild Life Board, Gol. Project cancelled vide Notification No. 12/Home/2012.
30	Suntaleytar HEP	30	MOU/IA cancelled due to non-performance of the developer.
31	Rangit III HEP	60	Project Commissioned
32	Kalez Khola-I HEP	27.5	MOU/IA cancelled due to non-performance of the developer.
33	Kalez Khola-II HEP	60	MOU/IA cancelled due to non-performance of the developer.
34	Rechu HEP	26	-
35	Rahikyong HEP	25	Yet to start

36	Rukel HEP	33	Projects cancelled/not taken up as these areas fell within Dzongu area and in the vicinity of Kangchendzonga National Park.
37	Ringpi HEP	30	Projects cancelled/not taken up as these areas fell within Dzongu area and in the vicinity of Kangchendzonga National Park.
38	Rathangchu HEP	320	Project scraped due to religious sentiments.

After she hits the plains at Sevoke, the two major structures on the Teesta are the Gajaldoba barrage in India and the Dalia barrage in Bangladesh. Each barrage is part of multi-purpose projects (and each of the multi-purpose projects is named the Teesta Barrage Project or TBP) which are supposed to address irrigation and power needs in six districts of North Bengal and seven districts of Rangpur division in India and Bangladesh respectively. Bangladesh had begun the construction of the Dalia barrage before India commenced work on the Gajaldoba barrage. However, both were completed almost at the same time.

Figure 3: Gajaldoba and Dalia Barrages on the Teesta

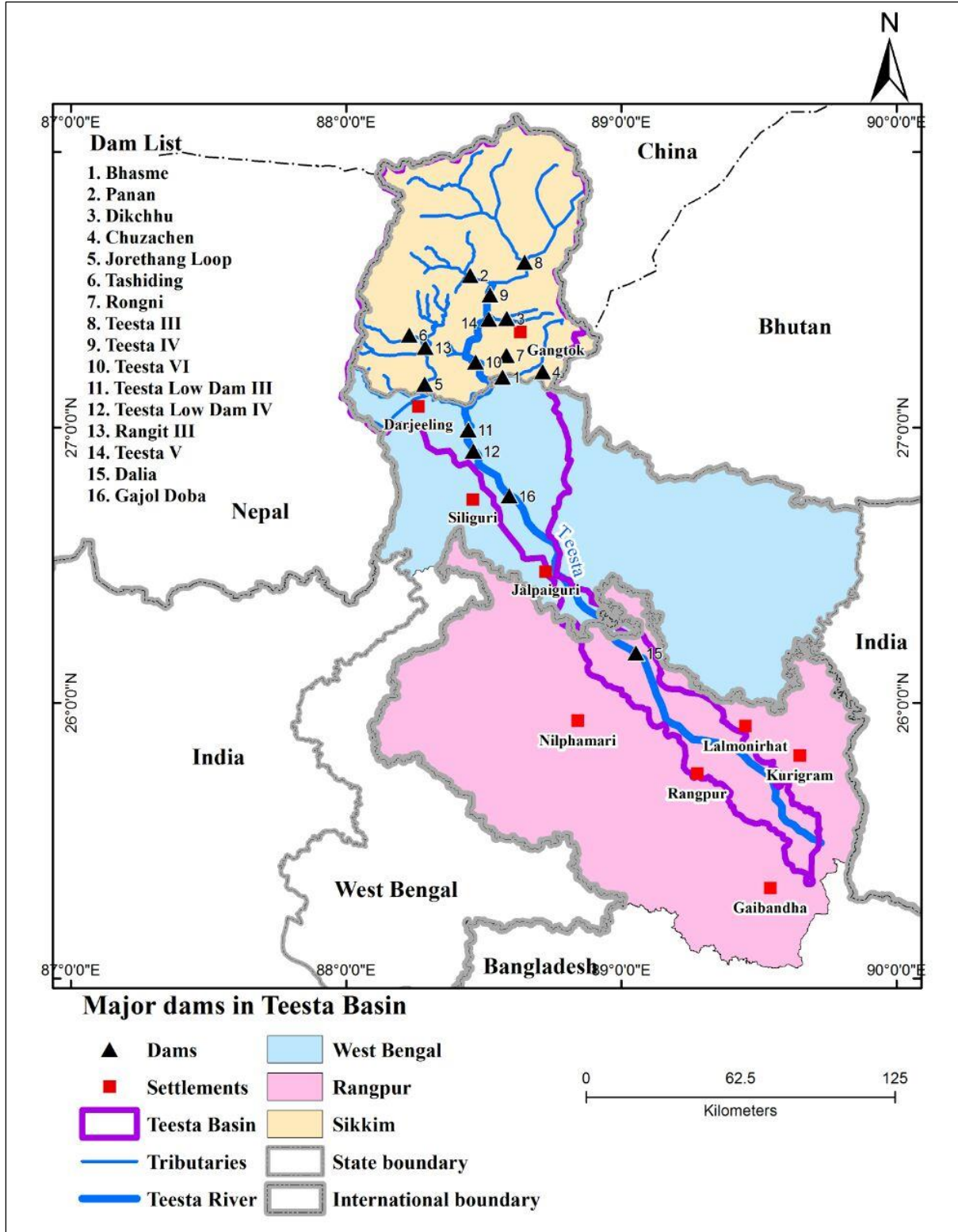


Dalia Barrage - The Dalia barrage is built in Lalmonirhat district about 16 kms south of the Indo-Bangladeshi border and is a gravity irrigation project. It is part of the Teesta Barrage Project of Bangladesh with a total target irrigated area of 5,40,000 hectares (Strategic Foresight Group, 2013), an area almost twice the size of Hong Kong. The total cost of the project is estimated to be Rs. 1,400 crores (roughly USD 220 million). Work on the project started in 1960 and Phase I was completed in 1990, which has been able to provide irrigation to about 1/5th i.e. 111,406 hectares of land.

Gajaldoba Barrage - The Gajaldoba barrage is built in Jalpaiguri district about 66 kms north of the Indo-Bangladeshi border, with a target irrigated area of 92268 hectares. It is part of Teesta Barrage project started in 1976 at a cost of Rs 69.7 crore with a target of irrigating 9.22 lakh hectares and generating 67.5 MW of hydropower in North Bengal. The Gajaldoba Barrage was completed in 1990. By 2011, after spending Rs 1,200 crores (roughly USD 185 million), the project has been able to provide irrigation water to only 66,000 hectares (less than 8%) of land and produce 20 MW of electricity (Kumar, 2013). Two canals drawn out from the Gajaldoba transfer Teesta's water to two other river basins in the region; one canal flows west to the Mahananda River and the other flows east to Jaldhaka River. After a few years of operation, in 1996, Gajaldoba started drawing and storing excessive water

from the Teesta, and the trend of steep reductions in flow every lean season began to be recorded at Dalia. Gajaldoba's upstream location, its increasing drawing and storage of Teesta water, and the lack of an agreement on sharing the Teesta waters have rendered the Dalia barrage and Bangladesh's TBP practically useless.

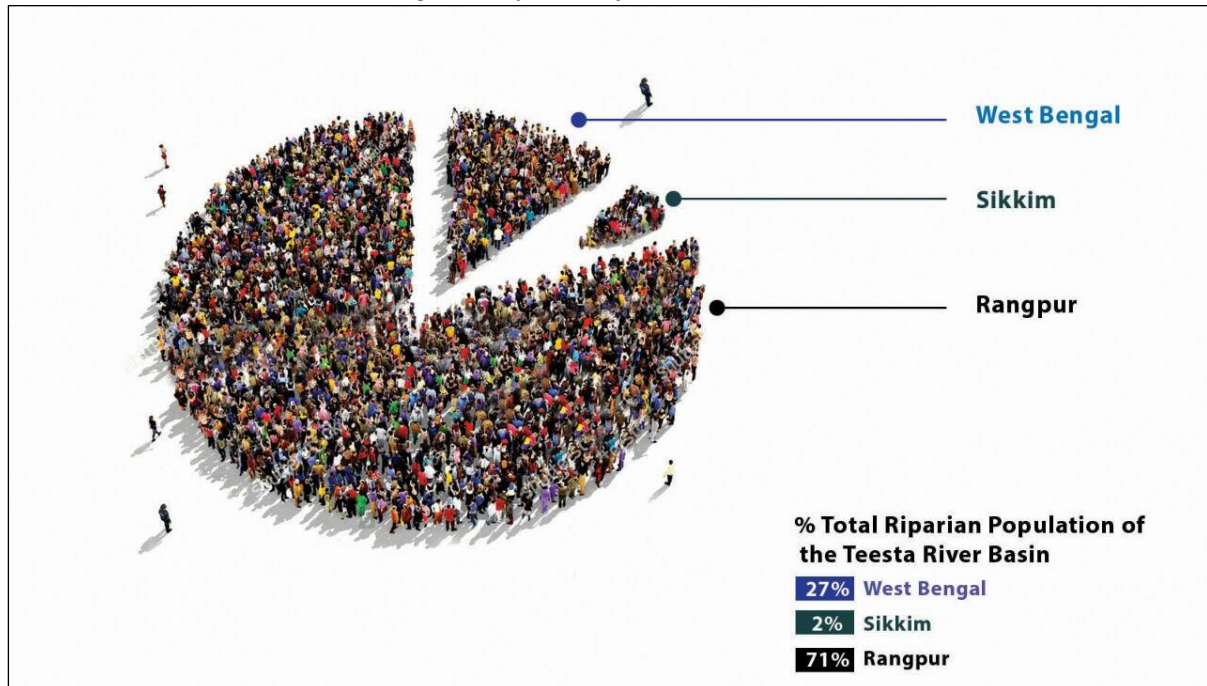
Figure 4: Dams in the Teesta River Basin



A.4. Demography

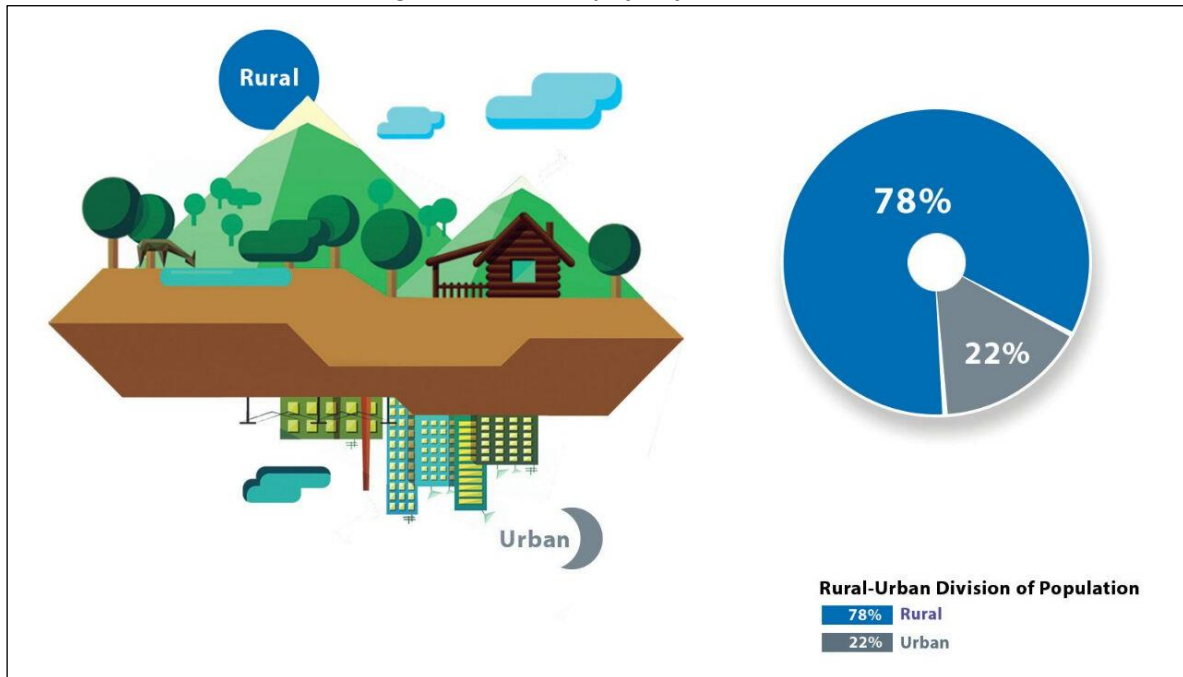
The Teesta River Basin is densely populated. It is home to around 30 million people – which is half the size of Italy’s population – out of which roughly 2% are located in Sikkim, 27% are located in North Bengal and the rest 71% are located in North Bangladesh. It must be noted that the actual number of people living in the Teesta basin in Bangladesh is 9.5 million, but more than 21 million people in the country are dependent directly or indirectly on the river for livelihood.

Figure 5: Population of Teesta River Basin



Out of the 30 million people, 23.4 million or 78% of the population stays in rural areas. West Bengal alone is home to 53% of the rural population of the entire Teesta basin. The rural population is characterised by low level of economic activity, poverty, malnutrition, illiteracy and unemployment and an overall low Human Development Index (HDI) score on both sides of the border. The rural population of the Teesta basin is highly dependent on the river for survival and experiences increasing vulnerability to climate change effects in the region and especially on the Teesta.

Figure 6: Urban-rural profile of Teesta Basin



The cultural profile of the Teesta basin is diverse. Spanning from North Sikkim to North Bangladesh, the basin is home to several tribes, religious groups and communities, both native and migrant. Within a span of 12,000-odd km², the basin hosts almost all major religions, numerous ethnicities, and many communities which have stayed in the region for as long as a few centuries and as short as a few decades. Bengali is the dominant language in the basin due to the sheer size of Bengali-speaking population, but along with it, Nepali, Hindi, English, Tibetan and tribal languages such as Lepcha, Rajbanshi, Bodo, Santali etc. are spoken as well.

A.4.1. India

A.4.1.1. Sikkim

The three major communities of Sikkim are the Lepchas, Bhutias and Nepalis. The Nepalis are further split into ethnic groups such as Limbus/Tsongs, Mangars, Kiratis, Gorkhas etc. Buddhism is the dominant religion in Sikkim while many Nepali communities practice Hinduism. Since the arrival of Western missionaries, some Lepchas have converted to Christianity. Sikhism also has a presence in Sikkim in the form of two gurudwaras, one located at Chungthang and the other on the banks of the Gurudongmar Lake.

A.4.1.2. West Bengal (northern region)

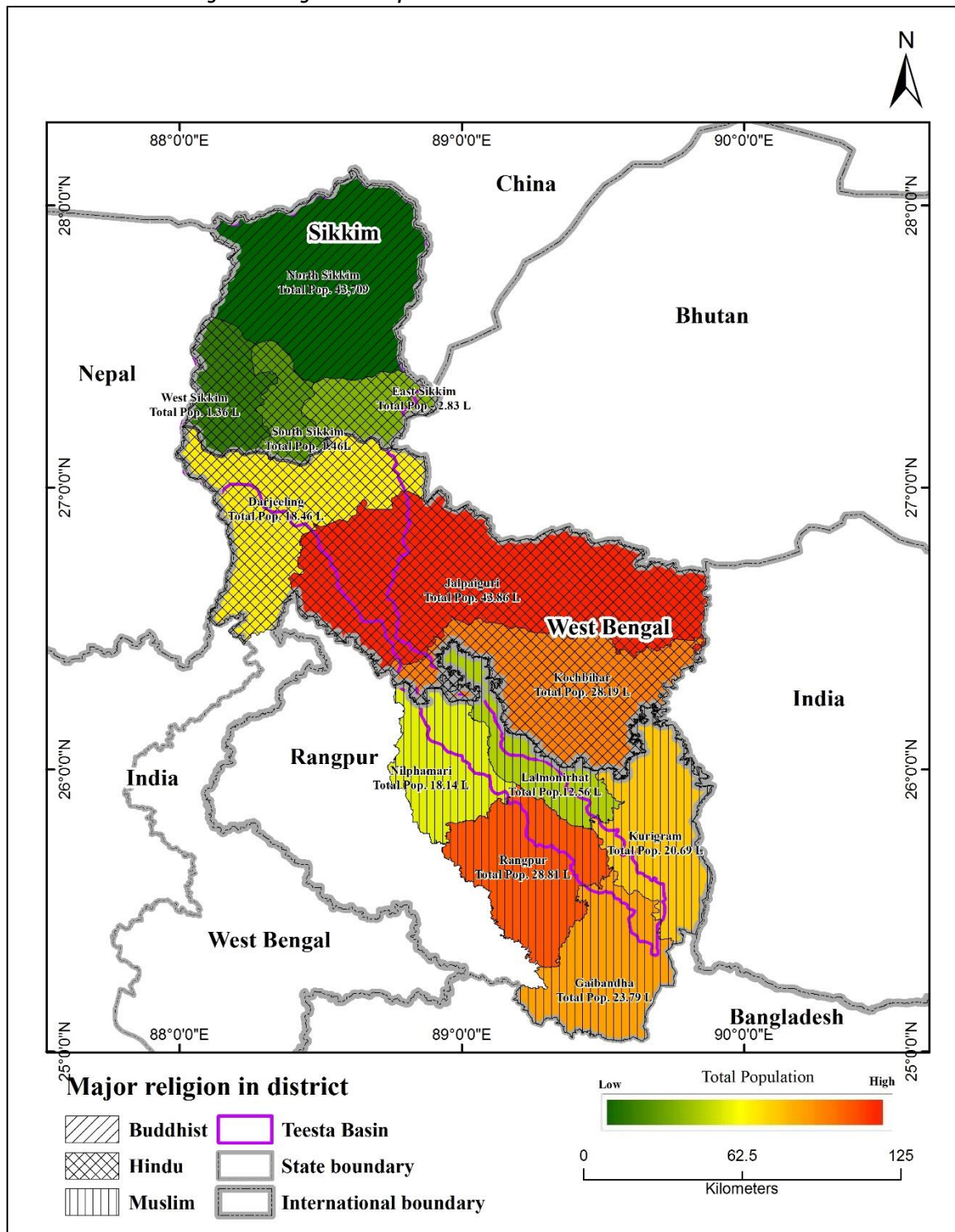
North Bengal is a mixture of ethnic Bengalis, tribal communities such as Rajbanshis, Mech, Rabha etc., Gorkhas and other Nepali communities in the Darjeeling Hills, and business communities such as Marwadis based predominantly in urban areas of Siliguri and Jalpaiguri. After Partition in 1947 and during the Liberation War of 1971, many Bengali Hindus fled East Pakistan and then Bangladesh and settled in North Bengal. Hinduism is predominant in North Bengal with pockets of animism, certain tribal religions and Islam. Buddhist communities are based in the Darjeeling Hills.

A.4.2. Bangladesh

A.4.2.1. Rangpur Division

While most of the population of the Rangpur division is Bengali, it also includes small tribal communities such as the Rajbanshis, Santhals, Oraons, Mal Paharis, Mundas, Malos etc. (Dhamai, 2014). Islam is the dominant religion of the region followed by a minority Hindu population, with pockets of Buddhism, tantric Buddhism, animism and other tribal religions.

