



# EMERGING SECURITY CHALLENGES AND WATER POLITICS IN THE HIMALAYAS



*Editors*  
Wini Fred Gurung  
Amit Ranjan

## About the Institute of South Asian Studies

The Institute of South Asian Studies (ISAS) is dedicated to research on contemporary South Asia.

It was established in July 2004 as an autonomous research institute at the National University of Singapore. The establishment of ISAS reflects the increasing economic and political importance of South Asia, and the strong historical links between South Asia and Southeast Asia.

The Institute seeks to promote understanding of this vital region of the world, and to communicate knowledge and insights about it to policymakers, the business community, academia and civil society, in Singapore and beyond.

For more information, visit [www.isas.nus.edu.sg](http://www.isas.nus.edu.sg).

South Asia Discussion Papers

*Emerging Security Challenges and Water Politics in the Himalayas*

March 2023

Edited by Wini Fred Gurung and Amit Ranjan

©2023 Institute of South Asian Studies

All rights reserved.

No part of this publication may be reproduced, stored or transmitted in any form, for any reason or by any means, whether re-drawn, enlarged or otherwise altered, without the prior permission in writing from the copyright owner except in cases of brief quotations embodied in articles and reviews.

*Cover photograph courtesy of Wini Fred Gurung*

*Printed in Singapore by Oxford Graphic Printers Pte Ltd*

### **Institute of South Asian Studies**

National University of Singapore

29 Heng Mui Keng Terrace

#08-06 (Block B)

Singapore 119620

Tel (65) 6516 4239

Fax (65) 6776 7505

URL [www.isas.nus.edu.sg](http://www.isas.nus.edu.sg)



# Emerging Security Challenges and Water Politics in the Himalayas

Institute of South Asian Studies

March 2023 | Singapore

*Editors*

Wini Fred Gurung

Amit Ranjan





# CONTENTS

<b>Introduction</b>	3
Wini Fred Gurung and Amit Ranjan	
 <b>PART 1: EMERGING SECURITY CHALLENGES IN THE HIMALAYAS</b>	
 <b>Thinking Himalaya beyond Geopolitical and Security Concerns</b>	10
Swatahsiddha Sarkar	
 <b>Tibet as a Factor in Himalayan Geopolitics: Emerging Security Challenges</b>	17
Sonika Gupta	
 <b>Geopolitical Trends and Security Contests in the Himalayas</b>	24
Binoj Basnyat	
 <b>Geopolitics and Security Challenges in the Himalayas: Pakistan's Perspective</b>	34
Zafar Nawaz Jaspal	
 <b>Reluctant Rivalry: Border Disputes along the Himalayas from Beijing's Perspective</b>	44
Zheng Haiqi	

**PART 2: WATER POLITICS IN THE HIMALAYAS**

<b>Misunderstood Himalayan Waters:</b>	52
<b>Hegemonic Blue versus Marginalised White, Green and Brown</b>	
Dipak Gyawali	
<b>Water Politics in the Himalayas:</b>	59
<b>The View from Islamabad</b>	
Shafqat Kakakhel	
<b>China's Ambitious Water Diversion Plans:</b>	69
<b>Options and Implications</b>	
Genevieve Donnellon-May and Hongzhou Zhang	
<b>Appendix 1: About the Authors</b>	78

## Introduction

*Wini Fred Gurung and Amit Ranjan*

### Summary

*For a long time, these countries have been involved in border disputes and strategic rivalries.*

*The trans-Himalayan region is one of the most important mountain systems in the world. It is spread across 2,400 kilometres and five Asian countries – Bhutan, China, India, Nepal and Pakistan. For a long time, these countries have been involved in border disputes and strategic rivalries. Issues like the low quality of governance and non-state violent extremism also have had significant implications on the military and security dimensions of the region. Another significant problem the region faces is the growing pressure on water availability. Despite being a source for 10 key Asian rivers, the widening demand-supply gap of water in the region has been a big problem due to factors like increasing industrialisation, accelerating rate of climate change and rising population.*

*This introductory chapter sets the base for a larger discussion on the changing geopolitical security and water challenges in the region. It examines the key challenges the region faces in terms of governance, security and water management.*

### The Concept of Security in the Himalayas

There are three major trends which can help in understanding contemporary Himalayan geopolitics.<sup>1</sup> First, there has been an unprecedented penetration of state sovereignty in the Himalayas which has been largely enabled due to advancements in technology and connectivity. Second, this penetration has led to increased interaction on the borders between the Himalayan states. Third, these interactions have given rise to and escalated territorial confrontations;

---

<sup>1</sup> “ThesethreetrendswereputforwardbyDrYogeshJoshi,ResearchFellowattheInstituteofSouthAsianStudiesintheNational University of Singapore, during the ISAS Roundtable on ‘Himalayan Geopolitics: Emerging Security Challenges’, on 22 July 2021.

these boundary controversies have severely affected the bilateral relations between the Himalayan states.