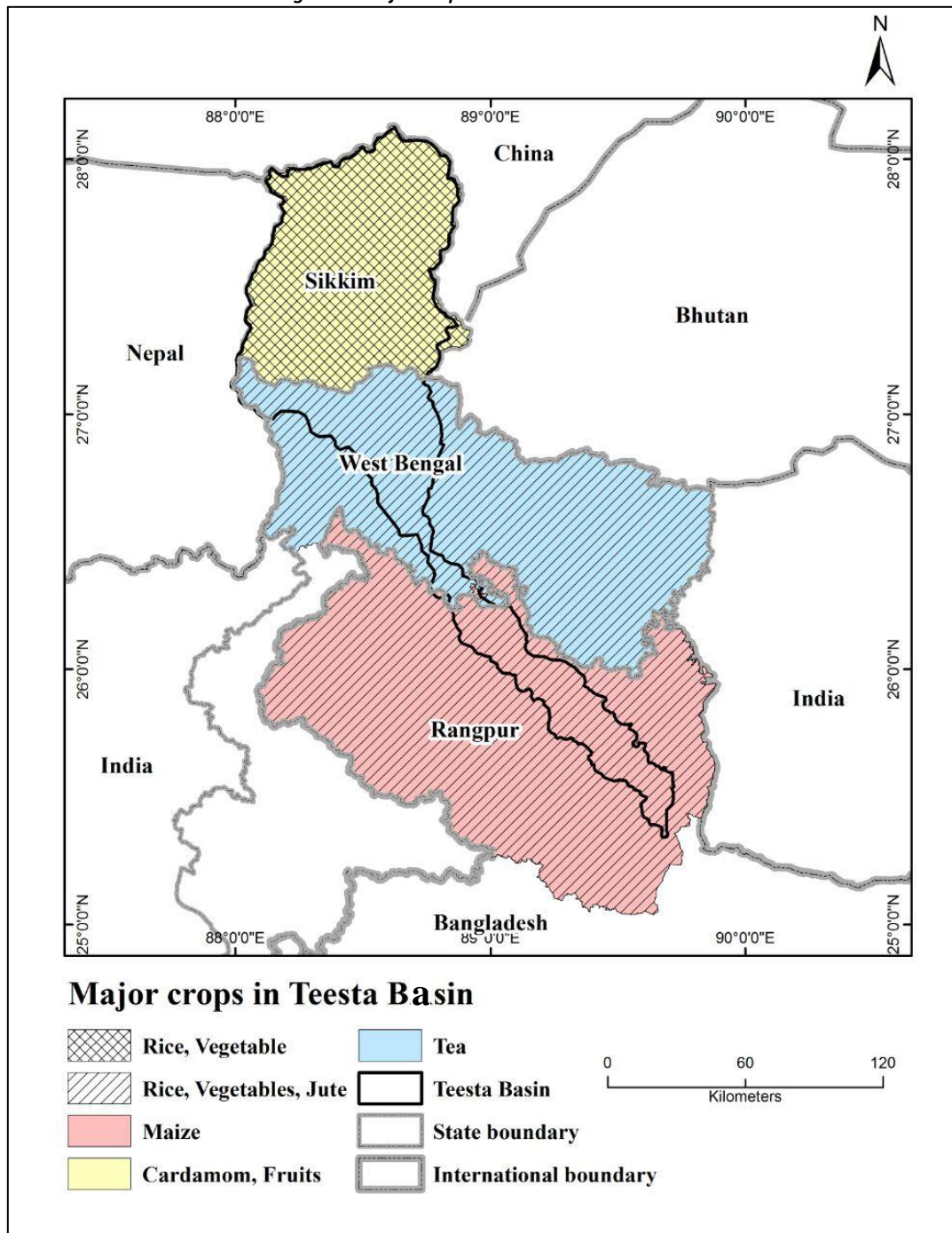
Figure 7: Religion and Population Distribution in the Teesta River Basin



A.5. Economy

Agriculture is the single most major economic sector in the basin which employs more than 90% of its rural population. It is neither heavily mechanised nor commercialised, and subsistence farming is a regular phenomenon, especially in remote and tribal areas. The average cropping intensity⁴ is high across central and lower Teesta basin, ranging between 1.6 crops per year on the Indian side to almost 2 crops per year on the Bangladeshi side. Irrigation facilities, availability of fertilisers, pesticides and HYV seeds, use of tractors and pumping sets etc. have led to increasing cropping intensity and productivity, but have also induced a steady decline in land fertility over the years.

Figure 8: Major Crops in the Teesta River Basin



⁴ Average cropping intensity refers to the number of crops raised in the same field during one agricultural year.

In Sikkim, agriculture contributes 8% of the state GDP and employs 69% of the total workforce (Government of Sikkim, 2011). Sikkim is famous as the highest cardamom producer in India. Along with it, the state also produces ginger, oranges, potatoes, flowers, vegetables, cereals and pulses. In North Bengal, agriculture contributes 23.6% of the state GDP and employs about 43% of the total workforce (Planning Commission, GoI, 2010). Rice, jute, potato, maize and tea are the major crops grown in North Bengal. Out of these, tea is both a major cash crop as well as a famous product of the region. Half of the agricultural workforce of North Bengal is employed on various tea estates in the Darjeeling Hills. In North Bangladesh, agriculture contributes 22.25% of the GDP of the region and employs roughly 45% (Asian Development Bank, 2016) of the total workforce⁵. The major crops on the Bangladeshi side are largely the same as those of North Bengal. Here, tea is replaced by tobacco as the major cash crop. Rangpur district has been traditionally famous for its tobacco production. However, over the years due to health awareness campaigns and changes in crop patterns in the region driven by local, regional and international NGOs, the production of tobacco has dropped steeply and has been replaced with an upsurge in maize production.

There is ample scope for fisheries in the Teesta basin. In rural Sikkim, fisheries are an important source of sustenance, but there is very little commercial value attached to the activity. In North Bengal, fishing is mostly inland but experiences very little development in terms of technology and infrastructure; despite favourable conditions and the presence of a healthy market for fisheries, 40% of the fish consumed in the area is brought from Andhra Pradesh. Fisheries are still an important source of livelihood in the Rangpur division of Bangladesh with more than 90% of the rural folk resorting to fisheries as an alternate source of sustenance as well as livelihood. The village of Tista Bazar in Lalmonirhat district was once famous for its fish market; fishermen from all over the central and lower Teesta basin came there to sell their catch. However, there has been a steep decline in fisheries in Rangpur division due to the reduced and irregular flow of the Teesta and the drying up of her river bed in lean season on an annual basis.

There is no significant industry in the Teesta river basin. In comparison to the state of West Bengal and the Rangpur division, Sikkim is relatively more industrialised; while industry contributes about 18% and 28% to the GDPs of West Bengal and Rangpur division respectively, the proportion of industry's contribution to Sikkim's GDP is 55%. However, industry in Sikkim is medium and small scale – largely distilleries, agricultural products processing units and handicrafts – and accounts for barely 0.2% of India's total GDP (Planning Commission of India, 2014). Most of West Bengal's industry is located in its southern and western parts; very few industrial units are located in North Bengal. Similar conditions are seen in northern Bangladesh where most of the development in industry, transport and communications is concentrated in the Dhaka division, with the Rangpur division lagging behind in almost all aspects of industrial growth and development (Islam & Noman, 2015).

The service sector is also not very developed, but it contributes the most to the GDP of the region: 37% to Sikkim's GDP, 58% to West Bengal's GDP and 49.33% to North Bangladesh's GDP⁶. Navigation on the Teesta river was once an important economic activity, but due to dwindling Teesta flows, large parts of the river remain dry for many months each year, whereas excessive swelling of the river in the rainy season makes her a risky mode of travel. Together, both situations have reduced the scope for navigational activities on the Teesta.

Tourism is a prominent sub-sector driving the growth and income of the service sector in the Teesta basin, especially in the upper and middle reaches of the Teesta river. Sikkim is a major tourist

⁵ These are national figures of Bangladesh. The dependence on agriculture for revenue and employment is higher in North Bangladesh than in other regions of the country, hence these numbers can be taken as a conservative estimate.

⁶ This is the national figure for Bangladesh. The service sector is largely concentrated in the Dhaka division and other divisions in southern Bangladesh, whereas it is very less developed in North Bangladesh. The contribution of the service sector in Rangpur division's GDP is lesser than the national average of 49.33%.

hub; an average of 6 lakh domestic and foreign tourists (Department of Tourism and Civil Aviation, Govt. of Sikkim, 2014) visit the tiny state every year. In North Bengal, tourism flourishes in the Darjeeling Hills and Dooars region which also cater to a similar number of tourists on an annual basis (Statistics of Tourist Arrival in Gorkhaland Territorial Administration, n.d.). Melli, a town on the West Bengal-Sikkim border is a famous tourist spot for white water rafting on the Teesta river. Bangladesh as a whole also receives 5 to 6 lakhs of tourists each year, but most of them travel to the Sundarbans and beaches in the south and a negligible proportion trickles to the north. With its archaeological sites, museums, architecture and rural beauty, North Bangladesh has ample scope for increasing its tourism.

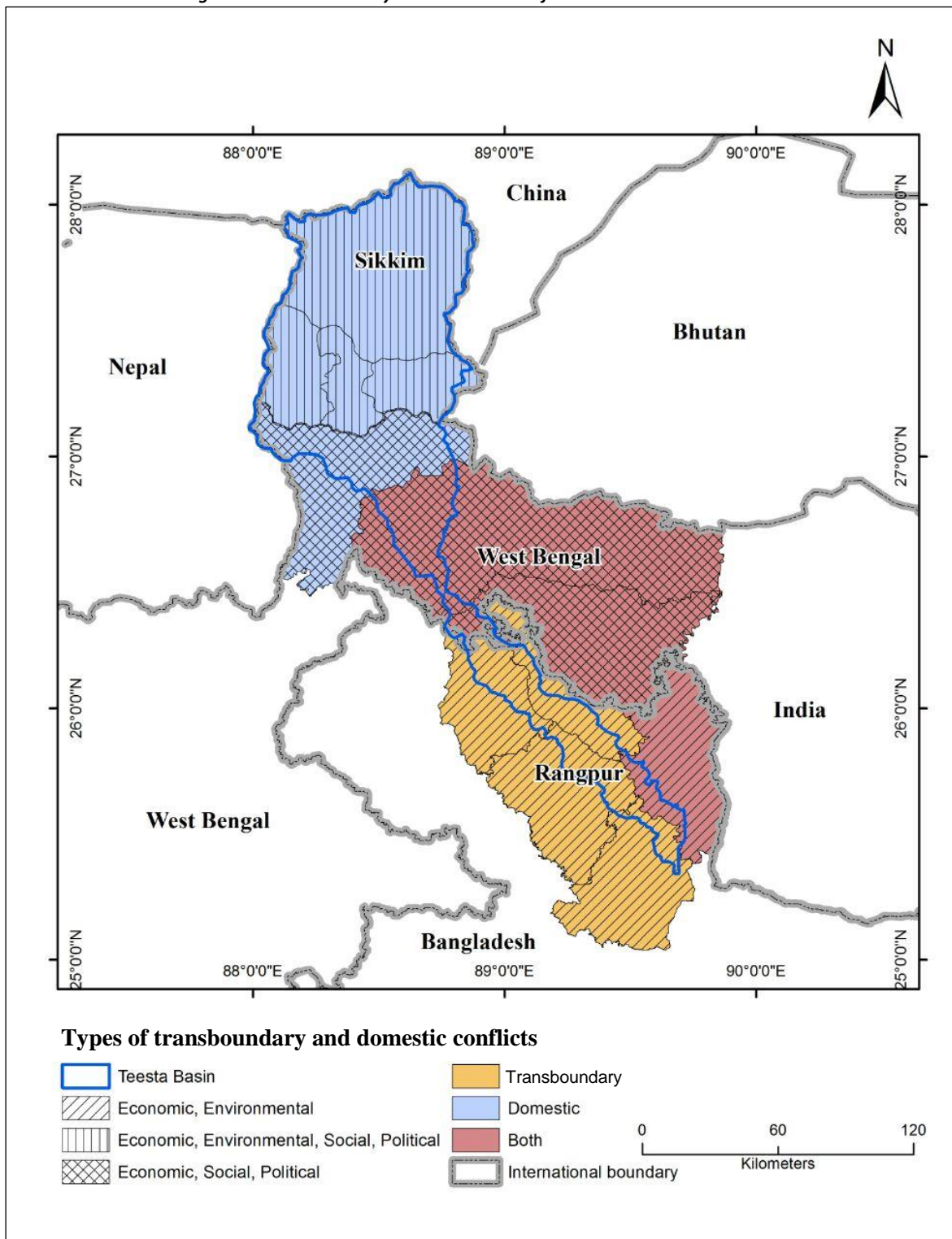
On both sides of the border, the natural beauty of the Teesta and her ecosystem are highly underrated. Apart from white water rafting at Melli, the Teesta’s potential for tourism, by and large, remains unutilised. This is also partly because of the river’s deteriorating conditions due to drying up, excessive sand mining and contamination. If sand mining is controlled, quality levels of Teesta’s waters improve, and adequate environmental flows are guaranteed throughout the year, the Teesta river can provide a major boost to tourism revenues on both sides of the border.

Figure 9: Sectoral Contribution to the Economy of the Teesta River Basin



B. Conflicts in the Teesta Basin

Figure 10: Transboundary and Domestic Conflicts in the Teesta River Basin



B.1. Transboundary Conflict

B.1.1. Signing the Teesta Treaty (India, Bangladesh)

B.1.1.1. The Issue

The Teesta is a perennial, rain-and-snow-fed river characterised by extreme variability in her flows throughout the year. Over 90% of her flow occurs in the rainy season from June to September while the rest 10% occurs in the remaining eight months. As a lower riparian, Bangladesh is completely dependent on India, the upper riparian, for keeping minimum flows in the Teesta river. India has been unilaterally constructing a series of dams up north which have reduced the flows to as little as 14 m³/s during times of drought, greatly hurting the livelihoods of thousands of farmers, fishermen and boatmen downstream in Bangladesh. Conversely, during monsoon season, Indian dams on the Teesta release excess water, causing heavy floods and again disrupting thousands of livelihoods in Bangladesh. The intensity of damage is particularly more acute in Bangladesh as the size of population and economy dependent on the Teesta in Bangladesh outstrips its counterpart upstream in India. Bangladesh demands a fair share of the Teesta waters in the lean season and minimum guaranteed flows throughout the year formalised in a treaty signed and ratified by the governments of both the countries. Negotiations on the Teesta have been going on for decades and a draft agreement has been prepared, however, the Teesta deal between New Delhi and Dhaka fell through in 2011, and no concrete progress has been made since.

B.1.1.1.1. History of the Teesta Dispute: From Partition to the Creation of Bangladesh

Up until the Partition in 1947, since the Teesta flowed as a single unit through the then princely state of Sikkim and the province of Bengal, both under British India, there was no question of transboundary governance and sharing. During Partition, the All India Muslim League was the first to hint at the looming dispute by asking for Jalpaiguri and Darjeeling districts to be incorporated in East Pakistan on the ground that they were the catchment areas of the Teesta. The rationale was that with the entire middle and lower Teesta basin in one country i.e. East Pakistan, they would be in a better position to use the erstwhile and future hydropower projects. However, mainly due to their non-Muslim composition, Darjeeling and Jalpaiguri were handed over to India (Ranjan, 2017).

After Partition, Sikkim continued to be a protectorate of India right up to its merger with the latter as a state in 1975. During the 1950s and 1960s, Indian and East Pakistani officials began talks over damming and sharing the Teesta. At the same time, India and Pakistan were negotiating agreements on the Ganga and Indus rivers due to which the Teesta issue took a backseat. After signing the Indus Treaty in 1960, the two countries turned their focus to negotiations on the Ganga, and the Teesta issue jumped up the ladder. East Pakistan outlined a plan to build a barrage on their side of the Teesta which India opposed. Suggesting ‘other rivers’ for fulfilling India’s irrigation and other needs, East Pakistan decided to go ahead with the plan (Islam M. F., 2016); however, it was only in 1990 that a barrage was completed on the Teesta in what was now Bangladesh.

B.1.1.1.2. The Indo-Bangladesh Joint Rivers Commission (JRC)

After the creation of Bangladesh in 1971, the two countries resumed talks over sharing the Ganga, Teesta and other 52 rivers shared by them. In 1972, India and Bangladesh established the Indo-Bangladesh Joint Rivers Commission (JRC) with the intention of “working together in harnessing the rivers common to both the countries for the benefit of the peoples of the two countries”, but originally focused on the joint management of the Ganga river basin. As per Article 4 of the Statute of the JRC, the Commission has the following functions –

“(a) to maintain liaison between the participating countries in order to ensure the most effective joint efforts in maximising the benefits from common river systems to both the countries,

- (b) to formulate flood control works and to recommend implementation of joint projects,
- (c) to formulate detailed proposals on advance flood warnings, flood forecasting and cyclone warnings,
- (d) to study flood control and irrigation projects so that the water resources of the region can be utilized on an equitable basis for the mutual benefit of the peoples of the two countries, and
- (e) to formulate proposals for carrying out coordinated research on problem of flood control affecting both the countries.”

– as well as any other functions their governments mutually agree upon and direct them to do.

However, the JRC could do little in its first 25 years of existence. This was partly because the Ganga Treaty i.e. its most significant task, was given exclusive attention till it was finally signed in 1996. The general meetings of the JRC took place once every two years up until 2010, those of the Standing Committee took place until 2005, and technical level meetings related to water sharing issues began only in 2009. Apart from these meetings, there have been occasional and irregular meetings for flood management, joint scientific studies, dam and site visits, and reaching out to other co-riparians such as Nepal, Bhutan and China (Joint Rivers Commission, Bangladesh). The scenario was not very different for the Teesta. Talks on the Teesta played second fiddle to the negotiations to the Ganga Treaty. After 12 long years in 1983, the governments of India and Bangladesh signed an ad-hoc agreement during the 25th meeting of the JRC to share the waters of the Teesta in the following manner: 39% of the total flow of the river for India, 36% for Bangladesh, and the remaining 25% unallocated, to be decided on the basis of scientific studies carried out in the future. For the next 14 years, no serious development took place regarding formalising the agreement; in the face of the Ganga negotiations, other common rivers were not given priority. It was only after the signing of the Ganga Treaty in 1996 that the Teesta river came into focus.

According to the JRC Bangladesh website, the first meeting of Joint Committee of Experts (JCE) on sharing the Teesta waters was held in August 1997. Since then, seven JCE meetings have been held. Their last meeting was in 2004, while the Joint Technical Group (JTG) on sharing the Teesta met for the first time in the same year. The JTG held four meetings in all; three in 2004 and the fourth and the last one in 2005, after which there was a lull of two years.

During this lull, Bangladesh and China held their first meeting on cooperation over water resources in Beijing in 2006. China is the upstream riparian of the Brahmaputra which is the biggest river of Bangladesh. The two countries signed a Memorandum of Understanding (MoU) to cooperate on various aspects of technology, design and research on the watercourses of the Brahmaputra. It could have been that this alliance alarmed India and spurred it into action; following this development, the Indo-Bangladesh JRC held two technical level meetings regarding the Teesta in 2007 and 2008. During the same time, in 2007, the Govt. of West Bengal (henceforth, GoWB) declared that it could concede at most 25% of the water available at Gajaldoba barrage for both, Bangladesh as well as the river ecosystem itself. Bangladesh vehemently opposed West Bengal’s stand and since then, the dispute over equitable sharing of the Teesta intensified.

The Government of India (henceforth, GoI), not wanting to antagonise Dhaka and Kolkata, suggested modifying the ad-hoc agreement of 1983 and dividing the 25% between the two countries so that India and Bangladesh get 52% and 48% of the total flow of the Teesta respectively (Rudra, *Sharing Water Across Indo-Bangladesh Border*, 2017). In an attempt to pacify both the contenders, the GoI completely ignored the health, or rather, the very existence of the Teesta and the survival of her ecosystems. With 100% of the Teesta’s waters being used by the two countries, there was no chance of the river and her ecosystems surviving and sustaining her 30-million-strong riparian population. It would also mean a severe setback to fishing, tourism and navigational activities in the river, creating a deep dent in the rural economy of the Teesta basin. Such a proposal was not only short-sighted and narrow-minded, but also self-destructive. Fortunately, it did not materialise. In 2010, the JRC conducted a field visit to the Teesta river and held its 37th meeting in Dhaka with the specific agenda of determining the sharing of Teesta waters and preparing a draft agreement accordingly. During this meeting, the Government of Bangladesh (henceforth, GoB) reiterated an arrangement it had proposed some years

ago specifically for the lean season. This arrangement which allocated 40% of the Teesta's flow to each country and the rest 20% was to be reserved as minimum flows continues to be featured in the draft agreement to this day.

B.1.1.1.3. Failure of the Teesta Negotiations

The then Prime Minister Manmohan Singh was slated to visit Bangladesh with West Bengal Chief Minister Mamata Banerjee in September 2011 and sign this deal with the Bangladeshi Prime Minister Sheikh Hasina, but at the last minute, Banerjee pulled out of the delegation, protesting against changes made in the agreement which she neither approved nor, allegedly, was she informed of. Apparently, Banerjee had agreed to share Teesta waters at a rate of 708 m³/s (against the prevailing 651 m³/s) with Bangladesh. However, the final agreement which was sent to her just before the Dhaka visit allocated a much higher proportion – at an average rate of 935 m³/s up to 1699 m³/s and apparently with no scientific justification, due to which she cancelled her participation (Sahgal & Dasgupta, 2011). As a result, the talks between New Delhi and Dhaka fell through and the agreement was not signed. As Banerjee's Trinamool Congress (TMC) was the single largest ally of the UPA-led coalition government at the centre at that time, the central government had to accept her decision.

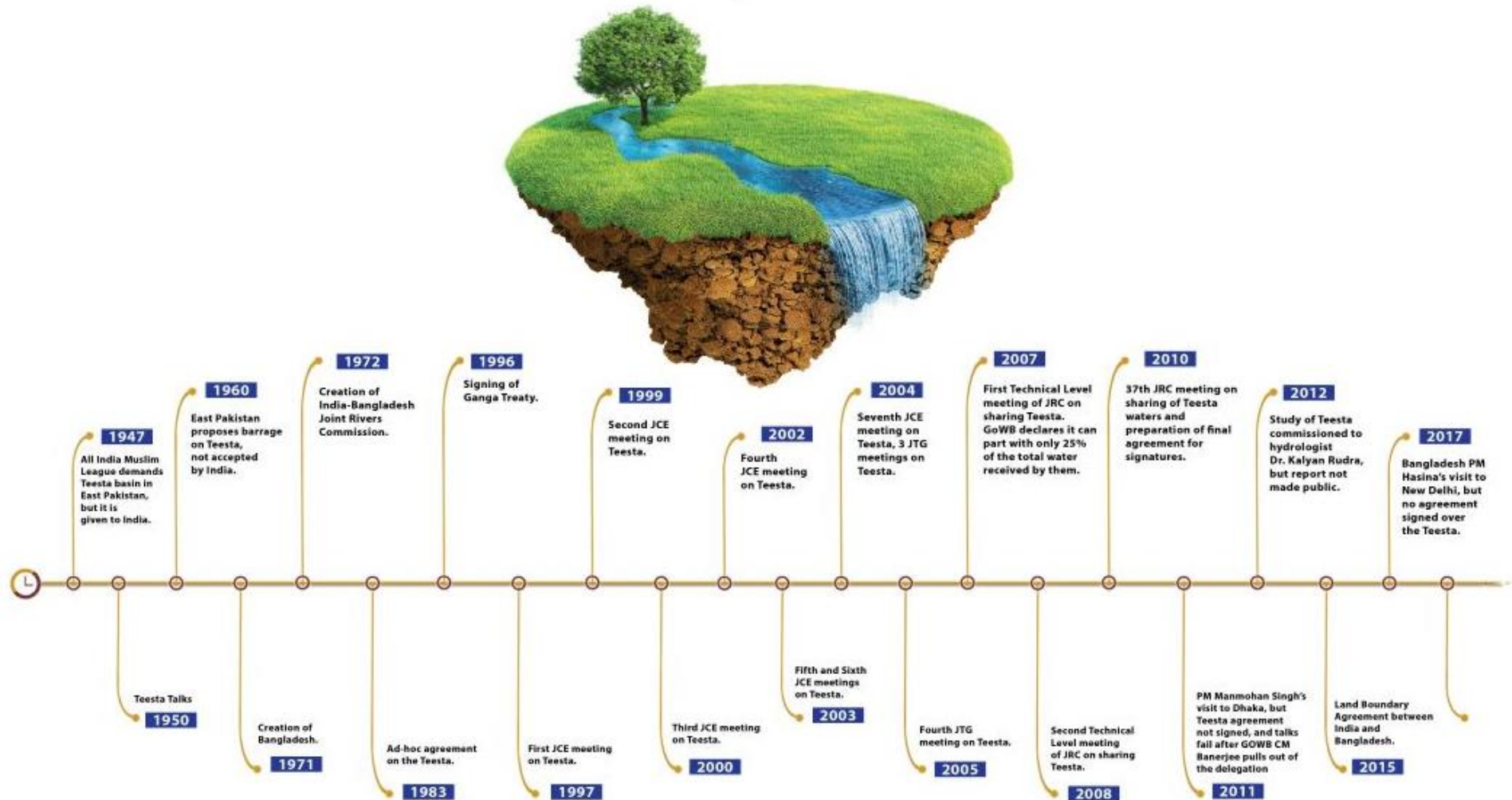
In the same year, the GoWB commissioned a study of the Teesta River under eminent hydrologist Kalyan Rudra who submitted his report in December 2012. This report was never made public and to this day, Rudra is “not authorised by the GoWB to speak on this issue”⁷. However, Rudra's views on the Teesta issue and his criticism of the entire TBP and the NHPC hydropower projects Teesta Low Dams III and IV, are evident in his paper “Taming the Teesta” (Rudra, 2003). “[S]iltation has been a major problem, with projected capacities decreasing at alarming rates, often before the entire project is completed,” he writes lamenting that “dams that were designed to moderate floods have created floods by releasing excess water at the peak of the monsoon.” Rudra's paper makes pertinent points regarding ecological fragility, economic liabilities, impact on wildlife and tourism, and social consequences of these projects.

In 2014, when the NDA government came into power at the centre, it was no longer dependent on allies to retain power, but getting the Teesta deal signed was still complicated due to political and ideological friction between the centre and the Banerjee-led GoWB. During Prime Minister Modi's historic visit to Dhaka to conclude the land boundary agreement in 2015, Prime Minister Hasina reminded him of “an immediate conclusion” on the Teesta deal. Banerjee had accompanied Modi on this visit, however, she maintained silence on this topic.

There was renewed hope for a Teesta agreement when Hasina visited India in 2017. Hasina and Modi signed 22 MoUs covering defense, education, space technology, nuclear energy, IT, cyber security, trade, R&D, judiciary, shipping, mass media and public health (MEA, GoI, 2017). Modi's support to the agreement and his initiative in breaching the topic increased hopes further, but the agreement continued to remain unsigned as Banerjee steadfastly maintained her opposition to the current nature of the agreement and offered “other river systems” to meet Bangladeshi needs, namely the Torsa, Sankosh and Raidak rivers, all three of which flow down to West Bengal from Bhutan (Ghosal, 2017). Predictably, this suggestion was met with little enthusiasm, and Hasina returned to Bangladesh without a Teesta deal where she was criticised vociferously by her main political rival, the Bangladesh Nationalist Party (BNP) led by Khaleda Zia for giving “unilaterally” while “issues crucial for Bangladesh [...] were not discussed in the visit.” Zia and BNP essentially accused Hasina of failing the people and signing MoUs which would “only increase India's military, political, and geopolitical influence on Bangladesh” and declared that the involvement of Banerjee in the Teesta treaty “undermined the sovereign status of Bangladesh” (Prothom Alo, 2017). Currently, while both GoI and GoB want to sign the agreement, it is the Banerjee-led GoWB which is standing in the way of the finalisation of the Teesta Treaty.

⁷ As per telephone conversation with Dr. Rudra in April 2017.

Figure 11: Timeline of the Teesta Dispute



B.1.1.2. Positions

B.1.1.2.1. The Government of India (GoI)

The GoI, previously led by the UPA and now the NDA, has shown willingness to sign the Teesta agreement. It is caught between two opposing sides, GoWB and GoB and is trying to balance the situation by offering more engagement, cooperation and aid to Bangladesh in various areas and negotiating with the GoWB simultaneously.

As per the Indian Constitution, water is a state subject, listed as Entry 17 in the State List.⁸ However, entry 56 in the Union List gives the central government exclusive powers to deal with “[r]egulation and development of inter-State rivers and river valleys to the extent to which such regulation and development under the control of the Union is declared by Parliament by law to be expedient in the public interest.” Further, entries 10 and 14 in the Union List place powers regarding foreign affairs and signing of international treaties exclusively with the central government. Hence constitutionally, the central government does not need the consent of a state government while signing an international agreement over a transboundary water body.

Reality though is far different. The UPA was constrained by the fact that Banerjee’s party TMC was their biggest ally in their coalition government at the centre. While there is no such constraint to the NDA government, it is anxious to not aggravate the GoWB with which it already has significant ideological and political differences.

India looks towards Bangladesh as a trusted partner in South Asia, especially in the face of Pakistan and China. Cultural and historical ties with Bangladesh, particularly with Sheikh Hasina, her party Awami League and her government have led to healthy Indo-Bangladeshi relations. New Delhi views Dhaka as a partner in combating terrorism in South Asia, a connector between the North East and the rest of India, and a gateway to East Asia. In order to retain cooperation and friendship with Bangladesh, India cannot afford to ignore their demands, including that of a fair share of Teesta waters.

B.1.1.2.2. The Government of West Bengal (GoWB)

Despite strong cultural and historical ties with Bangladesh and their pro-Muslim appeasement policies, the Banerjee-led GoWB has loudly and clearly voiced opposition to the terms of the Teesta treaty. While Banerjee had consented earlier to a 70:30 arrangement with 70% retained by the Indian side (Das M. , 2015), she has refused to accept the 40:40:20 arrangement as mentioned in the current draft of the treaty. The argument of the GoWB is “to protect the interest of the farmers in the area”. Flows drop drastically in the lean season, partly due to dams upstream in Sikkim holding water in order to generate electricity at peak times (Basu, 2017), and parts of the river are reduced to a trickle. The Teesta is vital for irrigating 1.20 lakh ha of land in five districts of West Bengal – Cooch Behar, Jalpaiguri, South and North Dinajpur, and Darjeeling – which consist of some of the poorest areas of the state and are home to a burgeoning and highly profitable tea industry and the draft treaty in its current form will seriously harm agriculture, particularly the cultivation of Boro rice, in North Bengal (Ranjan, 2017).

However, there is another layer to their reasoning – giving more of the Teesta to Bangladesh can hurt Banerjee and her party TMC electorally. About 30% of the population in these districts (47% in North Dinajpur) is of tribal and minority groups (Das M. , 2015). Also, there is a considerable proportion of Bengali Hindus who have fled East Pakistan during the Partition and then Bangladesh during the Liberation war and settled in North Bengal. The region is also home to sizeable numbers of

⁸ Article 246 of the Indian Constitution allows the central and state governments of India to make laws on certain subjects which are divided into three lists: List I or the Union List, List II or the State List and List III or the Concurrent List.

Marwaris, Nepalis and Gorkhas who have migrated and settled here for trade and employment. Mamata Banerjee and her party TMC are not politically strong in North Bengal which has traditionally been a Leftist stronghold. In the 2017 municipal elections, the Gorkha Janmukti Morcha (GJM) was a clear winner among Nepalis and Gorkhas, while due to Banerjee's obvious minority appeasement policies, other communities are increasingly distancing themselves from her. Since Banerjee and TMC are looking to consolidate votes in North Bengal, they are in clear opposition of the treaty as it can significantly upset their political prospects in the region.

There are quite a few compelling reasons why the Modi-led GoI, despite constitutional backing and a clear majority for the Bhartiya Janata Party (BJP) at the centre, cannot bulldoze over West Bengal's opposition and sign the Teesta Treaty.

- i. **The Geopolitical Importance of the Chicken's Neck:** West Bengal is a border state and its districts of Jalpaiguri, Darjeeling and Cooch Behar are located in the Siliguri Corridor or more popularly, 'Chicken's Neck', a narrow strip of land connecting the north-eastern states of India with the rest of the country which is important and sensitive on multiple levels. First, it is home to a vital transboundary resource (the Teesta) and shares international borders with three countries, namely Nepal, Bangladesh and Bhutan, with China in proximity. Second, the railway network which passes through this corridor connects to military bases in the northeast and is essential to provide troops with supplies and reinforcements. Third, it is a highly sensitive and socially fragile region: it faces a high incidence of poverty and economic inequality, is home to some of the most backward districts of West Bengal, has seen the birth of the Naxal movement, and now experiences a significant influx of "outsiders" i.e. Nepalis and illegal Bangladeshi migrants. Fourth, the region is impacted by climate change and has been grappling with environmental disasters such as extreme floods and droughts, which directly affect the Teesta River (Oak, 2017).
- ii. **Friction between GoI and GoWB:** The Teesta issue notwithstanding, the current GoI and the GoWB do not see eye-to-eye on many important issues within the country. There is significant political and ideological friction between the two governments which has manifested itself time and again: Banerjee's stinging criticism of demonetisation of Rs. 500 and Rs. 1000 notes in November 2016 ("biggest disaster") and the Goods and Services Tax (GST) implemented in July 2017 ("great stunt") (PTI, 2017), and the row between her and then Defense Minister Manohar Parrikar over army drills at toll plazas in West Bengal in December 2016 are just two and recent incidences in a series of spats between the two governments. At the same time, West Bengal is an important state in terms of security and geopolitics, it shares international borders with Bhutan, Nepal and Bangladesh and is in the vicinity of China. In terms of economy, and it contributes 40% of the GDP of East and North-East India, and 78% and 82% of the national production of jute and tea respectively (PTI, 2016); strategically, it is located on the trans-regional economic and trade route under the 'Act East' policy of the GoI. For all these reasons, the central government is cautious about any increase in differences and wants to minimise the friction in their relationship.
- iii. **Progress of BJP, current ruling party at the centre:** BJP, the biggest political party in the NDA, has historically had a weak presence in West Bengal and has only recently started making inroads into the state. The policy of selective minority appeasement followed consistently by the Banerjee-led GoWB has drawn the ire of the majority sections of Bengali society, especially those who have fled East Pakistan in 1947 and Bangladesh in 1971. The situation is serious enough for the Kolkata High Court to issue three remonstrations over GoWB's actions "to pamper and appease the minority section of the public at the cost of the majority section without there being any plausible justification" (Merchant, 2017). Multiple bans and curtailments on Hindu festivals and rituals, stipends to Imams and Muezzins and repeated incidents of communal violence across the state, eight of which have taken place in just the last year (Talukdar, 2017), have coupled with economic woes and consequently lowered Banerjee's credibility as a balanced leader working in the interests of all sections of the society. Meanwhile, BJP has steadily cemented for itself the position of a viable option to the TMC; the popular vote for BJP in West Bengal has risen from 17.5% in the 2014 Lok Sabha elections to more than 30% in the 2017 West Bengal municipal elections

(Mukerjee, 2017). In such a scenario, BJP is wary of taking unpopular decisions (like giving a bigger share of the Teesta to Bangladesh) that could possibly cause a dent in their progress.

B.1.1.2.3. The Government of Bangladesh (GoB)

The GoB has long maintained the stand that they have not been getting a fair share of the Teesta for years, especially during the lean season, and that the dual problem of consecutive droughts and floods in a year has been aggravated due to dams built unilaterally by India on the Teesta upstream. Bangladeshis are also critical of India's river inter-linking project, and even more so of the diversion of Teesta waters to the Mahananda River in the west. Through the 40:40:20 arrangement, GoB is looking to obtain guaranteed minimum flows during the lean season.

The Teesta is a major river flowing through the Rangpur division, formed in 2010 out of the northern eight districts of the Rajshahi division. Rangpur is the poorest division in Bangladesh. Its poverty headcount rate (HCR) is 42.3% and the extreme poverty HCR is 27.7% - both highest in the country (World Bank; World Food Programme: Bangladesh Bureau of Statistics, 2010). This means that 42.3% of the population of Rangpur division lives in poverty while 27.7% lives in extreme poverty. The Greater Rangpur region is historically known to be drought-prone and was among the worst hit regions during the Great Bengal Famine of 1942-1944 as well as Bangladesh's famine of 1974. The region is particularly vulnerable to seasonal hunger⁹ which, combined with recurring droughts and floods, has induced large-scale climate change-linked migration and is significantly responsible for illegal cross-border migration from Bangladesh to India. In addition, ecological vulnerability (particularly to frequent floods and river erosion), poor connectivity to urban areas, distance from markets and political neglect have contributed to the poverty and backwardness of the region.

However, at the same time, the Rangpur division is also known as the 'granary' of Bangladesh (Kumar, 2013). Maize, followed by rice, is grown extensively in the Greater Rangpur region. Other crops such as jute, chillies, potatoes and various vegetables are cultivated as well. While most of Bangladesh has a predominantly 'rice economy', the Rangpur division enjoys significant crop diversification (World Bank Group, 2016). Moreover, as contamination of groundwater due to arsenic is affecting agriculture in southern Bangladesh, the onus of maintaining food security is increasing on Rangpur. For a poor country like Bangladesh, food security is paramount, and hence, the waters of the Teesta are more crucial than ever.