The Himalayas is home to three nuclear powers – India, China and Pakistan. India is at odds with the two other nuclear powers and has fought wars with them in the past: India-Pakistan in 1947-48, 1965, 1971 and 1999, and the China-India war of 1962. Besides war, there are bilateral tensions between India and Pakistan, and China-Indian relations have experienced a skewed trajectory. The Himalayan region has witnessed several territories and border-related tensions in recent years. The most prominent ones were the India-China Doklam standoff in 2017 and the 2020 Galwan Valley skirmish between Indian and Chinese soldiers. Even India and Nepal, supposedly the two “close” neighbours, have engaged in political rows over territorial claims and counterclaims in the far Himalayas. The Kalapani issue resurfaced when, in November 2019, India released a revised political map showing the region as a part of the Indian state of Uttarakhand, much to Kathmandu’s annoyance. The situation worsened in May 2020 when India’s Defence Minister Rajnath Singh inaugurated a road construction near the Lipulekh pass. Nepal condemned the move and accused India of infringing upon its territory. In June 2020, the Nepal parliament approved a map demarcating the Kalapani, Lipulekh and Limiyadhura as part of its territory. Additionally, China’s claims on territories in Eastern Bhutan and news of its land encroachment in Humla, near its border with Nepal, have made the smaller Himalayan countries party to these territorial disputes with their bigger neighbours.

*Even India and Nepal, supposedly the two “close” neighbours, have engaged in political rows over territorial claims and counterclaims in the far Himalayas.*

These developments in the Himalayan region, coupled with the COVID-19 pandemic outbreak, have raised security concerns in the mountains. The developments outside the Himalayan region, such as the increasing China-India tensions in the Indian Ocean region, India’s closeness towards the United States (US) and the formation of the Quadrilateral Security Dialogue (Quad), have further added to the complications in the Himalayan region. In light of such a scenario, the first section of this South Asia Discussion Papers, titled ‘Emerging Security Challenges in the Himalayas’, looks at how the recent events



in the region have unfolded and the impact they may have on the overall security dynamics of the Himalayas. The chapters in this section were presented in a roundtable hosted by the Institute of South Asian Studies (ISAS) in the National University of Singapore on 22 July 2021.

*He puts forward an interesting viewpoint of how the region is seen predominantly from the coordinates of geopolitics and security while relegating other factors as either irrelevant or incompatible.*

In the first chapter of this section, Swatahsiddha Sarkar presents a sociological concept to understand the Himalayan region. He puts forward an interesting viewpoint of how the region is seen predominantly from the coordinates of geopolitics and security while relegating other factors as either irrelevant or incompatible. Further, Sarkar highlights that the modern understanding of the Himalayan studies is overburdened with an over-emphasis on cartographic fixations in place of people, culture, market or ecology. Against this background, he attempts to draw tentative prepositions to encourage the study and understanding of the Himalayas beyond the “realist” prism of the International Relations theory.

Authored by Sonika Gupta, the second chapter looks at Tibet as a crucial factor in defining Himalayan geopolitics. From a political perspective, Tibet is of utmost importance to understand the ground realities of the region, mainly because of the following factors – India is host to the Dalai Lama and the largest Tibetan population, the border contentions between China, India and Tibet, and the advancing age of Dalai Lama adds urgency to the Tibetan question in India. From an ecological point of view, the chapter examines how the degradation of the Himalayas, and the Tibetan plateau can have a disastrous impact on the South Asian population. It finally enumerates the primary stakeholders and their policy positions and evaluates the prospect of building stable geopolitics in South Asia with a focus on Tibet.

In the third chapter, Binoj Basnyat analyses the changing geopolitics in the region from the prism of defence and military. The region has witnessed intense militarisation with increasing activities in the Himalayas due to the US-China rivalry and China-India rivalry. Amidst all these, the chapter delves into the Nepal army’s involvement and

how Nepal's bilateral relations could unfold with great powers like India, China and the US.

The fourth chapter by Zafar Nawaz Jaspal inspects how the US stands to benefit from the boundary controversies between the Himalayan states. As the US considers China its principal adversary, Washington has strategically realigned its priorities in South Asia by establishing a strategic partnership with India and withdrawing its long-term strategic alliance with Pakistan. The chapter also looks at how domestic establishments in India and China, overpowered with nationalistic ambitions, have led to this strategic shift and rejig in the geopolitics of the region.

The fifth chapter by Zheng Haiqi considers the security dilemma in the region from China's perspective. He highlights the Chinese threat perception of possible Indian incursions at the disputed border between India and China and how India's border policies in the region are a means for the Narendra Modi government to gain a domestic reputation and maintain regional hegemony. Due to the lack of consensus between India and China, the latter does not rule out national defence consolidation, particularly the expansion of infrastructure construction in the border areas.

*As the US considers China its principal adversary, Washington has strategically realigned its priorities in South Asia by establishing a strategic partnership with India and withdrawing its long-term strategic alliance with Pakistan.*

## Water Politics in the Himalayas

Water is another crucial element that defines the geopolitics of the Himalayan region. Despite being home to critical river systems in Asia like the Indus, Ganga and Kali, the region faces a huge problem of a demand-supply gap. There are various reasons for this issue – increasing industrialisation, immense growth in population, higher food production, unsustainable water management practices and the environmental impact of climate change. This has not only given rise to ecological problems but also highly affected bilateral relations between the riparian countries. While these countries are already involved in security issues, water problems have only worsened the situation. Numerous cooperative arrangements exist to facilitate transboundary river water at the bilateral level. However, the water

stress is growing at such a fast rate that it has the potential to escalate disputes between the riparian countries and increase geopolitical competition. The chapters in this second section were presented in a roundtable hosted by ISAS on 26 July 2021.

The first chapter by Dipak Gyawali looks at water from two different perspectives – biophysical and economical. Water is classified into blue (water mostly in rivers and lakes), white (in atmospheric moisture), green (in soil moisture that forests, grasslands and dryland farming are dependent on), grey (used water from domestic and other production processes), brown (groundwater) and black water (industrial wastewater). He states that the Himalayan waters exhibit a complex relationship between availability limited by verticality and socio-economic mores. He also highlights that the international discourse is dominated by blue transboundary river waters and the ignorance of other waters, thus detrimental to the framing of an ecologically more meaningful policy for managing overall water security.

*Due to a lack of unhindered access to transboundary river flow, India and Pakistan negotiated the Indus Water Treaty (IWT) in 1960, which defined the respective rights of the two countries to the waters.*

The second chapter, authored by Shafqat Kakakhel, looks at the transboundary Indus River Basin (IRB) in the subcontinent. The major rivers of the IRB originate in or transit through India and Afghanistan, with whom Pakistan has political conflicts. Due to a lack of unhindered access to transboundary river flow, India and Pakistan negotiated the Indus Water Treaty (IWT) in 1960, which defined the respective rights of the two countries to the waters. Kakakhel points out that even though the IWT is considered one of the most successful examples of hydro-diplomacy with an efficient three-tier dispute settlement mechanism, it has come under growing strains as it does not address contemporary issues. The chapter discusses relevant developments in respect of the water-related issues between India and Pakistan and Afghanistan and Pakistan and makes some suggestions for the consideration of the stakeholders.

The third chapter in the second section is authored by Genevieve Donnellon-May and Zhang Hongzhou. It discusses the Himalayan waters from China's perspective. The chapter talks about China's

massive water diversion project – the South-North Water Diversion project (SNWD). The SNWD has three routes: eastern, middle and western. While the eastern and middle routes have been in use since 2013 and 2014 respectively, the most ambitious and highly controversial western route has yet to be built. Recent developments suggest that the construction of the western route could begin in the coming years after a decade of delay. The chapter examines the various plans for the western route that the Chinese government and scholars have put forth, the national and local interests associated with these plans and the potential impacts of China's western route on transboundary water governance, particularly the Brahmaputra River.

# **PART 1**

## **EMERGING SECURITY CHALLENGES IN THE HIMALAYAS**

# Thinking Himalaya beyond Geopolitical and Security Concerns

Swatahsiddha Sarkar

## Summary

*This chapter presents a conceptual audit of questions pertaining to geopolitics and security concerns while talking and thinking about the Himalaya. Conceptualising the Himalaya as a dynamic cultural space that can go beyond national narratives in order to encompass current processes of regulating identity, history, belonging, trade and politics, this chapter argues that national borders are not something sacrosanct or an end in themselves.*

## Introduction

Within the given history of the Himalaya, place making and cartographic exercises not only appear as processes, which are both ‘intended’ and ‘designed’, but also as phenomena that are malleable and contested. The normative concerns of the border or the very act of bordering need to be examined beyond its manifest scientificity. Hence, borders are increasingly being viewed through their multiple meanings employed both by the people at the helm of power (people at the ‘centre’) and those who live in and around the borders (people at the ‘margins’ of the nation-state). Borderlands exist and evolve as natural phenomena from within the Himalayas. What exists at the edges of a nation-state within the Himalayas does not constitute the edges of the Himalayas per se, rather, it is the beginning of another nation-state that also falls within the area. Unlike a “non-state space”, the region historically stands as a “multi-state” and a misfit to the Westphalian shoe.<sup>2</sup>

*The normative concerns of the border or the very act of bordering need to be examined beyond its manifest scientificity.*

<sup>2</sup> James C Scott, “The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia”, (New Haven: Yale University Press, 2009), <https://yalebooks.yale.edu/book/9780300169171/art-not-being-governed>; and Sara Shneiderman, “Himalayan border citizens: sovereignty and mobility in the Nepal-Tibetan Autonomous Region (TAR) of China border zone”, *Political Geography*, Vol. 35, (July 2013): pp. 25-36, <https://shneiderman-commons.sites.olt.ubc.ca/files/2017/07/Himalayan-border-citizens.pdf>.