While natural conditions and geographical distance from economic centres such as Dhaka and Chittagong are responsible for the backwardness of Rangpur division, years of political neglect, lack of public investment in infrastructure and education, and development of local industries, urban centres and markets are responsible too. The vacuum thus created has been exploited by anti-social elements such as smugglers (Strategic Foresight Group, 2013) and Islamist terrorist outfits such as the Harkat-ul-Jihad-al Islami Bangladesh (HuJI-B) and the Jagrata Muslim Janata Bangladesh (JMJB) to set up their bases and hide-out places (Terrorist and Extremist Groups - Bangladesh, n.d.).

In order to combat the lagging economy, seasonal deprivation and vulnerability, and extremism, the GoB believes that Teesta, the principal river of this region, must flow optimally throughout the year for them to harness her waters for economic development and social stability. Further, the unilateral exploitation of Teesta waters in India and the visible drop in Teesta's flow in Bangladesh have upset the local Bangladeshi people; it is now an emotional issue as well. Hasina's failure to clinch the Teesta deal during her visit to India in April 2017 has drawn sharp criticism from all levels of Bangladeshi society. In the upcoming national elections in Bangladesh in 2018, the Teesta issue promises to be significant in determining the extent of power that will be retained by the Awami League under Sheikh

⁹ Seasonal hunger is the recurrence of poverty and food deprivation during a certain period such as the sowing season every agricultural year. In northern Bangladesh, this period falls between September and November.

Hasina. Given its secular standing and steadfast friendship, it is in India's interest that the Awami League retains its position as the ruling party.

Purely on the basis of geographic location, Bangladesh is at India's mercy for regulating the flow in the Teesta to ensure adequate flows in the lean season and control of floods during monsoons. However, what lies underacknowledged, much to Dhaka's resentment, is the fact that India is also dependent on Bangladesh in multiple areas they have cooperated upon.

- i. **Connectivity to the North East:** India is connected to its seven north-eastern states solely by a narrow strip of land. Geographical isolation has partly been responsible for the detachment of the north-eastern states from the rest of the country in terms of social cohesion, popular culture and political discourse. The consequences of North East's isolation have been detrimental to India's social, political and economic interests and efforts to bring them into mainstream India have markedly increased in the past few years. Bangladesh, due to the virtue of its geographic location, is an important connector between India and its north-eastern states. Its ports are the North-East's best access points to sea routes and marine trade. Be it transporting electricity, goods, services or people from the North East to rest of India or vice versa, the fastest, safest and most efficient transit routes run through Bangladesh, particularly in the times of natural disasters and other emergencies. The GoB under Hasina has tried to address India's connectivity concerns by opening up numerous transit points all over the Indo-Bangladeshi border, issuing clearance for transport of Indian goods to and from the North East across Bangladeshi territory and allowing Indian ships to use the Chittagong port. India and Bangladesh will also be developing and upgrading the ports at Chittagong, Mongla and Payra together.
- ii. **Combating Islamist terrorism, illegal migration and other anti-social elements:** One of the biggest successes of the GoB under Hasina have been to crack down on Islamist terrorist outfits in Bangladesh. It has supported India's stand on terrorism and cooperated regularly in capturing and handing over a number of terrorists who have been destabilising India's North East and contributing to the spread of Islamist terror across both countries. The GoB has also provided regular intel to India over the movement of terrorist groups around and across the border. Similarly, it has actively cooperated with GoI to control rampant smuggling of drugs, timber, ivory and cattle across the border, as well as tried to curb illegal migration from Bangladesh to India through more stringent border controls and regular intel to GoI. Dhaka's efforts have contributed greatly in minimising threats, attacks and illegal activities, and increasing overall stability in the eastern region of India.
- iii. **Trusted partner in South Asia:** In a volatile and deeply distrusting South Asian neighbourhood, the GoB under Hasina is the one partner which has steadfastly supported India in various areas from diplomatic cornering of Pakistan to restoring and firmly protecting the secular fabric of its country time and again. Hasina has gone great lengths to strengthen bilateral relations with India and change the latter's image from an oppressor to a friend at the risk of antagonising BNP and the rising numbers of Islamists in the country (Talukdar, 2017). Bangladesh is also a strategic partner and gateway to India's 'Act East' policy. Through Bangladeshi ports, it can establish a cultural and economic route to East Asia and engage more actively with the region. In the face of the current Rohingya crisis and instability in Myanmar, another strategically placed neighbour, Bangladesh is the only dependable partner to take the 'Act East' policy further for now.
- iv. **Combating China's Influence in South Asia:** India realises that Bangladesh's friendship is vital if it has to check China's influence and strategic incursion in South Asia. While China is already making headway in Pakistan and Sri Lanka through the China-Pakistan Economic Corridor (CPEC) and the recent USD 1.1 billion deal over Sri Lanka's Hambantota port (PTI, 2017), it has also begun on India's eastern front. In November 2016, China and Bangladesh signed deals worth USD 25 billion, and Bangladesh has been obtaining most of its military hardware from China, its latest purchase being two Chinese submarines (Bhaumik, 2017). Bangladesh and China have also been cooperating on the Brahmaputra since 2006 for augmenting cooperation on managing water

resources. India has reasons to be alarmed as China and Bangladesh move closer to each other; the more China intrudes in South Asia, the more is regional stability at stake.

B.1.1.3. The Current Draft of the Teesta Agreement

While this whole dispute is centred around signing the Teesta agreement, the actual agreement and its contents have garnered little attention. A major reason for this can be that the draft of this agreement is hard to access; it is not available on the official websites of the water-related ministries of both the countries for public viewing and scrutiny. In a country like India where water data has been a sensitive issue and guarded closely by a rather paranoid government and bureaucracy, this does not come as a surprise. Earlier, a draft version of the agreement (Annexure IV) could be found on the website of 'Water Beyond Borders' for the year 2010, but recent verification (October 2017) shows that the draft is not available on that website anymore.

Annexure IV of the draft agreement (the only part of the agreement which was available) makes rather detailed provisions for allocating the water flow in the lean season between India and Bangladesh based on a formula mentioned in Annexure I and also keeps aside 20% flow as "share of river" i.e. for maintaining environmental flows during the lean season. Multiple sources have confirmed that the formula entails a share of 40% each to India and Bangladesh. Further, point ii) of Article II has a special provision for ensuring a minimum quantity of the Teesta to Bangladesh if the Teesta's flow falls below a certain level. The agreement also elaborates on the schedule of the sharing mechanism (Annexure II), a dispute resolution mechanism, pushes for structured data collection and sharing between the two riparians, and takes water quality requirements into account (Annexure III).

Assuming that the actual agreement would be the same or similar, it can be seen that the content of this deal is woefully inadequate in addressing the concerns and development of the entire basin. There are no provisions for disaster prevention, management and mitigation, tackling climate change, harnessing, sharing and conserving groundwater, maximising environmental flows and making them economically viable, river conservation and efficient water management measures, preservation and enhance of the cultural heritage (and consequently tourism) of the Teesta, protection of the basin's ecosystems, and overall human and environmental wellbeing of the basin. The Teesta is not a bucket of water from which mugs of water can be drawn and handed around in the hope of solving everyone's 'water problems'. She is a complex entity, connected to the environment, communities and economies through an intricate web of give and take. She percolates into the lives of her riparians through various layers, and not all of them are tangible and measurable. Simply dividing up her waters is therefore never a holistic solution to the issues in the basin.

The agreement, then, clearly needs to be about more than just minimum flows and 'fair' shares. While 20% minimum flows are a good start, ways have to be found to take this share to 30%. These environmental flows will serve fisheries in both countries, facilitate navigation, and boost tourism, thus creating sustainable employment and maintaining social and economic security in the basin. Both countries need to consider this advantage of adequate environmental flows and think beyond conventional large structural interventions.

It must be remembered that the GoI and GoB indeed managed to get the Ganga treaty signed, but after almost three decades of negotiations. Even then, the Treaty has not been deemed satisfactory on several grounds. For one, it does not provide for any joint development activities of the Ganga basin, beyond flood control, and even then, Bangladesh as well as the Indian state of Bihar face floods due to the Farakka barrage (which is the main point of contention between the two countries) as well as climate change. There are no provisions to tackle climate change and its impacts in the Ganga basin. Without joint development efforts, the river and her communities remain degraded and impoverished respectively. The Ganga Treaty also does not provide a 'minimum guarantee clause' to safeguard minimum flows in lean season, unlike its predecessor in 1977. The dispute resolution mechanism of the Ganga Treaty too is inadequate as it does not provide for an arbitration mechanism for the settlement

of the dispute, unlike the Indo-Nepali Mahakali Treaty and the Indo-Pak Indus Waters Treaty. Moreover, since the JRC has focused completely and only on the Ganga, the rest of the rivers have been neglected and no more agreements have been signed yet.

The Indus Waters Treaty signed by India and Pakistan is frequently cited as among the most successful water treaties globally, and in South Asia. Having withstood three wars and nearly constant hostile relations between India and Pakistan, the IWT stands a strong chance of being considered as a 'model' treaty for further water cooperation in South Asia. However, despite its resilience, the IWT has its own limitations. The treaty excludes two riparians of the Indus basin, China and Afghanistan. It allocates three of the six rivers in the basin to Pakistan and the remaining three to India, and is not based on joint efforts towards cooperation and development of the Indus basin. It has a robust dispute resolution mechanism, but there are no provisions to tackle climate change, improve the basin's ecology and biodiversity, manage groundwater aquifers and boost local economy in a joint manner. In this sense, the IWT is limited to preventing conflicts and is not fully equipped to tackle issues of climate change and groundwater and establish holistic cooperation between the two riparian countries.

Thus, the experience with the Ganga Treaty of 1996 shows that simply having an agreement does not guarantee proper conservation and utilisation of the river, while the success of the Indus Waters Treaty has failed to bring about joint conservation and holistic development of the Indus basin. In both cases, the details of the agreement make a huge difference.

B.2. Domestic Conflicts

B.2.1. India

B.2.1.1. Hydroelectric dams on the Teesta in Sikkim

B.2.1.1.1. The Issue

Sikkim was an independent Himalayan kingdom until 1975 when it merged with India as its 22nd state. The Himalayas run right through the state which is also home to the third-highest peak in the world, the Khangchendzonga. Sikkim is situated in the north-eastern part of India and shares international borders with Nepal, China and Bhutan. Due its geographical location and terrain, Sikkim has been relatively cut off from contact with the rest of India and seen little industrialisation. Since joining India, the predominantly rural economy of Sikkim has been reliant on funds and assistance from the central government in almost all developmental areas. The Teesta river, with its steep drop of more than 5000 m within a distance of 100 kms, is hence considered as a valuable resource from which hydroelectricity can be produced to power the economies of Sikkim and other power-deficit states for considerable revenue. As per the website of the Department of Energy and Power, Government of Sikkim (henceforth, GoS), Sikkim's free share of hydroelectricity is of 12% in the initial 15 years and 15% for two decades after them, while the rest of the power would be sold to states as far as Punjab, Haryana, Uttar Pradesh and Rajasthan. Sikkim's tourism industry, organic farming, horticulture as well as overall economy could benefit greatly from an increased and consistent supply of electricity. As a result, the GoS set on a dam-building spree and by 2011, had awarded 38 projects to roughly 20 private and public firms in India (Huber & Joshi, 2015). As of the year 2017, 16 of them have been cancelled while the rest are either commissioned or in various stages of construction (Table 1).

These hydropower dams have been designated as 'run-of-the-river' projects considered to be environment-friendly, and are supposed to make non-consumptive use of water. However, quite a few papers such as but not limited to Vagholikar & Das (2010), Kohli (2011), Bhutia (2012) and Shah (2013) have shown that the real consequences of these dams are very different. Most of these 'run-of-the-river' projects are actually large dams with significant storage capacities so that water can be held back for daily peaking power generation, and with underground tunnels, some as long as 18 kms for diverting water. Even though this water is eventually returned to the original course of the river, it does not alter the fact that the river bed lies dry in patches where water has been diverted and stored, sometimes for 24 hours or longer. Travelling up and down the Teesta, it can be seen that she no longer flows consistently; at some places, she trickles while at some, she swells due to the irregular and unsynchronised holding and releasing of her waters by the dams. Further, blasting of tunnels has caused immediate and visible impacts in the surroundings. Landslides have become frequent causing degradation of land, property and domestic water supply; heaps of rocks and heavily eroded mountain sides are a common sight while travelling across the state. Environmental Impact Assessments (EIAs) have not taken cognizance of the severity of this fact, just as they have downplayed the risks and hazards of building so many hydropower dams in an area like the Eastern Himalayas which experience significant seismic activity.

Reasons behind cancelling the 16 dams mostly pertain to vicinity to the Khangchendzonga National Park and 'non-performance' of the companies who were assigned the project. The HEP at Rathangchu was cancelled for religious reasons. This was the result of the first anti-dam movement in Sikkim, led by environmentalists, Buddhist monks and other devout Buddhists under the banner of Concerned Citizens of Sikkim (CCS) who protested vehemently against the dam which threatened to destroy Rathangchu, a sacred river for the Buddhists, and the Khangchendzonga Biosphere Reserve nearby. There were numerous public protests which included monks from monasteries all over Sikkim, and the matter went to the Supreme Court. In 1997, the then newly elected Chief Minister of Sikkim, Pawan Chamling pulled back the project in the honour of "the sentiments, religion and culture of the people of Sikkim" (Huber & Joshi, 2015).

The movement picked up again with the Affected Citizens of Teesta (ACT) in 2004, a group of young Lepcha activists who took it to an unprecedented scale. The ACT began with protesting against the dams Teesta III (at Chungthang in North Sikkim) and Teesta IV (just south of Mangan, district headquarters of North Sikkim) and eventually included five other dams planned near Dzongu, a traditional ‘reserve’ of the Lepchas, namely Panan Hydro Electric Project (HEP), Ringpi HEP, Rukel HEP, Rangyong HEP, and Lingza HEP. A fiery protest by the ACT in the form of numerous street protests, petitions, cases in the National Green Tribunal (NGT) and a record of several hunger strikes stretching for 915 days led to the cancellation of projects at Ringpi, Rukel, Rangyong and Lingza, while as of 2017, Panan, Teesta III and Teesta IV are at various stages of construction against which the ACT and its associates, namely Sangha of Dzongu (SOD), Concerned Lepchas of Sikkim (CLOS), Citizens Forum of Sikkim (CFS) and the Sikkim Association for Environment continue to agitate.

Elsewhere in Sikkim, another 12 dams have been cancelled, but others continue to be constructed and operated. In 2011, the controversial “Prevention and Control of Disturbance of Public Order Bill” which banned processions, hunger strikes, and any other form of public agitation was tabled by the GoS and raised an uproar of such proportions that the bill had to be recalled (Huber & Joshi, 2013). However, resistance persists, and the tension between the government and civil society continues to simmer in Sikkim.

B.2.1.1.2. Positions

B.2.1.1.2.1. The Anti-Dam Activists

The activists and their supporters are rightly concerned about the deceptive labelling of the dams as ‘run-of-the-river’ projects and that a) 70% of the river was to flow from the tunnels constructed for diverting the water for electricity generation and b) about 150 tonnes of dynamite was used to construct 1 km of a tunnel; the sum total of dynamite blasted for the construction of tunnels of 30+ hydro-projects impacted the brittle Himalayan mountains to their core and increased landslides to the detriment of human lives, land and property (ACT, n.d.).

However, the fears and issues are much deeper. Due to Sikkim’s difficult terrain and isolated geography, Sikkimese society has evolved to be small and close-knitted, and is characterised by emphasis on ethnic and tribal identities. Dzongu, the hotbed of this conflict, has traditionally been a Lepcha bastion which was formalised in 1958 as a part of the erstwhile Sikkimese queen’s estate. When Sikkim became an Indian state in 1975, their identity, along with that of other Sikkimese communities was safeguarded through Article 371F of the Indian constitution. However, the hydropower projects brought with them an influx of migrant labour. Not only were the locals not given employment, but the outsiders came in such large numbers that they threatened to make the indigenous tribes, especially the Lepchas, a minority in their own state.

The ACT, its supporters feared erosion of local cultures and religion; they pointed at the friction between Buddhists and Sikhs over sites such as Gurudongmar Lake sacred to Buddhism as well as Sikhism and the Sikh attempts to rename the lake. Further, isolation had also kept them away from specific health conditions and diseases which were common in the rest of the country; the migrants mingled with the locals and brought with them these diseases, thus impacting public health in Sikkim. Also, after the stipulated time of their work at the hydropower project, they continued to stay in Sikkim and eventually earned voting rights. The local communities, especially the Lepchas who are already a small community were alarmed at this. Electoral politics being all about numbers and demography, they saw this as dilution of their political rights, and a threat to the protection which Article 371 accorded to their ethnic group and identity.

Accompanying these fears was the nature of implementation of project-related activities. The EIAs were fraught with significant errors, and many of them had completely ignored important

components, such as seismic activity, which contributed to the ecological fragility of the region. Public hearings were manipulated; protestors were pressurized and threatened (Huber & Joshi, 2015), facts were suppressed, and approvals were forged (Mazoomdaar, 2017). There had also been numerous delays, errors, neglect in the case of resettlement and rehabilitation, and even a blatant portrayal of basic and mandatory facilities such as electricity, primary healthcare centres, roads, schools etc. as “advantageous individual gains” (Huber & Joshi, 2015).

At the initial stages, the activists, particularly ACT, were rather stubborn and aggressive in their approach, which put them at odds with both, the affected local communities as well as the state GoS. Two instances prove this point.

In the first, in 2007, the GoS set up a review committee to look into ACT’s demands. The committee’s recommendations would be submitted within a month of its formation and would be binding on the government in exchange for ACT calling off the hunger strike to sit down with the government and decide the composition of the committee. The ACT responded with a fresh set of numerous conditions. Negotiations collapsed, with the Chief Secretary of Sikkim accusing them of not being interested in solutions and that they were infiltrated with anti-Sikkim forces (Wangchuk, 2007). The ACT could have taken up the offer and played an important role in forming a balanced committee that would have put their grievances ‘on record’ and influenced its recommendations. It took a while for the negotiations to revive, but precious time had passed by then.

In the second instance just previous to the collapse of negotiations over the review committee, a delegation of dam-supporters from Dzongu issued a statement saying that they were not aligned with the hunger strikes led by ACT and CLOS, and their No-Objection Certificates still held good if they were granted better compensation rates for lost land and other safeguards in a timely and orderly manner. They refrained from commenting on the anti-dam activists and their hunger strikes and stuck to their stand, but the ACT responded rather harshly, which eventually led to two bitter, untrusting camps among the people of Dzongu. Around the same time, Lepchas from Darjeeling staged a protest against the projects in Dzongu by blocking National Highway 31A, the sole road connecting Sikkim to the rest of the country, thereby cutting Sikkim off India. The protest lasted for two hours and affected traffic mostly on the Sikkim side, irking many common Sikkimese people. The GoS also was displeased and considered it as an outside interference in state matters (Wangchuk, 2007).

More than a decade has passed since the protests were launched in Sikkim, and the anti-dam activists have seen victories as well as failures. Over the years, the protest has moved from opposing hydroelectric dams in principle to keeping Teesta’s tributaries free of hydropower projects, with each of the party making a few compromises in the process. However, the concerns of ACT and its supporting organisations persist.

B.2.1.1.2.2. Dam Supporters among Local Communities

The Sikkimese people have been sharply divided over the hydropower projects. Even the community in Dzongu has split into two groups, one of those who support ACT and its sister organisations in their anti-dam stance and a second of those who see the projects as an opportunity for development, livelihood and prosperity. While both groups share fears over outsider influence and domination on local culture, religion and politics, they differ significantly on ways to address the situation. Unlike the blanket opposition imposed by the anti-dam activists and their supporters, the pro-dam segment believes that a robust system of adequate checks and balances would resolve the issue. While ACT and other activists carried out protests, the pro-dam group has repeatedly issued letters and declarations that they were not a part of the protest and were willing to cooperate with the administration and the power companies if their conditions were met. Instances of friction with ACT and its supporters put them further apart from each other and at one point, there was a total absence of trust and dialogue between both the camps (Wangchuk, 2007).

The pro-dam segment, especially of Dzongu, had compelling reasons for supporting the hydropower projects. Unlike the rest of the state which benefited from the tourism boom, Dzongu stayed untouched, with poor infrastructure and low economic activity. Its cardamom plantations were hit by a decline in productivity and market value. In such a situation, the land owners of Dzongu saw the hydropower projects as a chance to sell their lands at a rate many times higher than their market value – in August 2007, the GoS finalised the rate for land acquisition for the Panan project at Rs. 18 per sq. ft. for agricultural land and Rs. 16 per sq. ft. for barren land, when the market rate hovered around as low as Rs. 2 per sq. ft. The 9-fold jump was the highest rate that the state government had for any project anywhere in the state, and it was accompanied with another 30% of the amount as a compensation. This was too much for the Lepchas in Dzongu to ignore.

Further, opposition to these projects meant opposition to the state government, which had unique repercussions in Sikkim. Sikkim's 'success story' of a flourishing tourism sector, organic farming, and fairly developed infrastructure even in some of its remotest areas masks the fact that almost 20% of the Sikkimese population lives below poverty line, and even though it has one of the highest per capita incomes in the North East, much of this income is generated from public employment (18.5% in Sikkim compared to the national average of 6.3%). This is just one of the many indicators emphasising the dependency of the local population on the government instead of other private economic activities for generating income (Chettri, 2013).

Further, it also overshadows the overwhelming dependency of the local communities on the state administration for the provision of many goods and services, employment opportunities, and subsidies, the distribution of which varies along ethnic lines. The GoS has complete control over this distribution which is often influenced by short-term political interests. Due to such high level of dependency on the government, the locals automatically face restrictions on expressing dissent; control on distribution of basic facilities and resources enables the state to silence any opposing voices and coerce the locals into conforming with its agenda (Chettri, 2013). Naturally, many locals were unable to voice any opposition towards the projects even if they wanted to for the fear of being stripped off government benefits and left alone to fend for themselves. The monetary and employment benefits (at least as projected initially) of the projects were thus an obvious choice for many.

B.2.1.1.2.3. Government of Sikkim (GoS)

Since its amalgamation with India 42 years ago, Sikkim has seen only two full-term Chief Ministers, Nar Bahadur Bhandari (1979-1994) and Pawan K. Chamling (1994-present), with no robust opposition to either. Coupled with the government's stronghold on basic necessities and resources, and the fact that open dissent is not a traditional aspect of the Sikkimese society, the resultant nature of democracy in Sikkim is quasi-feudal, with little space for sustained and systematic disagreement and criticism of the state within civil society.

This is the primary reason why the strength and tenacity of the Lepcha movement against dams took everyone, including the state, by surprise. The GoS initially ignored the protests, but as they grew in volume and number, it had no option but to respond. The GoS tried working out all sorts of solutions with the anti-dam activists, from offering to set up a review committee to look into the demands of the ACT, to restricting the flow of outside labour in Dzongu, to cancelling about 16 projects up until now. Talks collapsed from time to time, but each time they resumed, the GoS seemed to work towards a solution that would safeguard everyone's interests. However, hydropower project continued to be built in Sikkim and problems pointed out by activists and local communities continued to hamper the economic, ecological and cultural interests of the region.

The GoS maintained a careful balance of coercion, persuasion and incentivisation in order to advance its agenda. Depoliticizing of dams (shifting the responsibility of the projects to private, non-governmental actors), promoting selected facts and 'there-is-no-alternative' (TINA) narratives (Huber & Joshi, 2015), pressurizing protestors through threats and public criticism, and more subtle means such

as financing local festivals and celebrations were some of the tactics used by both GoS and private hydropower companies to round up approval and curb dissent. The systematically built dependence of locals on government machinery for basic necessities, employment and subsidies contributed to the use of *saam-daam-dand-bhed*¹⁰ by the establishment and the private sector.

However, the dam building spree in Sikkim has been slowing down. From 27 hydropower projects allotted to various public and private companies in 2007, the number has come down to 16 in 2015, with many projects being stalled or abandoned due to financial reasons. The hydropower projects on the Teesta in Sikkim are at various stages of construction and experience inordinate delays, governance and clearance issues and huge cost overruns. For instance, the original cost of the Teesta III project has almost doubled from Rs. 5702 crores to Rs. 11382 crores by the year 2015, while the original completion deadline for the Teesta IV project was 2011-2012, which was then shifted to 2016-17 (Datta, 2015); as of November 2017, the project is yet to get environmental clearance and major works have not started (Energy and Power Department, GoS, 2017). Further, the risk of increased landslides due to intensive tunnelling and seismic activity (Sikkim falls in seismic zone IV; zone V has the highest risk) have also added considerably to the costs of completing these hydropower projects.

In the face of widespread, aggressive and persistent opposition, high ecological risks, and mounting financial problems, the Chamling-led GoS went to great lengths to consolidate hydropower projects in Sikkim for reasons, many of which received the nod of the GoI as well. Elaborated below, they sum up the geopolitical and economic importance of hydropower projects for Sikkim.

- i. **Economic independence:** The most significant driving force behind the hydropower project building spree in Sikkim is economic independence from central aids, funds and development packages. After annexation into India in 1975, Article 371F of the Constitution was created specially to preserve certain laws and social, political and economic rights of the indigenous communities of Sikkim. Additionally, it also granted Sikkim the status of a ‘special’ state which enables it to this day to receive a special share of grants and funds (apart from those included in the National Planned Expenditure) from the central government plus a separate contribution by the central government amounting to 90% of the total costs of Centrally Sponsored Schemes in the state. Sikkim’s small, largely agrarian and poor economy is heavily dependent on these funds, and is able to secure them only as long as it is a ‘special’ state. In an attempt to reduce this vulnerability, the GoS views hydropower as a financially lucrative option. As per the contracts signed over the projects, an average of 12% of the power generated is allocated to Sikkim, while the rest of it is sold to other states in North India. Given the direct correlation between availability of electricity and economic growth, the GoS hopes to stir up Sikkimese economy and bring more prosperity to the state through, in the words of Chamling, its own ‘white gold’ (Huber & Joshi, 2015).
- ii. **Cautious and cordial relations between GoI and GoS:** Since Sikkim is a crucial border state surrounded by three countries – Nepal, Bhutan and China – it is unlikely that it will ever lose the status of ‘special’ state. Sikkim plays the very important role of providing a buffer between China and the very vulnerable Chicken’s Neck. China particularly has an active presence at the border. The latest standoff between Indian and Chinese troops at Doklam in Sikkim in July 2017 led to the Chinese state-controlled media calling on Beijing to “reconsider its stance over the Sikkim issue” and push for a ‘pro-independence movement’ in Sikkim (Patranobis, 2017). While this rhetoric gained traction in neither of the establishments, such a possibility is very real and cannot be taken lightly. The geopolitical vulnerability and significance of Sikkim has led to successive central governments carefully maintaining cordial relations with the state and not interfering in its peculiar ethnicity-driven politics and quasi-feudal democracy. However, even though GoI has continued to allot funds generously to Sikkim, it sees an opportunity to meet the needs of a power-hungry India in Sikkim’s untapped hydropower potential which is more than 5000 MW and up to 8000 MW at

¹⁰ An ancient Indian saying which outlines four ways of getting a task done. *Saam* – through requests, pitches, advice; *Daam* – through monetary incentives; *Dand* – through punishment; *Bhed* – through ‘divide and rule’ policy.

peak times (Department of Information and Technology, GoS, 2016), and has thus encouraged the proliferation of hydropower projects in the state.

- iii. **The ‘clean’ image of hydropower:** Hydropower development is an attractive option to energize Sikkimese economy because of its ‘clean’ image which fits perfectly with Sikkim’s reputation for eco-friendly policies. Sikkim, with its untouched verdant beauty, almost non-existent industry (and pollution), and fully organic farms is famously known as the ‘green state’ in a country otherwise reeling under the harmful effects of industrial pollution and fertiliser-soaked agricultural lands. A host of policies and eco-friendly initiatives in Sikkim, ranging from afforestation to state-wide bans on plastic bags have drawn appreciation and numerous awards for the state, including the ‘Sustainable Development Leadership Award’ for CM Chamling at the World Sustainable Development Summit in 2016 (ANI, 2016). Being “the cheapest green power available to mankind today” (Huber & Joshi, 2015), hydropower only enhances the image of the state and its government.

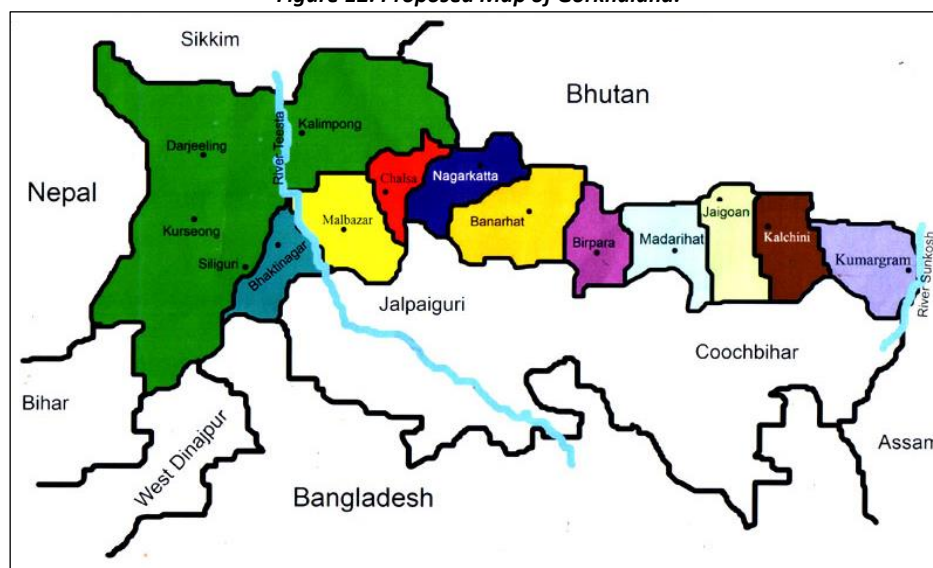
B.2.1.2. The Struggle for Gorkhaland

B.2.1.2.1. The Issue

Gorkhaland is a separate state demanded by the Gorkha community which resides in the extreme north of West Bengal. Its proposed area consists of Darjeeling district, surrounding Darjeeling hills, parts of Siliguri subdivision and parts of the Dooars region, all in north Bengal.

The aspiration and struggle for Gorkhaland is almost a century old, when the region was under British control. Historically, Gorkhaland has not been an independent state; the region was passed around among the regional powers of Sikkim, the Gorkhas, Bhutan and the British. In the early 20th century, when the Darjeeling hills were an administrative part of British Bengal, the Nepali-speaking Gorkhas began to dominate the region, while indigenous tribes from Sikkim settled down as minorities. What further propagated the influx of communities in the region was the tea sector; the British brought with them cheap labour from Nepal, eastern India and even China, while Marwadis and Bengalis flocked to the tea estates to take up salaried and clerical positions. The Gorkhas and other local tribes found themselves increasingly at the bottom of the flourishing tea ladder, which, along with practically no affinity with Marwadi and Bengali cultures, united them in their rejection of their artificial integration with Bengal. This culminated into the demand for a separate administrative unit for Darjeeling district in 1907, and then one for Darjeeling and Jalpaiguri districts in 1929 (Banerjee & Stöber, 2013).

Figure 12: Proposed Map of Gorkhaland.



Picture Credit: The Darjeeling Chronicle – via Facebook

The All India Gorkha League was founded in 1943 with the aim to separate the Darjeeling hills from West Bengal. During the time of India's independence, a public meeting was held in Darjeeling to voice local aspirations for autonomy. The District Committee of the Communist Party of India (CPI) even issued a memorandum pitching for the creation of a 'Gorkhastan' out of Darjeeling Hills, southern Sikkim and Nepal. However, CPI's West Bengal faction opposed the idea vehemently and rooted for the Darjeeling hills to remain a part of the newly created state of West Bengal, a position upheld henceforth by every government of the state, irrespective of the ruling party (Benedikter, 2009). The nationwide exercise of linguistically organising Indian states evaded Darjeeling hills in the 1950s. Nepali, the language spoken by about two-thirds of the population in the Darjeeling hills was simply not considered as an official language until 1961 by the GoWB and in 1992 by GoI (Mitra, 2017). The Gorkha National Liberation Front (GNLF) was formed by Subhash Ghising in 1979 and a long, tumultuous struggle for Gorkhaland was launched. The struggle continued throughout the 1980s, with the GNLF approaching the Prime Minister of India demanding a separate state and the recognition of Nepali language under the 8th schedule of the Constitution. The struggle began to turn violent and at its peak in 1986-88, nearly 1200 people succumbed to the political violence.

The then GoWB finally yielded to a compromise – the 'Darjeeling Gorkha Hill Council' (DGHC) was formed in 1988 under Subhash Ghising's chairmanship. Under the DGHC, territorial autonomy was granted to the sub-divisions of Darjeeling, Kalimpong and Kurseong, and a few villages from the Siliguri sub-division as well. However, without legislative powers, the DGHC quickly descended into inefficiency, financial problems and non-democratic functioning. For years, the DGHC did not meet, no economic planning was undertaken, and accountability was severely compromised. In short, the DGHC had wasted the opportunity.

In 2007, Ghising was toppled from his position as the Chairman of DGHC and was succeeded by Bimal Gurung of Gorkha Janmukti Morcha (GJM) who launched a fresh struggle for Gorkhaland. Under Gurung, a bill for creating the Gorkhaland Territorial Administration (GTA) was passed in 2011. The GTA replaced DGHC and had more administrative, financial and executive powers than the DGHC, however, they were still not vested with legislative powers. GJM proposed to include 398 mouzas¹¹ from Siliguri and Dooars in the GTA and expand its territory but was furiously opposed by the Bengalis who had increasingly come to view the Gorkhas as 'outsiders' and migrants from Nepal rather than the indigenous Nepali-speaking population of the region.

Just before the elections for GTA, the Justice Shyamal Sen Commission recommended the inclusion of only 5 mouzas to the existing GTA territory, which angered the GJM and led them to boycott the elections (Nagchoudhary, 2017). However, they came around and after quite a few political upheavals, captured all the seats of the GTA. The Gorkha community continues to lend support to GJM and Gurung as is evident in the May 2017 municipal elections in which GJM retained three of the four municipalities in the Darjeeling Hills.

In June 2017, a controversial decision by the GoWB to make Bengali compulsory in all schools of West Bengal sparked protests in the Nepali-speaking GTA region which saw the move as an act of aggression against their language and culture. The protests which began peacefully quickly spiralled out of control and widespread occurrences of violence were reported. Police and paramilitary forces had to be deployed, which further led to skirmishes between them and the protestors. The protests began with the agenda of opposing the imposition of Bengali language, but the demand for Gorkhaland soon took over, with the GJM firmly stating that "the only thing [they] want now is Gorkhaland" (Special Correspondent, 2017).

The protests collided with peak tourist season of the region, and the tourism sector took a hit not only in the GTA region but also neighbouring Sikkim, the sole road to which passed through GTA territory (Giri P. , 2017), (Chowdhury, 2017). By the time the GJM called off the agitation in September

¹¹ A small administrative unit, akin to a village.

2017, 104 days had passed, 11 lives and significant public and personal property had been lost (Express News Service, 2017), and the GJM had split with one faction resuming control of the GTA. While the protests have died down, the region is still simmering with dissent among both the Gorkhas and the Bengali populations. Recognizing this, the Kolkata High Court has issued a stay order on the central government's decision to pull paramilitary forces out of the Darjeeling hills (Chatterjee, 2017).

B.2.1.2.2. Positions

B.2.1.2.2.1. The Gorkhas

Unlike the local communities in Sikkim who were divided over the hydropower projects, there is an overwhelming consensus among the Gorkha community over a separate Gorkhaland. While the demand for Gorkhaland is primarily territorial, over years, it has accumulated layers of economic status, language, culture, ethnicity and political clout. The Gorkhas differ from the Bengalis in ethnicity and physical appearance; their distinctly separate languages and cultures have co-existed for more than a century but not blended in. With the tea plantations, economic differences also took root; Bengalis took up all the clerical and bureaucratic i.e. 'white collar' positions while many Gorkhas, along with other tribal communities from Nepal, Sikkim and East India were brought to the tea estates as labourers. Hence, it was only a matter of time that the Gorkhas and other Nepali-speaking communities frowned upon the merger of the Darjeeling hills with Bengal, which they deemed as artificial.

The dissent among Gorkhas increased with the delay in recognising Nepali as an official language; for years, it was not recognised as a second language even at the district level in Darjeeling. The Bengalis dominated economically and culturally, and after independence, they took over politically and bureaucratically as well. The Gorkhas began to feel increasingly trapped – they had neither financial control, nor political clout, nor cultural influence in a state with which they were merged purely in an administrative sense. The only solution, they surmised, was a separate state of Gorkhaland; in the words of Roshan Giri, secretary-general of the GJM, “[o]nly a State in India can provide us with the necessary legal framework for developing our ethnic and linguistic identity” (Giri R. , 2009).

It must be noted that while the Gorkhas have clamoured persistently for a separate state, the idea of seceding from India and forming a separate country is not on their cards. Firstly, the Gorkhas are a patriotic community; the Gorkha regiment is one of the most valiant regiments of the Indian Army. Secondly, they recognise the comparative benefit of staying with India over forming an independent state in the face of complex geopolitical and economic realities of the proposed Gorkhaland. Within India, the Gorkhas are confident of stabilising and progressing as a successful state for various reasons. Economically, the proposed area under Gorkhaland would be home to several tea estates, forests and national parks, and the upper reaches of the Teesta. With these resources, tea, timber, tourism and hydropower will be able to flourish, bringing significant revenue to the state. Politically, there are considerable chances that Gorkhaland will qualify as a 'special' state. Its location in the Chicken's Neck, shared international borders with Nepal and Bhutan, and proximity to China will bring focus and funds from the central government. As a gateway to the north-east, Gorkhaland also stands to benefit from the 'Act East' policy. Socially and culturally, a separate state would enable the Gorkhas to preserve and enhance their language and culture more proactively. However, there are other factors which are not conducive for the creation of Gorkhaland.