## Understanding the Himalaya from a Sociological Perspective

*Although the onset of European colonialism introduced new ways of negotiating sovereignty and territoriality between Himalayan state systems, claims of confluent territories and overlapping sovereignties are key to understanding Himalayan frontiers.*

As a space of cultural-social contact between individuals and groups, human and non-human subjects, the Himalaya can be best represented as a liminal space – one that thrives on constant (re)negotiations, overlaps, ruptures, discursivities and hybrids. This creates the Himalaya as a borderland in itself and necessarily as a “contact zone” where cultures meet, clash and grapple within the spaces of highly asymmetrical power relations illustrated through colonialism, the Cold War, imperialism or even globalisation.<sup>3</sup> Extending these views, some scholars have tried to envision the border regions of Highland Asia, including the Himalaya, as a continuous zone “rather than as disconnected spaces at the peripheries of individual nation-states”.<sup>4</sup> Although the onset of European colonialism introduced new ways of negotiating sovereignty and territoriality between Himalayan state systems, claims of confluent territories and overlapping sovereignties are key to understanding Himalayan frontiers.<sup>5</sup> Based on the assumption that there is no single route that could maintain the layered identity of Himalayan cultural constellations into tight-knit national ‘boxes’, an attempt is made in the following to revisit the concerns of geopolitics and security issues in the Himalayan context.

We have been examining the Himalaya mainly through the coordinates of geopolitics and security while relegating other elements as either irrelevant or incompatible. In a certain sense, intellectual concerns of Himalayan studies were shaped by the assumptions of fear, suspicion, rivalry, invasion, encroachment and pugnacity. If during the colonial times, it was Russophobia, then it is Sinophobia or Pakistan phobia that largely determines our concerns in the Himalaya today. Within the domain of geopolitics and security, the region is conceived through

<sup>3</sup> Mary Louise Pratt, “Arts of the Contact Zone”, *Profession* (1991): pp. 33-40, <https://www.jstor.org/stable/25595469>.

<sup>4</sup> David N Gellner, “Northern South Asia’s diverse borders, from Kachchh to Mizoram”, in David N Gellner (ed), *Borderland Lives in Northern South Asia* (Hyderabad: Orient Blackswan, first Indian imprint, 2014), pp. 1-23, <https://www.dukeupress.edu/Borderland-Lives-in-Northern-South-Asia/>.

<sup>5</sup> Christoph Bergmann, “Confluent territories and overlapping sovereignties: Britain’s nineteenth-century Indian empire in the Kumaon Himalaya”, *Journal of Historical Geography*, Vol. 51 (2016): pp. 88-98, <https://www.sciencedirect.com/science/article/pii/S0305748815001000>.

its 'outside', a process that decolonial scholars like Paulin J Hountondji refers to as 'extroversion', denoting the state of or tendency towards being predominantly concerned with and obtaining gratification from what is outside the self.<sup>6</sup> Ironically, it is the Delhi-Beijing-Islamabad triad, and not the mountain per se, that defines our concerns about Himalaya.<sup>7</sup> This leads us to become self-reflexive and ask: as social scientists, are we not leading Himalayan studies towards the dead-end of violent social science practices?

*Ironically, it is the Delhi-Beijing-Islamabad triad, and not the mountain per se, that defines our concerns about Himalaya.*

If extroversion in knowledge production has resulted in academic dependency, in the case of Himalayan studies, it has given birth to the political compulsion of territorialising the Himalaya at par with the imperatives of nationalism. Hence, one can explain the attempt to create a national Himalaya by each of the five nations (Nepal, Bhutan, India, Pakistan and Tibet/China) that fall within this transnational landmass called the Himalaya. The National Mission of Himalayan Studies (NMHS), set out by the Indian Ministry of Environment, Forest and Climate Change, is a classic case that provides funds for research and technological innovations, and creates policies but only for the Indian Himalayan region. The mission document avowedly claims, "The Government of India has come up with this Mission in recognition of the fact that the Himalayan Ecosystem is important for ecological security of India."<sup>8</sup> There emerges the idea of the Indian Himalaya. It reminds us of that ancient parable where a few blind men were trying to fathom the enormity of an elephant by touching only the different parts of its body.

By considering cartographic fixations as the natural limit of scholarship, we have overburdened Himalayan studies with the states' concerns in place of people, culture, market or ecology. It is, in this context, argued that India's understanding of the Himalaya is informed by

<sup>6</sup> Paulin J. Hountondji, "Producing Knowledge in Africa Today", *African Studies Review*, Vol. 38, no. 3 (December 1995): pp. 1-10, <https://www.jstor.org/stable/10.5325/philafri.15.1.0001>.

<sup>7</sup> Alexander E Davis, Ruth Gamble, Gerald Roche and Lauren Gawne, "International relations and the Himalaya: connecting ecologies, cultures and geopolitics", *Australian Journal of International Affairs*, Vol. 75, no. 1 (2021): pp. 15-35, <https://www.tandfonline.com/doi/full/10.1080/10357718.2020.1787333>.

<sup>8</sup> Mission Document, National Mission on Himalayan Studies, [http://nmhs.org.in/pdf/publication/Mission\\_Documents/Mission\\_Document.pdf](http://nmhs.org.in/pdf/publication/Mission_Documents/Mission_Document.pdf).



a certain kind of realism, as the Himalaya continues to remain as a space defined mainly in terms of sovereign territoriality, in contrast to alternative imaginations like community, ecology or market. Such an alternative conceptualisation of the Himalaya is not only possible but also necessary. However, one sees little hope in the way our social science imagination and practices have shrouded our doing of Himalayan studies from within.