- i. **Too small for statehood or too large for social dominance:** The current area under the GTA is about 3300 km² with a population of about 12 lakhs, and has three seats in West Bengal's legislative assembly. With not even a full Lok Sabha seat in its kitty, the GTA-administered area is too small to merit statehood. However, with Siliguri and Dooars, the area of proposed Gorkhaland almost doubles to 6500 km² and its population expands to 32 lakhs which translates into 20-25 assembly seats, and one, or possibly two Lok Sabha seats. However, the population of Gorkhas in Siliguri, and Dooars is not in majority; these areas are dominated by Bengalis and Adivasi tribes. Essentially, if the total population of the newly proposed area is considered, the Gorkhas will not emerge as the

dominant community. In fact, they will end up being a minority in their own state and gain neither political clout nor cultural mainstreaming which they have been seeking through Gorkhaland. In other words, a larger Gorkhaland would defeat the very purpose of Gorkhaland.

- ii. **Risk of a new state in the Chicken's Neck:** A separate Gorkhaland's location in the Chicken's Neck would possibly mean the 'special' status, but it could also mean a challenge to the new, inexperienced administration. The region is sensitive on multiple levels – political, strategic, military, economic, social – and any weakness or folly in this region can have serious ramifications in terms of security. While military and security are the domains of the central government, daily administration, law and order and internal peace are under state administration. Whether a new, inexperienced state government with a record such as that of its predecessor DGHC can successfully carry out these duties in unique and highly sensitive situations is a serious question.

B.2.1.2.2.2. The Bengalis

The Bengalis, both within and outside the Darjeeling hills oppose the creation of Gorkhaland. They argue that the area now proposed to be Gorkhaland has been as much a home to them as to the Gorkhas. While they accept the GTA, they are against the inclusion of areas from Siliguri and Dooars in the proposed state on the grounds of Justice Shyamal Sen Commission's verdict and that these areas are not predominantly Gorkha, but home to a mixture of Bengalis and Adivasi tribes. Rather, the Bengalis have started viewing the Gorkhas increasingly as 'outsiders'; the open border policy with Nepal has led to a huge influx of Nepali migrants to the region. These migrants share common language and culture with the Gorkhas and hence in the eyes of the Bengalis, the Nepali-speaking communities are 'taking over' not only the Darjeeling hills, but also areas of Siliguri and Dooars which have traditionally been a Bengali and Adivasi stronghold.

For many Bengalis, Darjeeling is traditionally a part of their state. It features in their literature as a place of beauty and recreation, and has an exceptional sentimental value attached to it. For Bengalis, the Darjeeling hills contribute to the unique image of West Bengal – the only Indian state with both, the Himalayas in the North and the sea in the south – which is similar to India itself in a miniature form. They are ready to make concessions to the Gorkhas (the GoWB publicly apologized to them for imposing Bengali language in all schools of the state) but they are also resolute in keeping West Bengal unified. It cannot be forgotten that the Bengalis have seen partition twice, first in 1947 and second in 1971. Many Bengalis have fled East Pakistan and Bangladesh before settling down in Darjeeling, the surrounding hills, Dooars and Siliguri. For them and even for West Bengal as a whole, the idea of a third partition is simply unacceptable. Banerjee's poignant words sum up the collective feelings of the Bengali community: "Bengal cannot suffer the pain of yet another partition".

B.2.1.2.2.3. The GoWB and GoI

The GoWB has unequivocally opposed the creation of Gorkhaland from the very beginning. Barring the one memorandum issued by CPI in 1947, neither the Left nor Banerjee's TMC have indicated any support for the creation of Gorkhaland. The fact that even the slightest whiff of support to Gorkhaland would severely impair their popularity within the Bengali community – the largest in West Bengal – is a strong political reason for the parties to oppose the Gorkha movement. However, there are other reasons, especially from the point of view of a ruling party, as well.

- i. **Economic importance of Darjeeling hills to West Bengal:** The Darjeeling hills are economically important for West Bengal as they have flourishing sectors of tourism and tea. In 2014 alone, more than 6 lakh tourists visited the areas under the GTA. In the same year, the areas of Darjeeling and Dooars produced over 187 million kgs of tea, which amounts to about 60% of the tea production of West Bengal (Tea Statistics, n.d.). Darjeeling and Jalpaiguri districts have the highest per capita incomes in West Bengal (Planning Commission, GoI, 2010) and tea, a financially lucrative cash

crop, is an important contributor. If Gorkhaland becomes a separate state, West Bengal will lose substantial parts of two of its more prosperous districts and see steep reduction in its revenues.

- ii. **Control over Teesta's flow to West Bengal:** If Gorkhaland is formed, it will be the upstream neighbour to West Bengal and will control Teesta's waters before they reach the Bengal plains. The GJM is fully aware of this; amidst the strikes, rallies and violence of 2017, GJM chief Bimal Gurung warned that he would halt ongoing hydel projects, Teesta Lower Dam III and IV on the river as a "non-cooperation movement against the West Bengal government". That the statement did not materialise into reality is another story, but the fact remains that an independent Gorkhaland, with or without the graces of the central government, can certainly use the dams to halt flow of the Teesta downstream to West Bengal. If Gorkhaland is created, West Bengal will lose two hydropower projects worth 292 MW to the new state. Currently, the Teesta Barrage project in North Bengal produces only 20 MW of electricity, and based on its slow and dismal progress, it looks unlikely that it will meet its original target of generating 67.5 MW of electricity. Hence North Bengal is relying on the Teesta Lower Dams III and IV for fulfilling its power needs. With Gorkhaland in the picture, West Bengal will have no option but to buy power from the new state, thus stretching its finances.
- iii. **Weakening of GoWB's position in the Teesta issue:** the Gajaldoba Barrage built on the Teesta river is located in the Dooars region, downstream of the Teesta Lower Dams III and IV. Since all three dams are currently located in West Bengal, the GoWB holds a key position in controlling the flow of the Teesta to Bangladesh, and in the whole transboundary dispute. Even if GoWB retains the Gajaldoba barrage, losing Teesta Lower Dams III and IV to Gorkhaland would reduce GoWB's control over the flow of the Teesta and weaken its position in the Teesta transboundary issue.

Given these reasons, it is clear that no government (and no party aiming to form government) in West Bengal would support the creation of Gorkhaland.

National political parties have historically shown little interest in the matter. The BJP had initially sided with the Gorkhas; in 2009, it contested and won the Loksabha seat from Darjeeling, with its candidate Jaswant Singh voicing active support for Gorkhaland. However, over the years, BJP has carefully retraced its position. It is currently trying to pave its way into West Bengal and fears that vocal support to Gorkhaland would seriously hamper its progress in the rest of the state. The state's BJP cell too has openly stated that even though they empathise with the agitators and stand for their development, they do not support the creation of Gorkhaland for now. However, one cannot rule out the possibility of a BJP-led GoI pushing for the creation of Gorkhaland sometime in the future. The strategic location of Gorkhaland regarding the Teesta sharing issue as well as the current government's demonstrated capability to take bold and swift decisions (demonetisation, GST etc.) has raised the possibility (and hopes) of a separate Gorkhaland. If and when such a decision is taken, it would be heavily dependent on the status of the Teesta issue, India-Bangladesh relations, political climate in Bangladesh and the political and economic situation of West Bengal, to name a few.

B.2.2. Bangladesh

B.2.2.1. Domestic Conflicts in the Teesta Basin – A Possibility for the Future?

As far as one can see, there are no major domestic conflicts in the Teesta Basin in Bangladesh. Unlike Sikkim and West Bengal who face turmoil, the overall situation in Rangpur is that of relative stability and peace. In fact, Rangpur division is one of the more peaceful areas of Bangladesh. It is among areas least affected by political violence, militant activities, rebellions and insurgencies, and *hartal* (strike) violence with considerably less casualties than many other areas of Bangladesh (Suykens & Islam, 2015). Rangpur has been a shelter for Islamist militant outfits such as Harkat-ul-Jihad-al Islami Bangladesh (HuJI-B) and the Jagrata Muslim Janata Bangladesh (JMJB), but the division has by and large stayed out of the ambit of their attacks which have been concentrated in areas in and around power

centres like Dhaka and Chittagong. Security-wise, its distance from urban epicentres like Dhaka and Chittagong has benefitted Rangpur.

Multiple sources and field visits convey that Rangpur's principal problem is the reduction in the flow of the Teesta. It is true that there are more than a dozen other rivers flowing through Rangpur including the mighty Brahmaputra, however, except for Teesta and the Brahmaputra, many of these rivers are too small to support a significant size of population and agriculture throughout the year. Also, the Brahmaputra flows in the far eastern part of the division while the Teesta is closer to the central part. To the west of the Teesta, there is no major river running through Rangpur. Teesta river is the only major source of water for most of the division. Hence, even if the Teesta basin in Bangladesh covers only 2004 km² area inhabited by 9.5 million people, more than 21 million people in the country are dependent directly or indirectly on the river for livelihood.

Further, the fact that Rangpur is far away from economic centres and markets such as Dhaka and Chittagong, has led to its decades-long neglect. It was only in 2010 that the region was separated from Rajshahi division and focused upon for development. Effectively, Rangpur has been prioritised for only seven years now and has a long way to go before it sheds off the tag of a backward division. The GoB has been taking efforts along with many NGOs to boost agricultural production, public health, literacy and resilience to natural disasters. In all these areas, water availability and management are key to achieving progress and hence, the administration has set its sights on the Teesta which is the fourth largest river in the country and the largest river in Rangpur division after the Brahmaputra.

For anyone familiar with the Teesta conflict, it is no news that India's actions upstream of the Teesta are hurting Bangladesh, the downstream riparian. However, domestic issues of the Teesta basin in Bangladesh are not covered as extensively by Bangladeshi media, academia and policymakers. A recent public outburst in Ulipur town of Kurigram district, Rangpur division provides a glimpse into some local issues in the Teesta basin of Bangladesh.

B.2.2.1.1. 'Save the Buri Teesta' movement

A local movement to 'Save the Buri Teesta' a 30-km-long distributary¹² of the Teesta was launched in Ulipur upazila of Kurigram district of Rangpur Division in February 2017. The Buri Teesta emerged as a distributary of the Teesta river at Arjun village of Ulipur upazila and joined the Brahmaputra river at Kachkol area under Chilmari upazila. Its flow was controlled by two regulators (sluice gates) by the Bangladesh Water Development Board (BWDB) at Arjun and Kachkol. However, due to heavy floods in 1988, the sluice gate at Arjun collapsed. Since then, BWDB blocked the flow of Buri Teesta and it started silting rapidly. In the process, all agricultural land in its vicinity became unusable in the dry season. Along with agriculture, local navigation (including recreational activities such as annual boat races) and fisheries were severely hit. Slowly, the Buri Teesta fell to neglect – even a simple bridge could not be constructed over the small river due to petty local politics, lack of funds, and obstruction from locals, most of whom were poorly compensated for their land at the site of construction (Asaduzzaman, 2012). The Buri Teesta is almost dead now and its dry bed has been grabbed illegally, mostly by rich and powerful locals, and turned into agricultural fields for regular cultivation. Some have also created and sold plots in the river bed for commercial uses.

The 'Save the Buri Teesta' movement has four clear demands – a) digging at source-point of the Buri Teesta in order to rejuvenate the flow, b) reconstruction of the sluice gate at Arjun, c) immediate eviction of illegal land grabbers to restore the course of the river, and d) immediate dredging of the river bed. In March 2017, more than 5000 people of Ulipur came out on the streets to form a 2-km-long human chain urging authorities to rejuvenate the Buri Teesta river (Daily Star Correspondent, 2017). The very next month, a procession of around 4,000 people carrying water bottles and pitchers went to the Khearpur Bridge over the Buri Teesta. They poured water in the river, in a symbolic move to recreate

¹² A distributary is a branch of a river that does not return to the main stream after leaving it.

the flow of water and urged authorities again to prevent the river from drying. The mayor of Ulipur municipality supported the movement, insisting that normal flow of the Teesta and Buri Teesta were essential for the local environment (Staff Correspondent, 2017). In May 2017, the movement went to Dhaka. The Ulipur Samity at Dhaka formed a human chain yet again in front of the National Press Club in which natives from Ulipur and Kurigram staying in Dhaka and leading environmentalists of the country participated in large numbers. Directly addressing the Prime Minister, the organisers and participants reiterated their four demands in front of a large crowd. (Staff Correspondent, 2017).

The movement has received the attention of the concerned authorities. The Executive Engineer of BWDB Kurigram has agreed to build a new sluice gate at Arjun in the next fiscal year stating, “if the local lawmaker assists me, the project may be approved quickly” (Wahed, 2017). The Upazila Nirbahi Officer (UNO) of Ulipur took up the issue with the Assistant Commissioner of Kurigram district. It was also discussed by Kurigram’s District River Protection Committee under the National River Protection Commission. All eyes are now on the coming fiscal year when works on the Buri Teesta will begin.

B.2.2.2. The Teesta Narrative and Conflicts

That unilateral actions by India upstream on the Teesta have severely affected her flow downstream and rendered Bangladesh’s Teesta Barrage Project partially useless is an undisputed fact. However, the popular narrative in Bangladesh portraying Indian actions as the singular problem and a bilateral treaty on the Teesta as the singular solution does not take cognizance of the shortcomings in water infrastructure, management and conservation practices in the country.

Multiple studies conducted by both Bangladeshi as well as non-Bangladeshi researchers confirm the definite deterioration of the Teesta and the reduction in her flow over the past few decades, especially after the Gajaldoba barrage started operating. However, the availability of Teesta’s water, or in general of transboundary rivers flowing into Bangladesh, became a grave issue of national political proportions only in the last 20-25 years. This was due to not only decreasing flows and other climate change impacts, but also political/developmental changes in upstream India. In 2001, the Central Electricity Authority of India identified the Brahmaputra basin as “India’s powerhouse” and singled out two states, Arunachal Pradesh and Sikkim, as most ideally suited for hydropower production. Within these new findings, the GoI saw the fulfilment of its twin goals of fulfilling the needs of power-hungry central and western states of India, and bringing the North East into mainstream economic growth.

Accordingly, plans for 168 hydropower projects with a total installed capacity of 63328 MW were drawn up for the north-eastern states, more than half of which were to be in Arunachal Pradesh and Sikkim alone. The Ministry of Power, GoI, also launched the ‘50,000 MW Hydro Initiative’ in 2003 as part of GoI’s “Mission 2012: Power for All”. Incidentally, Sikkim and Arunachal Pradesh were also the upper riparians for Teesta and Brahmaputra, two major rivers of Bangladesh. Bangladesh was rightly alarmed at the intensive damming activity which India embarked upon without consulting its co-riparians. With high uncertainty of impacts, very little information available due to GoI’s opaque dealings, and high stakes for the vulnerable downstream communities, Indian hydropower projects in particular and joint water management in general became key points of Bangladeshi hydropolitics (Kolås, et al., 2013). While civil society groups arranged local protests of aggrieved and vulnerable communities, spearheading the agitation at the national front was the BNP.

To this day, the contestations and protests continue. India’s hydropower projects in the North East and the lack of a water sharing agreement, especially on the Teesta, are discussed intensively among the political circles, academia and civil society in Bangladesh. However, apart from highlighting India’s actions and the need for an agreement, very little is put forth. Few papers talk about local solutions such as rainwater harvesting in the Teesta basin, or a critical and pragmatic look at the current draft of the Teesta agreement without hurrying to get it signed – such an approach is clearly not mainstreamed in the current political and even academic discourse over the Teesta. The focus instead, of Bangladeshi political class and at least a portion of civil society and intelligentsia is to get an

agreement signed and obtain “a fair share of Teesta waters” from India, once and for all. This is particularly crucial for the Hasina government; it will finally silence her critics, especially the BNP, who have been alleging that her government has ‘sold over’ to India. A deal over the Teesta will also go a considerable length in consolidating the Awami League’s position in northern Bangladesh, more so if the agreement is signed before Bangladesh’s national elections in late 2018/early 2019.

The media too has clamoured vigorously for the agreement with little incursion into its details. An analysis of media coverage around the Teesta agreement from 2010 to 2012 conducted by the International Union for Conservation of Nature (IUCN) points out that when the Teesta deal fell through in 2011, the media in both countries resorted to “a blame game” and indulged in “a fair amount of partisan and unattributed reportage”. The report highlighted the fact that the “least detailed aspects of the proposed Teesta agreement in the media during this period were: the rationale on either side of the border for the water-sharing agreement, the contours of the agreement, and the strategies being explored, if any, for pushing for the agreement to take place in the near future” (Bhushan & Ahmed, 2014); looking at media coverage of the Teesta since then, it can be seen that little has changed.

It would be prudent to remember here the Ganga Treaty which despite being signed and implemented, has failed to address issues of the Ganga River basin on both sides of the border. Pushing for an agreement and a share of the river deemed as ‘fair’ by narrowly defined parameters would work in nobody’s interest; better to have no agreement instead of a detrimental one. However, geopolitical realities and political equations on both sides of the border have now made the Teesta agreement (in whichever form) imperative. Given the importance of the Hasina-led GoB for India, the Teesta agreement is bound to be signed sooner than later. However, if all the efforts are focused solely on getting a signed agreement and a fixed quantity of water from India without proper infrastructure, technology, distribution systems and management practices in place, it is highly likely that domestic conflicts over the Teesta will occur in Bangladesh after the agreement is signed. In order to prevent this from happening, Bangladesh needs to have a framework already in place to store, manage and distribute the waters efficiently, equitably and sustainably. Both countries need to ensure that issues such as climate change, river and groundwater conservation and sustainable development are adequately addressed in the agreement itself. As the downstream riparian state with the development and stability of its poorest region at stake, Bangladesh needs to realise the urgency and act proactively.

C. Local Communities of the Teesta

Teesta's riparian communities are largely rural and agricultural, characterised by low level of economic activity (a small service sector and an almost non-existent industrial sector), poverty, low level of human resource development, weak access to markets, and an overall low standard of living. They are highly dependent on the Teesta river for survival and livelihoods, and many of their cultural and religious practices involve her in various capacities. Within an area of little more than 12000 km², the Teesta basin holds extraordinary cultural diversity; almost all major religions are represented, and various languages, ethnicities, tribes, and two nationalities can be found staying together. However, always clubbed together as one monolithic group, the different interests, aspirations and concerns of the local communities are rarely taken into serious consideration. Through activism and a more vocal civil society on both sides of the border, it is now possible to for the local communities to ensure that their fears and needs are heard. As gathered first-hand and through secondary sources, the primary issues of the local stakeholders are as follows.