The Himalaya's territorialisation bears a colonial legacy, which also sets up its post-colonial destiny as played out by the nation-states. The arbitration of relationships among the five nation-states falling within the Himalayan landmass has failed to transcend the approach derived from the given categories of territoriality, sovereignty and difference. Hence, the fact that lines of peoplehood and national border within the Himalayan context have never coincided is bound to give birth to tensions while working out projects predicated upon national sovereignty. Given this historical logjam, we can only expect an escalation of territorial disputes as the immediate fallout when 'distance demolishing technologies' are adopted by constituting nation-states to secure their respective territories in the Himalayan landmass.<sup>9</sup>

*Political borders are to be considered as space-making strategies of modern nation-states that do not coincide with cultural borders.*

It needs to be recognised that political and cultural borders do not concur. Political borders are to be considered as space-making strategies of modern nation-states that do not coincide with cultural borders.<sup>10</sup> While statist imagination has a telling effect on the way the border is understood in political terms, culture defies the (political) idea of the border. At best, culture considers it permeable, penetrable, connective and heterogeneous – something that could be accounted for mainly through dreams, passions, flows and livelihoods. The singular statist conception of the political border would then appear to become 'polysemic' or even 'rhizomatic' when viewed in cultural terms and by extension, in terms of trade

<sup>9</sup> James C Scott, *The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia*, op. cit.

<sup>10</sup> Shibashis Chatterjee, *India's Spatial Imaginations of South Asia: Power, Commerce, and Community* (Oxford University Press, 2019), p. 4, <https://oxford.universitypressscholarship.com/view/10.1093/oso/9780199489886.001.0001/oso-9780199489886>.

and ecology or environment.<sup>11</sup> It needs to be realised that human security cannot be effectively appreciated through the paradigm of sovereign territoriality, even though state systems operating within the Himalayas have failed to devise any other framework to grapple with the issue.

More often than not, states dominate the agenda of defining the domain of non-traditional security (issues like human rights, ecological devastations, climate change, human trafficking, migration, forced exodus of people, transnational crime, resource scarcity and even pandemics) besides setting the tone of approach to handling traditional security threats (military, political and diplomatic conflicts that were considered as threats against the essential values of the state, territorial integrity, and political sovereignty). Interestingly, it has been found that measures taken to deal with traditional security threats from outside often trigger non-traditional security threats on several internal fronts.

*Interestingly, it has been found that measures taken to deal with traditional security threats from outside often trigger non-traditional security threats on several internal fronts.*

Keeping these realities and contexts in mind, it is argued that there could be several alternate ways of understanding geopolitical and security concerns regarding the Himalaya. Thus, if the statist meaning (territoriality, sovereignty and difference) is privileged over those of the anthropological, historical, cultural and ecological ones, it would continue to reflect a set of mental processes predicated on a certain conception of spatial imagination that could be anything but unHimalayan or, for that matter, antithetical to the very idea of the Himalaya itself. How long should one go on referring to the Himalaya as the largest biodiversity hotspot, Asia's largest water tower, susceptible to climate change and ecological vulnerabilities – culturally and linguistically diverse – sharing a common historical pool of resources, communities, cultures, civilisations and memories? When would these terms of reference be predicated in our social scientific attempts to understand the Himalaya, which could later

<sup>11</sup> Étienne Balibar, "The Borders of Europe", in *Cosmopolitics: Thinking and Feeling Beyond the Nation*, edited by Pheng Cheah and Bruce Robbins (University of Minnesota Press, 1998), pp. 216-233, <https://www.upress.umn.edu/book-division/books/cosmopolitics>; and Gilles Deleuze and Félix Guattari, *A Thousand Plateaus*, trans. Brian Massumi (London: Continuum, 1980), <https://www.upress.umn.edu/book-division/books/a-thousand-plateaus>.

contribute to, what is fashionably referred to nowadays as, impactful policy research in social sciences?

To think like the Himalaya is, therefore, to think through the images that are central to our conception of space. There are at least four such images that one could reflect on: i) The Himalaya as a space of power; ii) The Himalaya as a space of commerce; iii) The Himalaya as a space of meta-community; and iv) The Himalaya as a space of social metabolism.<sup>12</sup>

*What may seem notable is that these images do not converse with each other. In the absence of any such conversation, critical engagement between images has not taken place.*

The very attempt at capturing the spatial imagining of the Himalaya through these images can help grasp and categorise the wide range of scholarly contributions published in different parts of the globe. What may seem notable is that these images do not converse with each other. In the absence of any such conversation, critical engagement between images has not taken place. In this process, the first image of the Himalaya (for example, as a space of political power), which grasps the area in terms of territoriality, sovereignty and difference, emerges as an apotheosis. Thereby, relegating other images and their constructs as unhelpful, if not meaningless. Arguably, if someone locates a kind of epistemic violence that is perhaps continuously being encouraged in Himalayan studies, it would not be far from the truth.