- i. **High apprehension about dams and other built structures on the Teesta:** Right from North Sikkim to Kurigram, locals are highly sceptical and even fearful of the big dams and barrages built across the Teesta and their effects on the river's health and ecology. The anti-dam movement is the strongest in Sikkim, partly because most of the dams on the Teesta are concentrated there and partly because the impacts on the state's fragile ecology have been immediate and severe, but communities downstream are critical of the Gajaldoba and Dalia barrages as well. Those who supported the construction of the dams in Sikkim as well as those who see economic opportunity in the Gajaldoba and Dalia barrages are nevertheless anxious about impacts of the structures on the surrounding environment, their society, and the health of the river.

In Sikkim, there are concerns regarding safeguarding of indigenous cultures and the religious value of the Teesta, disaster mitigation and management, and obtaining the electricity supply as promised by power companies and the state government. In North Bengal, the locals worry over dams in the Darjeeling hills and Sikkim, the devastating floods caused due to their unsynchronised release of water especially in the monsoons, overall environmental degradation, and the effects of a rapidly deteriorating Teesta on their farming and fishing activities. The Bangladeshis are most upset over the Gajaldoba barrage and the resultant irregular flows of the Teesta, leading to droughts in the lean season and floods in the rainy season, year after year. The Dalia barrage, now almost defunct due to Gajaldoba upstream, is unable to meet irrigation and other water needs of the Bangladeshis, causing severe stress to their livelihoods. Project affected people across the basin are concerned about adequate and timely land compensation and employment opportunities.

- ii. **Climate change and disasters:** Local communities in the Teesta basin are experiencing climate change first-hand. Rising temperatures, greater snow melt, season shifts, erratic monsoon patterns and increase in severity of natural disasters are a current reality in the Teesta basin. Further, the effects of climate change have been aggravated by unchecked dam building in the region. The largely agrarian nature of the local population makes it extremely vulnerable to climate change and combined with a lack of latest knowledge, technology and resources, the socio-economic and environmental risks for Teesta's local communities are high. While many tribal and riverine communities have been picking up the signs from their surroundings – through observing river flow, behaviour of surrounding wildlife and climate patterns – they find it challenging to access regular, reliable and easily understandable data on what is happening to their land, water and climate. This inaccessibility obstructs farmers, fishermen and other people whose livelihoods are vulnerable to the vagaries of nature from taking timely and informed decisions to prevent or minimise their losses and arrange for substitute income.
- iii. **Migration and social upheavals:** the cases of Sikkim and Gorkhaland shed light on the sensitive nature of social and cultural diversity in the region. With two partitions, an annexation, and the birth of an eventually violent socio-economic movement (the Naxalite movement), the Teesta basin

carries high social risks. Its geopolitically sensitive location makes it even more vulnerable to external interference or worse, provocation. Its economic backwardness and uneven development lead to considerable rural to urban migration, as well as an influx of migrants from Nepal and Bangladesh into Gangtok and Darjeeling-Jalpaiguri areas (which are the most developed areas of the region). There is vocal discomfort and even outrage about migrants from Nepal and Bangladesh.

Opposition to Nepali migrants is largely socio-economic, as legally, India shares an open border with Nepal. However, there is no such arrangement with Bangladesh, and a large number of migrants are illegal. In 2004, the estimated numbers of Bangladeshi illegal immigrants to West Bengal and all of India were 12 million and 5.7 million respectively (Das P. , 2016). As of 2017, the total number of Bangladeshi illegal immigrants in the country is said to be 20 million (Tripathi, 2017). This number has radically altered population dynamics in West Bengal and the North-East, leading to communal fears in the region and drawing ire at a national level. While local riparians in the Teesta basin recognise that many of these migrants, legal and illegal are fleeing, among other things, environmental and economic crises, they feel that this influx is an infringement on their lands, resources, opportunities and rights. Many North Bengalis have vouched for giving Bangladesh a fair share of the Teesta with the hopes that this might improve the agricultural situation in North Bangladesh and curb illegal immigration.

- iv. **Weak representation of local concerns and interests:** local communities across the basin feel that their actual concerns and interests find little space in bilateral negotiations and mainstream media. Many civil society organisations and activists have raised awareness about various local issues in the Teesta basin especially on the Indian side, but at the negotiation table as well as in the existing draft of the Teesta agreement, these issues are not addressed. A stakeholder survey conducted by The Asia Foundation in 2013 in the Teesta basin indicated that there was “little propensity to conduct public consultations on issues that directly affect the local people”, with about 78% of the respondents never been invited to share their views before the start of a development project (Prasai & Surie, 2013). Since the survey sample was not large enough to be statistically significant, the results could be debated. However, first hand field research for this project echoed these results across the entire length of the river. For stakeholders to be heard, there has to be a platform, and only civil society initiatives can create it.

Another survey by Prasai & Surie (2013) indicated that 33% of Indian residents and 43% of Bangladeshi residents resorted to media outlets for making their voices heard, while almost similar proportions also took their concerns to local politicians. In the case of media, Bangladeshi stakeholders have fared better than their Indian counterparts. This is because the Teesta issue resonates with a larger base in Bangladesh than in India due to its geographical compactness and relative homogeneity as compared to India’s vast size and variety of issues which compete for national attention. With local politicians and government officials, there hasn’t been much success as negotiations have been restricted to the highest levels of the political ladder. Not only the local communities but also other important actors such as hydropower companies, prominent activists and NGOs in the Teesta Basin, and even the Chief Ministers of West Bengal and Sikkim and the Divisional Commissioner of Rangpur have been excluded from these negotiations.

The common man on both sides of the border is undoubtedly influenced by the political and media narrative over the Teesta. Fuelling his discontent is the visibly declining and deteriorating flow of the Teesta, leading her to a slow and painful death, year after year. It is natural that local riparian communities of the Teesta are emotional about her waters and her possible extinction. However, instead of letting their political representatives and the media take disadvantage of it, they need to move beyond emotions and look at the Teesta as a strategic, economic, ecological resource that needs urgent care and fortification. It is unfortunate that the bilateral negotiations do not give as much importance to socio-cultural and economic impacts of the Teesta issue on local communities as they do to geopolitical, technological, financial and security aspects. However, these four factors have a direct impact on Teesta’s local communities, and must be kept in view in order to devise solutions and policies which can be pragmatic, feasible and more than an academic exercise.

D. Groundwater

One of the most neglected aspects of the Teesta basin is groundwater. Not only no aquifer mapping has been done at a basin-wide scale but also there is no mention of groundwater and the regulation of its use in the existing draft of the agreement. The upper reaches of the Teesta i.e. Sikkim state is home to what is known as a 'mountain aquifer' while northern part of West Bengal and northwestern Bangladesh have alluvium aquifers which are a part of the extensive alluvium aquifer of the Indo-Gangetic plain. Accessing water from mountain aquifers is relatively more challenging than that from alluvium aquifers. They are variable and complex, and their recharge depends largely upon the relationship between slope and the underlying geology. Alluvium aquifers are vast and shallow reserves of groundwater and more easily accessible, but their recharge rate is slow.

Groundwater is used in many places in the middle and lower reaches of the Teesta basin. In the area from Sevoke to Jalpaiguri, dug wells are the main source of drinking water. Sinking tube wells is difficult in this region due to presence of pebbles and boulders hence they are lesser in number. The water table in this region is shallow with small seasonal fluctuations which makes it an almost perennial source of water. However, arsenic¹³ has been traced in the groundwater, especially in areas very close to the course of the Teesta (Bhattacharyya & Mukherjee, 2008).

Groundwater is extensively used on the Bangladeshi side of the Teesta basin, partly due to decrease in surface water, and partly because groundwater is abundantly available at a shallow level. However, between 1981 and 2011, it has been exploited to unsustainable levels and the decline in groundwater table has been found to be between -2.3 m to -11.5 m. The use of tubewells has proliferated in the region chiefly due to the rapid and widespread expansion of boro rice cultivation which consumes 78.7% of the abstracted water. Together, boro rice cultivation, resultant exploitation of existing groundwater, depletion of surface water, reduction of wetland areas and below average rainfall are major impediments to sustainability of groundwater in the region. Further, a joint study by Ahmed et al., (2004) has found moderate to severe traces of arsenic in about 60-80% of tested wells in the region.

As the volume of surface water in the Teesta and her tributaries decreases due to natural or anthropogenic factors, groundwater will become more and more crucial for fulfilling domestic and agricultural needs. However, there is no shared policy on how the groundwater of the Teesta basin will be used, conserved and improved qualitatively. It is evident that uncontrolled abstraction of groundwater is going to deplete the aquifers. Contamination of groundwater can also make it a scarce resource. If the alluvium aquifers deplete, recharging them, especially the deeper ones, is a slow process, sometimes taking hundreds of years. Surface water depletion is immediately visible and obvious and hence, an easily identified cause for conflict. In the case of groundwater, it is not so; groundwater depletion is relatively slower, inconspicuous, out of human sight, and hence out of human mind. This makes groundwater a potential and serious cause of conflict. While the Teesta basin has a good amount of groundwater, it is only a matter of time that it turns into a scarce or qualitatively unusable resource; the process has already started. Taking cognizance of this silent factor in negotiations, policies and the agreement while there is still time is of paramount importance.

¹³ A harmful mineral which in its inorganic form can cause cancer of skin, lungs and bladder.

E. Climate Change in the Teesta Basin

The Teesta basin is an ecologically diverse region, stretching from the Tibetan plateau to the tropical humid plains of Bengal. The basin has an extremely fragile ecology which is sensitive and vulnerable to climate change. It is also prone to earthquakes, droughts and floods, the intensity of which have been aggravated by large dams upstream of the river.

Average temperatures across the Himalayas and on the Tibetan plateau have been rising at rates higher than global average for about half a century now. Temperatures in the Himalayas rose at a rate of 1°C per decade from the 1970s to the 1990s (against mid-latitudinal northern hemisphere average of 0.6°C). As a result of this warming of the Himalayas, snow-covers and glaciers are melting at an alarming rate, swelling Himalayan rivers and causing huge floods. Many of these receding glaciers end up creating glacial lakes. Water accumulates rapidly as snow and ice melt faster, and sudden discharge of large volumes of water and debris from these lakes causes glacial lake outburst floods (GLOFs), which cause huge destruction in the valleys downstream (Vagholikar & Das, 2010).

All these phenomena are observed in the Teesta basin as the Teesta arises from a glacier and is a perennial snow-fed river. Rising average temperatures are observed throughout the basin, and so are the changes in rainfall. Rainfall pattern in the Teesta basin has become erratic, more intense over a smaller number of 'wet' days with longer dry spells, and will continue to be more so. Such intense rainfall over a short period of time is leading to a high rate of soil erosion and landslides in the upper reaches of the Teesta, and increasing the number and intensity of floods and droughts across the basin. If this scenario continues at the current pace, in the next few decades, it is projected that the melting glaciers will at first swell the rivers with increased meltwater, but then, as the glaciers will continue to shrink, so will the volume of meltwater, and the glaciers will disappear altogether. The environmental ramifications of such an event would definitely be disastrous, but the social, economic and political consequences could be destabilising and catastrophic beyond imagination.

What is worrying is that despite a mammoth amount of research and clear evidence, climate change and its effects find no place in the bilateral negotiations and the existing draft of the Teesta agreement. It is a clearly visible ticking time bomb and yet, large dams continue to be built and the signs continue to be neglected or at best, be 'fixed' by temporary measures. Governments at state and central level might have different agendas, but they are unanimous in their dismissive attitude towards the profound effects of climate change sweeping across the basin.

F. Role of Domestic Politics in Teesta Transboundary Dispute

It is evident that the Teesta dispute is not restricted to the central governments of India and Bangladesh. While GoWB is directly involved in the bilateral issue, India's interests in Sikkim and Bangladesh's interests in Rangpur play an indirect role in the tussle over the Teesta. It is impossible to study this dispute by formally separating domestic politics and bilateral relations between India and Bangladesh; the two are entangled in complex ways with each affecting the other.

Despite failure of the Teesta talks in 2011, it is evident that bilateral relations between India and Bangladesh have been largely smooth. Some friction was definitely created in 2011 but it was temporary, and relations were back on track on many fronts, including the Land Boundary Agreement as well as various agreements in defense, transport, electricity, education, maritime safety etc., being signed over the next few years. Looking back, India's failure to sign the Teesta agreement looks like a speedbump in the otherwise smooth journey of India-Bangladesh ties. Moreover, the central governments of both countries have time and again shown willingness to sign the agreement, as both recognise the importance of the issue for the health of their relationship, which in turn is important for South Asia's stability and security.

Particularly, Bangladesh finds in India a natural ally – culturally, historically, economically and geographically. A secular democracy like itself, India is a trusted partner for Bangladesh in economic development, capacity building, trade, defense, research and development and combating climate change. India too sees a friend in Bangladesh, and especially in the secular Awami League government lead by Sheikh Hasina. Bangladesh is also a strategic partner connecting India to its north-eastern states, fighting terrorism in South Asia, and pursuing its 'Act East' policy. Owing to proximity and geographical similarities, India and Bangladesh experience natural disasters and climate change in similar ways. Both countries are dependent on each other for growth and stability.

It is due to GoWB's opposition that India has not signed the treaty; hence the driver behind the fundamental Teesta dispute is a domestic player. Even though GoI has constitutional powers to override the position of GoWB, geopolitical and domestic realities dictate otherwise. Much to the chagrin of Bangladesh, these factors thwarted the signing of the Teesta agreement. While relations became frosty for a while after the pull out, India more or less got away without signing the treaty, at least in the short term for the following reasons.

- i. India is the upstream riparian, as well as more powerful economically, politically and militarily.
- ii. India's location as well as strength increased its stalling capacity. Bangladesh too tried to stall transit deals which would give connectivity to India's north-eastern states with the rest of the country through Bangladeshi territory. However, Bangladesh could not stall for long.
- iii. Bangladesh has a bigger win-set¹⁴. Despite the Teesta negotiations falling apart, GoB braved domestic pressure and cooperated with India over many other issues. Many agreements and deals were signed between 2011 and this day, including almost two dozen deals in April 2017 alone. Due to the size and flexibility of Bangladesh's win-set, India found it relatively easy to 'make it up' to Bangladesh by offering aid and cooperation in other less contested areas and ensure at least satisfactory if not excellent ties.
- iv. In India, there were differences between the positions of centre and state, whereas in Bangladesh, the position over the Teesta deal was largely homogenous. The GoI was able to successfully use the reason of domestic pressure and friction for not signing the agreement: it satisfied GoWB without antagonising Bangladesh into defection from negotiations and deteriorating bilateral relations.

¹⁴ A win-set is an array of all possible outcomes that are acceptable to the negotiating party. I have borrowed this concept and related logic from the 'two-level game theory' as elaborated by Robert Putnam in his paper "Diplomacy and Domestic Politics: the logic of two-level games" published in 1988.

However, there is no doubt that an agreement over Teesta's waters is very much in India's interest and India needs the Teesta treaty to secure its friendship and partnership with Bangladesh for a stable and secure South Asia. For this to happen, both India and Bangladesh need to rework their strategies in realising the Teesta agreement. In the case of India, it needs to acknowledge the role of domestic players in the issue not only verbally, but through action. To start with, at least the two state governments need to be roped in. GoI needs to bring West Bengal, the main contender, aboard and include Sikkim as well. The tactic of offering more and more cooperation and aid in various areas to Bangladesh i.e. maximising its win-set will not work after a while; it will certainly be tested in the national elections of Bangladesh in 2018/2019. GoI will have no option but to prioritise signing the Teesta agreement by winning West Bengal's support and aligning the win-sets of Sikkim and West Bengal with its own.

It is an unfortunate fact that as the downstream riparian, the onus of getting the Teesta agreement signed lies on Bangladesh. Lowi (1993) argues that upstream states, due to geographical advantage, do not need to bother with downstream requirements and are in a position to act as they please, especially if they are a powerful regional hydro hegemon (like India and China). However, this is not entirely true in the case of India and Bangladesh as Bangladesh is important for India in many ways which have been mentioned earlier in the paper. As the downstream and non-hegemonic riparian of the Teesta, it is up to Bangladesh to strengthen its bargaining power, and through innovative options and solutions, incentivise India to get the deal through. Increasing bonhomie with China and positioning itself as a crucial partner in combating terrorism in north-eastern India has benefitted Bangladesh, but it needs to consolidate its indispensability further to push India into delivering what it wants.

Beyond the governments who are players at the domestic and international/bilateral level, there is a third level of civil society, environmentalists, academia, technocracy, corporates and activists. Currently, these actors are excluded from the negotiations. However, this does not mean that they do not wield power. Warner & Zawahri (2012) note that these non-state actors "can enter the game and influence the outcome even under conditions of power asymmetry among the riparian states" by using "their specialised knowledge, networks, and 'soft power' to challenge the authority of powerful states and alter the power equation". An example is cancellation of multiple hydropower projects owing to pressure from anti-dam activists and local communities. While non-state actors from both sides have not played a major role in the bilateral Teesta dispute as of now, they hold potential to influence and shape its proceedings. Their presence is of prime importance for the health of the Teesta and her ecosystems, and efficient use and just allocation of her resources on both sides of the border. In the Indian context at least, non-state actors provide heterogeneity in interests and positions at the domestic level. This heterogeneity opens doors for Bangladesh to find supporters on the other side of the negotiating table.

G. Conclusions and Recommendations

In the complex web of conflicts in the Teesta basin, the most ignored entity is the river. Heavily dammed, mined for sand, drying in wide patches, deteriorating in quality and reeling under the impacts of climate change, the Teesta nevertheless retains traces of her once pristine beauty. Frequently subject to landslides in its upper reaches and severe droughts and floods in its lower reaches, the Teesta manages to support a population of 30 million people in her basin. She has been directly responsible for their survival and livelihoods features prominently in their cultural, recreational and spiritual lives.

The importance of Teesta to India and Bangladesh is profound. For India, she is the only major river draining two of its geopolitically important state – Sikkim and West Bengal. The Teesta also flows through the Chicken's Neck and separates the North East from the rest of the country. For Bangladesh, Teesta is the principal river in its dry, drought-prone north and north-west region which is also the poorest region in the country. Away from urban centres and markets like Dhaka and Chittagong, Rangpur division's economic growth and development relies heavily on the Teesta river. Both countries naturally want to reap maximum benefits of the Teesta though at current rates of consumption, the total volume of the river, even if used up completely, is insufficient to meet their needs. This scarcity combined with India's upstream location and hegemony is the driving force behind Bangladesh's insistence that a fair sharing arrangement over the Teesta be worked out at the earliest.