## Conclusion

The argument is simple. Being a naturally evolved phenomenon, the Himalayas should be understood through frameworks that have grown from within itself. The Himalaya needs to be visualised with an open eye and taken in as a whole instead of in parts, unlike the ancient parable of the efforts of the blind men trying to understand the elephant in parts. The Himalaya is a space whose history defines its geography rather than the other way around. Since histories are constructed rather than delivered, we need to be careful about what kind of Himalayan history we are trying to inject or project into

<sup>12</sup> Metabolism denotes a particular form in which societies establish and maintain a flow of materials and energy that occur between nature and society; the mode in which societies organize the exchange of matter and energy within their natural environment.

how we imagine the Himalaya. Viewing the Himalaya as a space of political power and, by extension, through the coordinates of nation-states epitomising differential national histories is a violent choice. It encourages ultra-sensitivity towards territorial claims and border management.

In contrast, if we are willing to consider the Himalayas as a space deeply embedded in human subjectivities, we can overcome the grip of an absolute bounded national space. This is necessary to address the concerns of trade, commerce, community, ecology and environment – issues that are no less important when we think of securing livelihoods, cultures, and the Himalayas' environment. In fact, the roadmap of all these alternative routes – trade, community, environment — are located beyond the absolutist statist position. The imperative is to give these alternative imaginations of security, the required space in policymaking, state-building strategies and diplomatic relations. The time has come when we need to take a position between the Himalaya as a national space and as a space of dwelling instead of avoiding our encounter with this ambivalence.

*The imperative is to give these alternative imaginations of security, the required space in policymaking, state-building strategies and diplomatic relations.*

# Tibet as a Factor in Himalayan Geopolitics: Emerging Security Challenges

*Sonika Gupta*

## Summary

*In South Asia, the beginning of 2020 brought a break from the continuities of the past decade. The most prominent of these was the changing ground situation in Ladakh on the India-Tibet border. This is part of a geopolitical shift that has given rise to new security challenges in the region. The ongoing crisis in Ladakh has urgent implications for Tibet, India and China.*

## Introduction

*As the region contains the longest disputed border in the world, it is a territorial issue between India and China.*

There are two ways one may understand the issue of Tibet in the Himalayan region. As the region contains the longest disputed border in the world, it is a territorial issue between India and China. Or it may be understood as an outstanding issue of Tibetan self-determination. Historically, while the Tibetan issue has been at the forefront of India's security and political calculations vis-à-vis China, Tibetan self-determination has usually been a secondary political concern. India has adopted a set of policies to balance China's presence as a powerful neighbour with core Indian security concerns regarding territory and boundary management. However, this policy seems to have produced limited success in resolving India's primary concern: a settled border with China. This is because it is impossible to address the issue of the border between India and China without addressing the issue of Tibetan self-determination. The issue of Tibetan self-determination stems from colonial history and continues to frame Tibet as a factor in India-China relations, usually to the disadvantage of the Tibetan people.

## An Overview

The Tibet issue is intrinsically linked to any negotiations for a boundary resolution between India and China, as the disputed boundary that

runs from Ladakh to Arunachal Pradesh is essentially the border between India and Tibet. This border is now heavily militarised in Ladakh and Arunachal Pradesh. This increasing tension on the border has destabilised decades of carefully constructed bilateral border management between India and China. It has naturally had a spill-over effect on the bilateral relationship, in which we are now beginning to see a renewed trend of mutual hostility. Within this troubled relationship, the Tibetan exile community and the Dalai Lama's presence in India have become resurgent factors.

*This increasing tension on the border has destabilised decades of carefully constructed bilateral border management between India and China.*

Since 1959, when the Dalai Lama fled to India and established his government in exile there, India has been home to thousands of Tibetans who continue to follow His Holiness into exile. India helped the Tibetan community sustain its culture, preserve religious education and traditions along with providing welfare to the refugees through the establishment of Tibetan settlements in many parts of India. At the same time, India has not challenged China's claim on Tibet. While India and no other country in the world has recognised the Tibetan exile government or the Central Tibetan Administration (CTA) as it is now known, its presence in India along with the Tibetan Parliament in Exile (TPIE), has always been a contentious issue with Beijing. The CTA and the TPIE are the organised expressions of the continued Tibetan rejection of China's claim over Tibet. Moreover, the exile community is a crucial repository of the Tibetan struggle for self-determination, and they amplify the voice and protest of the Tibetan people against Chinese oppression. The Dalai Lama himself continues to command global attention and respect as the leader of the Tibetan people and a towering spiritual figure.

However, despite their longstanding struggle, the Tibetan cause has suffered from international political apathy since the Chinese economic reforms. Since the 1980s, as countries around the world, including the United States (US), the European Union (EU) and India chose to accommodate and align their economic interests with the booming Chinese economy, the issue of Tibetan self-determination took a backseat. The Tibetan issue began to be presented primarily as one of human rights abuse and found episodic support from the

international community. While the CTA, led by the Dalai Lama, continued to canvass for international support, it also recalibrated its position on the Middle Way to negotiate a political solution with the Chinese government. In 1988, the Dalai Lama formally announced that he was seeking a resolution of the Tibetan issue under conditions of 'genuine autonomy' rather than independence. Between 1988 and 2010, there were multiple rounds of contact between the Dalai Lama's envoys and the Chinese government. While these contacts were valuable in keeping the formal communication open between the Tibetan leadership and Beijing, there was no headway in resolving the Tibetan issue. These negotiations turned out to be a window dressing for China, which has remained uncompromising in its political stance on Tibet. Since 2010, there has been no formal contact between the two sides, and the Chinese position on Tibet has hardened further.

### Understanding the Current Situation

*To effect control over the monastic clergy, China has insisted that the practice of reincarnations in Tibetan Buddhism must comply and align with the Chinese Communist Party's diktats on the matter.*

As of the present, the Dalai Lama's advancing age has imparted an urgency to the Tibetan issue, with China already making moves to declare its own candidate as the reincarnation of the Dalai Lama. In 2011, the Dalai Lama had devolved his political role and power to a democratically elected 'President' of the CTA, and he has since continued to function only as the religious and spiritual leader of the Tibetans. Therefore, the issue of reincarnation is a purely religious matter in Tibetan Buddhism. However, the issue has far-reaching political implications. It must be noted that since the 1950s, Tibetan monks and nuns have been at the forefront of protests against the Chinese government. Therefore, China primarily views monasteries as potential threats and has tried for years now to sinicise the practice of Tibetan Buddhism. Over the years, this has taken the form of extreme religious repression, with Tibetans denied the right to learn their own language or practise their faith. To effect control over the monastic clergy, China has insisted that the practice of reincarnations in Tibetan Buddhism must comply and align with the Chinese Communist Party's diktats on the matter.

In 1995, China refused to acknowledge Gedhun Choekyi Nyima as the duly recognised 11<sup>th</sup> Panchen Lama and installed its candidate as the Panchen Lama. Gedhun Choekyi Nyima disappeared at the age of six and has not been heard of since. Gyaltsen Norbu was instead installed as the 11<sup>th</sup> Panchen Lama though widely rejected by the Tibetans. Norbu is often seen in public condoning the Chinese practices of ‘reforming’ Tibetan Buddhism. In a rare interview in March 2021, he stated that “Tibetan Buddhism should adapt to the conditions of a socialist society with Chinese characteristics and move towards sinicisation.”<sup>1</sup> Given this history, it is expected that the Chinese will definitely choose their own candidate for the next Dalai Lama as well.

*Given this history, it is expected that the Chinese will definitely choose their own candidate for the next Dalai Lama as well.*

China has begun to lay the groundwork for this by introducing a new set of updated rules for Tibet and Tibetan Buddhism. In 2018, China introduced the ‘Four Standards’ policy in the Tibet Autonomous Region (TAR) that requires monks and nuns to be “politically reliable” and demonstrate “moral integrity and willingness to play an active role at critical moments” ostensibly to stop any opposition to state policy in monasteries. In the same year, China also banned monks trained in Tibetan monasteries in India from teaching in monasteries in Tibet. This is primarily to stop monks loyal to the Dalai Lama from returning to monasteries in Tibet and destabilising the ongoing sinicisation of Tibetan Buddhism or from inciting any protests.

On the other hand, the Dalai Lama has declared that he will not reincarnate in occupied Tibet. Therefore, there is a high possibility of his reincarnation being located in the Indian Himalayas or its neighbourhood. Given this, the Indian government will have a difficult choice to make in whether it allows the exiled Buddhist clergy and the CTA to recognise and celebrate a reincarnation in Indian territory. If India does allow for Dalai Lama’s reincarnation in its territory, that is likely to cause a severe downturn in India-China relations with possible implications along the border. In addition, with the 2020 Tibetan Policy and Support Act (TPSA) passed in the US Congress, the US has

---

<sup>1</sup> “China’s Panchen says Sinicization of Tibetan Buddhism fully underway”, *Tibetan Review*, 12 March 2021, <https://www.tibetanreview.net/chinas-panchen-says-sinicization-of-tibetan-buddhism-fully-underway/>.



*This is likely to spill over into the India-China border dispute and complicate the conflict management for both New Delhi and Beijing.*

thrown its weight behind the Dalai Lama on the reincarnation issue, declaring that only the Dalai Lama and his close disciples are entitled to choose the reincarnation to His Holiness. Therefore, China's threat perception in this issue has escalated. In response, while internally, China will undoubtedly build support for its own candidate among the Tibetan monasteries, China will also expand that effort to key religious locations in Bhutan, Nepal, Ladakh, Sikkim and Arunachal Pradesh in India. This is likely to spill over into the India-China border dispute and complicate the conflict management for both New Delhi and Beijing.