On the surface, the failure of Teesta talks in 2011 and the overall lethargy in their progression indicate a gap in Indo-Bangladeshi relations. However, apart from temporary setbacks, the bilateral ties between India and Bangladesh have sailed well and expanded into areas such as education, maritime cooperation, IT, transport and defense. Moreover, the Indian government has repeatedly voiced its consent to signing the Teesta agreement. The bilateral dispute then, is not really just bilateral; the opposition by the Banerjee-led GoWB to the terms of the current draft of the Teesta agreement is the single biggest hurdle to the fruition of Teesta negotiations. While the Indian Constitution grants the central government powers to override GoWB's opinion in this matter, geopolitical realities state that the GoI bringing GoWB onboard before signing the Teesta agreement is in the interest of the country's security, economy and political stability. For Banerjee and her government, retaining maximum of the Teesta's waters for North Bengal is important for gaining political clout in the traditionally Leftist stronghold and assuaging the discontent in the region, especially within the Gorkha community.

The current Bangladeshi government too is anxious to compensate for years of neglect of Rangpur division by securing the Teesta waters for its population, as well as provide an answer to the nationwide criticism of their failure to get the Teesta deal before the country goes to national elections in late 2018/early 2019. In this entire scenario, there is no weightage given to the river's conservation and sustainable use and development, the economic importance of her resources for sectors like tourism, fisheries and navigation, equitability in access to and allocation of her resources among the local communities in the basin, and her resilience to various impacts of climate change.

Thus, through numerous examples throughout the paper, it has been established time and again **that the Teesta dispute between India and Bangladesh is neither a bilateral dispute between the two countries, nor is it about the Teesta river.** The term 'Indo-Bangladeshi conflict over the Teesta river' has proven to be a misnomer. The political players in the dispute have clear political, economic and security interests; it is the local communities and activists on both sides of the border who have prioritised the Teesta on their agenda. Since the river is directly connected to their social, economic and cultural wellbeing, it is understandable that the local communities strive to restore and maintain her quality and quantity.

However, it must be noted that the river is neither the exclusive nor the topmost priority of the local communities; their struggle for the Teesta is enmeshed with numerous struggles to preserve their cultural, ethnic and religious identities which have regularly overtaken the cause of saving and conserving the river. This has also resulted in difference of opinion and deep divisions within them,

unlike political and economic players (such as the hydropower companies) who enjoy a relatively larger support base within their own groups. The vulnerability of local communities to environmental and social phenomena such as climate change, demographic transformations, globalisation and privatisation, and regional political dynamics is responsible for their recurring emphasis on cultural and political identity and economic fortification, sometimes at the cost of the river. The activists and NGOs who support and further their cause understand this and hence their stand too is a hybrid of the issues of the river and other socio-economic concerns of the local communities of the Teesta basin.

A conflict which has intricate layers of economics, domestic politics and regional geopolitics needs solutions that consider these layers as inseparable and legitimate aspects of the problem as well as recognise the personal interests behind each party's position and actions. Such solutions are pragmatic and able to satisfy personal interests, but in the hope that once these personal interests are satisfied to at least a certain extent, the players will acknowledge the bigger picture and collaborate to work towards a greater, nobler goal of saving and flourishing the river, her ecosystems and her people. While we cannot assume that the parties will develop such an integrated, environmental approach after their interests are met, we can certainly incentivise certain actions and policies which would lead to the betterment of the Teesta.

For India, the priority is to sign the Teesta agreement and retain the Hasina-led GoB and its friendship without antagonising the people of West Bengal. The following actions could yield results.

- i. **Involving Sikkim:** Throughout the unravelling of the Teesta issue, the state of Sikkim has been a mute spectator. Despite being the uppermost riparian with thirty-odd dams holding a substantial amount of Teesta's water, Sikkim has never been included in the discourse over sharing the Teesta, neither at domestic level nor at national level. Whether it is the state's location as the uppermost riparian, the fact that it has almost no stakes in the sharing issue, its 'special' status, or the geopolitical importance of its location that has left Sikkim 'untouched' throughout the dispute, Sikkim must no longer be kept away from the negotiating table, especially now that it shares vulnerability to climate change along with the other two regions. The main argument of the GoWB is that the volume of Teesta waters that flows into West Bengal is not enough to fulfil its needs with Bangladesh's demand to spare. Lack of synchronisation of water releases by Sikkim's dams affects the flow of the Teesta to Gajaldoba and eventually to Bangladesh. Hence it is natural, rather imperative, that Sikkim be a part of the discourse on bilateral sharing of the Teesta.
- ii. **A domestic agreement on the Teesta:** The GoI should also work towards a domestic agreement over the release of Teesta waters between Sikkim and West Bengal. In order to get the Teesta agreement signed (and not stall it) soon and especially before Bangladesh goes to national elections, it is important that all the domestic players are aligned with the GoI when it goes to the negotiation table. The domestic agreement can determine the timing, quantity and quality of flow of the Teesta up to Gajaldoba in such a manner that a maximum of North Bengal's water needs is fulfilled and flash floods downstream in southern Sikkim and North Bengal are prevented by synchronising water releases from the dams upstream. The agreement can (and should) also include quality control measures, and joint actions to increase their resilience towards climate change, protecting Teesta's ecosystems, and developing Teesta's economy in an integrated manner. Such an arrangement and its efficient and timely execution would go a long way in blunting GoWB's opposition to the bilateral Teesta agreement between India and Bangladesh.
- iii. **Water use efficiency and conservation plan for the Teesta basin in North Bengal:** It has been established that the volume of the Teesta is no longer sufficient to fulfil the demands of India and Bangladesh. The dwindling supply of her waters, be it due to dams upstream or climate change, calls for extensive demand management through serious upgradation in water use efficiency and water conservation efforts, especially in North Bengal. Since water is a state subject as per the Indian Constitution, planning and implementing efficiency and conservation measures is primarily the responsibility of the GoWB. By expanding its activities into disaster management, groundwater management and sustainable crop patterns, it can develop a blueprint for efficient water

management in North Bengal. Through sustained, systematic implementation and proper awareness, the GoWB can fashion this responsibility into an opportunity to a) develop and consolidate a voter base in North Bengal, especially in the rural areas and b) cooperate with GoI on the Teesta agreement without fearing opposition from local communities and its adverse political consequences.

On the other hand, the West Bengal unit of BJP can also spearhead water use efficiency and conservation efforts in the Teesta basin in order to pave its way into North Bengal. In North Bengal which has traditionally been a Leftist stronghold, such a move would make BJP look more centrist than right wing, and not only enable the central BJP-majority government to take the unpopular decision of giving more of the Teesta to Bangladesh, but also improve the chances of BJP performing well in the West Bengal state elections in 2021. Further, such efforts would also gain traction among local communities, environmentalists, environmental NGOs and activists who are more likely to lend actual on-ground support to the GoI in conserving Teesta waters for West Bengal as well as sharing them equitably with Bangladesh. However, while the political opportunities are enormous, the risk of water use efficiency and conservation turning into a mere tool for political gains and thus being treated with a shallow, farcical approach is very real. Care should be taken that this does not happen.

- iv. **Other sources of power in Sikkim:** Sikkim's dams, though environmentally harmful and socio-culturally disruptive, are a crucial source of revenue for the state, and of power for states as far as Punjab, Haryana and Rajasthan. Hence, for economic and energy reasons at least, complete dam removal is not a practical option. However, there are two other options which GoS and GoI can explore in Sikkim. The first is constructing many micro and mini hydel projects in place of some of the dams, especially those which hold large storage capacity. Studies exploring dams that could be replaced with smaller, non-storage dams should be carried out. Also, in order to prevent micro and mini hydel projects from creating the same adverse social, cultural, economic and environmental impacts which large hydropower projects do, care needs to be taken that these projects are backed by inclusive planning, active participation of local stakeholders and strict adherence to environmental regulations.

The second option is using solar energy. The steep drop in solar energy prices and a record low of Rs. 2.44/kWh in 2016-17 (Das, Gambhir, Sarode, & Dikshit, 2017) has made solar energy an attractive, clean and cost-efficient option for fulfilling the power needs of a sunshine-abundant India. It is true that Sikkim does not have the large, flat spaces which are required to install solar panels in order to generate solar energy on a large scale. However, it can definitely explore investing in rooftop photovoltaic (PV) systems for its houses and buildings. Further, large scale solar energy production is very much possible in Punjab, Rajasthan and Haryana and must be encouraged to reduce dependence on hydropower.

With solar energy and micro and mini dams, Sikkim will truly be able to maintain the image of being an 'eco-friendly' state. This will certainly have an impact on Sikkim's revenues in the short run, but by investing in and upgrading its tourism, service and organic farming sectors, Sikkim can generate substantial revenues (even if not as much as the current hydropower projects) and definitely provide wider employment options to its local population than the hydropower projects could. These moves will go a long way in pacifying the discontented Lepchas and other local communities, as well as curb the environmental degradation in the region. It must also be noted that given Sikkim's strategic location and the current geopolitical realities in the Himalayas, it is highly unlikely that Sikkim's 'special' status and consequent benefits will be taken away. Hence Sikkim (and India) should consider the economic, social, environmental, cultural, inter-state and international impacts of its dams and take serious efforts to reduce their numbers and impacts in the Teesta basin.

- v. **Greater (incremental) autonomy for Gorkhaland Territorial Administration (GTA):** The short-term benefits of establishing a separate state of Gorkhaland for both the Gokhas and the GoI

cannot offset long term liabilities and challenges. For the Gorkhas, the current size of the GTA is too small to merit statehood, whereas expanding it to include areas of the Dooars and Siliguri subdivision will reduce them to minority status in their own state, defeating the purpose of Gorkhaland. For the central government, a fledgling state in the vulnerable Chicken's Neck would drain its financial and security resources. Also, there are other ways in which the current GoI can coax or pressurize West Bengal such as increasing its win-set through more funds, resources and other benefits, improving performance in the state during Loksabha elections of 2019, and possibly a regime change in West Bengal in 2021 are some ways in which West Bengal can be brought aboard the Teesta treaty.

In such a scenario, a separate Gorkhaland is neither desirable nor necessary. Instead, more autonomy to the existing GTA in areas of legislation, economy and socio-cultural aspects along with a robust system of checks and balances for greater efficiency and accountability would work in all parties' interests. The Gorkhas would benefit by gaining more control without losing their majority or stability, West Bengal would be able to keep its state intact and access Teesta Lower Dams III and IV, and the GoI would be able to gain more support in the Darjeeling for the Teesta treaty as well as the Loksabha elections of 2019. With GoWB onboard, the option of declaring Gorkhaland as a Union Territory can also be explored.

Bangladesh's priority number one is getting the Teesta agreement signed, and particularly for Hasina's government, before the upcoming national elections. While the time frame is too short for all of the following actions are likely to be carried out effectively, the GoB needs to think and proceed along their lines.

- i. **Restricting its win set:** By signing various agreements and cooperating in a host of other fields with India, Bangladesh is effectively allowing India to get away without signing the Teesta agreement. The GoB should recognise areas in which it has the upper hand and try to strike a bargain which would entail India prioritising the Teesta river and the release of its waters to Bangladesh. India recognises the importance of the Awami League-led government for the strength of its bilateral ties with Bangladesh; this factor can be leveraged to start discussions on Teesta afresh and get a better, more comprehensive and fairer deal not only for Bangladesh but also for the local riparian communities across the basin. Bangladesh being the downstream riparian has more incentive and need (in the short term) than India to ensure a holistic agreement over the Teesta. It must therefore take a pragmatic look at the consequences of foregoing certain cooperative or friendly moves in exchange for the Teesta agreement and choose the terms of its bargain accordingly.
- ii. **Basin-wide approach:** The Teesta is a tributary of the Brahmaputra and the Teesta basin, strategically located the wider Ganga-Brahmaputra-Meghna (GBM) basin. 83% of Bangladeshi territory lies in the GBM basin whereas about a third of Indian territory lies in the GBM basin - its management therefore is key to Bangladesh's overall growth, development and stability in greater proportion than it is in the case of India. Hence, Bangladesh cannot afford to look at it from a myopic point of view.

Even though the Teesta basin is shared only by India and Bangladesh, other countries in the South Asian neighbourhood such as Nepal and Bhutan are upstream riparians to quite a few rivers of the GBM basin. Nepal lies completely in the Ganga basin of which Bangladesh too is a part, while rivers such as Jaldhaka, Torsa and Raidak flow through Bhutan as well as Bangladesh with India being the middle riparian. Bangladesh should look beyond India and work on developing water resources with these countries at a basin level, as it already is with China. The process has already begun; under Bangladesh JRC, there have been five expert level meetings with Nepal since 2000 while a Bangladesh-India-Bhutan group for sub-regional cooperation has met once in 2013. This initiative needs to be sustained and expanded, with or without India, with a basin-wide outlook and corresponding aims to bring about all-round development in the region. Increasing cooperation

between Bangladesh, Nepal and Bhutan will motivate India to step up and contribute more substantially to joint efforts on water resources management and development in the GBM basin.

- iii. **Preventing possible future domestic conflicts:** Unlike India, the Teesta basin in Bangladesh is not fraught with conflicts between different domestic constituents. However, the potential for conflicts to erupt after a stipulated share of the Teesta waters starts arriving from India very much exists and can materialise into reality very rapidly if adequate measures for equitable and efficient allocation are not taken swiftly. Besides negotiating for the agreement, Bangladesh should focus on investing in appropriate water infrastructure and cheap and effective technologies. It should also devise and diffuse best practices in water management and governance and put in place a comprehensive framework of robust water laws, rules and regulations to efficient utilisation and equitable allocation of the Teesta waters to the last drop. In the long run, these steps can play an important role in mitigating and preventing water conflicts in Bangladesh's Teesta basin.
- iv. **A far-sighted, more comprehensive Teesta agreement:** The Teesta agreement in its current form is but a narrow, reductionist and state-centric approach towards sharing the Teesta's waters. In the long run, both India and Bangladesh are likely to suffer from such half-baked water cooperation, but in the short run, the stakes for Bangladesh are higher. Before renewing its efforts for signing the Teesta agreement, Bangladeshi water experts and policymakers should take a long, hard look at the content of the current draft of the Teesta agreement and invest time and efforts in making it holistic and truly representative of the interests of the river and her stakeholders. It is true that this will push the signing further into the future, but it is better to have a delayed deal which is beneficial than to have a bad deal finalised hastily. Ideally, the geopolitical consequences of the delay should push both riparians to rework the Teesta agreement speedily and strategically and give it more vision and comprehensiveness. However, given that India is less affected in the short term, it is up to Bangladesh to initiate and propel the process.

Together, India and Bangladesh should also revise the Terms of Reference (ToR) of the Indo-Bangladesh Joint Rivers Commission. Apart from meeting regularly over the joint monitoring of the flows of the Ganga at Farakka, the JRC is carrying out other functions in a rather half-hearted and inconsistent manner. Both countries need to revamp the JRC and convert it into a River Basin Organisation (RBO) operating at the transboundary level, with more powers, more autonomy and a wider scope that includes preserving, protecting and enhancing hydrogeological properties the river, agriculture, fisheries, animal husbandry, water supply and sanitation, groundwater aquifer management, pollution control, sand mining, water for industrial use, water for tourism etc. in the basin. A strong dispute resolution mechanism, and allocation of water and financial resources within the area to obtain optimal results are fundamental. However, other functions such as establishing stakeholder fora and partnerships, and enabling regular interactions between them and relevant government departments are important as well, and need to be incorporated in the main functions of the RBO. Initially, the RBO can begin functioning on a single transboundary river basin such as the Teesta and gradually, it can be expanded to include rest of the 54 transboundary rivers shared by India and Bangladesh as well. While each river basin has its unique characteristics, an overarching, cumulative and integrated agreement and an equally holistic and effective RBO can be aimed for transboundary water security and cooperation between the two countries.

The civil society is most and directly affected by the Teesta dispute and the least heard among all parties. Whatever be its ultimate intention, civil society is the one party closest to placing the actual river and her environment high up on its agenda. In order to safeguard the river and ultimately its own survival, civil society needs to regroup and take the following actions.

- i. **Clamour for a better agreement:** Local communities, activists and NGOs across the basin need to prioritise a better Teesta agreement, drawn on the lines of environmental sustainability, resilience to climate change, economic efficiency and equitable allocation of Teesta's waters. Through community outreach programs, NGOs and activists can spread awareness about the contents of the current draft of the agreement and sensitise local communities towards factors such as climate

change, environmental flows, groundwater management, disaster mitigation, heritage preservation, and protection of Teesta's flora and fauna which have been omitted from the draft. This sensitisation has to be accompanied by political awareness drives which relay domestic and international political equations, regional geopolitical realities, various narratives of the issue on both sides of the border, and the economics of the Teesta dispute to the local communities in an easy-to-understand manner. The objective is to develop a well-informed consensus in order to negotiate longer and better, and a combination of environmental and political knowledge would empower the communities with a realistic and greater grasp of the situation and further contribute to their struggle. With this multifaceted understanding, the local communities would be in a better position to understand the motives and agendas of their political representatives and bureaucracy and demand a better agreement followed by accountability from them.

- ii. **A more assertive role of the epistemic community¹⁵:** The epistemic community too has a huge role to play in this regard. While many studies have been conducted on the environmental, economic, social and scientific aspects of the Teesta basin, its geopolitical dimensions and entanglement of bilateral and domestic politics is rarely focused upon. Deeper and more sophisticated analysis of the geopolitics of the Teesta basin is the need of the hour. The epistemic community needs to probe further into these dimensions of the Teesta dispute and work twofold: on one hand, empower the civil society with their findings and analyses and on the other, advise the negotiating parties at both domestic and bilateral level to implement solutions that would make everyone better off.
- iii. **Stronger track II diplomacy:** The nature of Teesta negotiations is state-centric and in dire need of more consistent and robust Track II initiatives to solve the Teesta issue, which can be taken up after sufficient progress is achieved in the two areas as mentioned above. Initiatives such as the India Bangladesh Roundtable on Blue Peace in the Eastern Himalayas – convened in Mumbai by Strategic Foresight Group, a Mumbai-based think tank, and attended by 25 senior diplomats, Members of Parliament, former ministers and experts from India and Bangladesh (Strategic Foresight Group, 2013) – should multiply and be publicised extensively in mainstream media. This will play a crucial role in disseminating vital facts and figures about the issues in the basin across both countries and provide narratives which are relatively less politicised and biased to locals in the Teesta basin and the Indian and Bangladeshi population at large.
- iv. **Push for water conservation measures:** Recognising that decentralised water management and localised solutions are not as lucrative for governments as large-scale irrigation and hydropower projects are, NGOs, activists and the epistemic community should spearhead the spread of water conservation and efficiency practices which can be directly accessible to and implementable by local communities. Rainwater harvesting, farm ponds, rooftop solar PV and water-efficient cropping patterns are some solutions which can be implemented at an individual and community level with NGOs providing technical know-how and access to basic materials. Water security is a crucial aspect of social and economic stability, and access to such easily applicable solutions will go a long way in improving and conserving the river and inculcate both resilience and confidence in the local communities. With their basic risks and vulnerabilities addressed, the communities will then be in a better position to demand overall conservation and development of the Teesta basin.

¹⁵ It is a transnational network of knowledge-based experts who help decision-makers to define the problems they face, identify various policy solutions and assess the policy outcomes. (Wikipedia)

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