In addition, escalations along the Tibetan border in Ladakh have already set the stage for difficult India-China negotiations on any issue in the bilateral relationship. While the India-China relationship has always been fraught with mutual suspicion, current mutual hostility over the border and the Tibetan issue have the potential to destabilise peace between the nations. Taking note of this changing situation, former Indian National Security Advisor Shivshankar Menon asserted that "while peace does prevail, the old modus vivendi with China is under stress".<sup>2</sup>

It must also be recognised that the Chinese use of force in the Galwan Valley is part of a larger pattern that can be traced to shifts in policies towards territorial disputes under Chinese President Xi Jinping. Under Xi's leadership, China is aggressively pursuing its programme for national rejuvenation, in which using force to recover China's 'lost territories' has a central role. Significantly, this is not a particular approach towards the India-China boundary but is rather part of a more aggressive Chinese approach towards all of its territorial claims, including the South China Sea (SCS) and Hong Kong.

In fact, since 2004, when Chinese President Hu Jintao announced the New Historic Missions of the People's Liberation Army (PLA), there has been a significant increment in the use of force in China's approach

---

<sup>2</sup> Siddharth Varadarajan, "Menon: Peace Prevails but the Old Modus Vivendi With China is Under Stress", *The Wire*, 20 December 2016, <https://thewire.in/diplomacy/88189>.

towards territorial disputes. This was first visible in Beijing's approach to the SCS, where China has followed a policy of creeping occupation of marine features for over three decades to now claiming the entire SCS as its sovereign territory. In 2012, China developed an entirely new city on the disputed Woody Island in the Paracel archipelago, claiming nearly two million square kilometres (km) of the SCS. Sansha, a brand-new city of fewer than 2,000 people, is nearly 400 km away from Hainan, China's southernmost province. China now patrols the maritime area between Hainan and Sansha as its customs territory. Sansha city also hosts the Chinese Maritime Militia, which is responsible for enforcing its territorial claims in the SCS.

One is beginning to see a similar pattern in the Himalayan region. The annual US Department of Defence report claims that China is now constructing new villages in the disputed territory in Arunachal Pradesh.<sup>3</sup> This indicates a change in the Chinese approach toward the disputed boundary, which until recently had been governed by the mutual border agreements. Since the 2020 Galwan Valley clash, the status quo has changed and endangered the existing mechanisms for ensuring peace and tranquility on the disputed border. This is indeed a significant shift that signals that the bilateral relationship must now work out newer modalities to negotiate a more fractious relationship.

*Since the 2020 Galwan Valley clash, the status quo has changed and endangered the existing mechanisms for ensuring peace and tranquility on the disputed border.*

Finally, even though the Tibet issue has lost international support in the last two decades, the troubled US-China equation has resulted in the issue resurfacing to prominence as a part of the larger concern about China's treatment of its border populations, including Xinjiang, Inner Mongolia and Hong Kong. In 2019, the US passed the Hong Kong Human Rights and Democracy Act that imposed sanctions against China for democratic rights violations in Hong Kong.<sup>4</sup> Similarly, the passing of the TPSA allowed the CTA to bring renewed attention to continued religious and cultural repression in Tibet. This issue will

<sup>3</sup> "US report claims China has built a village in disputed Arunachal territory", *Deccan Herald*, 5 November 2021, <https://www.deccanherald.com/national/us-report-claims-china-has-built-a-village-in-disputed-arunachal-territory-1047649.html>.

<sup>4</sup> Emily Cochrane, Edward Wong and Keith Bradsher, "Trump Signs Hong Kong Democracy Legislation, Angering China", *The New York Times*, 27 November 2019, <https://www.nytimes.com/2019/11/27/us/politics/trump-hong-kong.html>.

*This is likely to exacerbate the Chinese threat perception of Tibet as an internal and external issue.*

impinge upon rebuilding the US-China equation after the turbulent years of the Donald Trump administration. This is likely to exacerbate the Chinese threat perception of Tibet as an internal and external issue. Given the current policy environment in Beijing, this is likely to produce more hardline policies of repression inside Tibet as well as more assertive territorial claims on the ground on the border. This is likely to result in the further militarisation of the TAR and the boundary. Under these conditions, we can expect India and China to be under pressure to maintain the longstanding border management protocols until a mutually agreed political response to the changing ground situation is forthcoming.

## **Conclusion**

Given that the situation on the border in Ladakh is already tense, any political downturn in bilateral relations over the reincarnation issue is likely to escalate the existent aggression. Increased deployments in Ladakh are now a permanent feature for the foreseeable future until an effective political agreement can be worked out between India and China. However, the issue of reincarnation will complicate the building of this political agreement. This creates an uncertain situation on the Indo-Tibetan border, running along Ladakh, Sikkim and Arunachal Pradesh, that is prone to escalation from both sides.

# Geopolitical Trends and Security Contests in the Himalayas

Binoj Basnyat

## Summary

*The Himalayan region has endured fundamental changes for centuries. The 1950 occupation of Tibet by the People's Republic of China has been a strategic turning point. Afghanistan was liberated on 19 August 1919, while Bhutan, India, Pakistan, Myanmar and Sri Lanka – all nations south of the Himalayas – acquired independence in the late 1940s. The Indian Himalayan region, spanning 11 Indian states, has been the basis of contention with China over border disagreements. The independence of the South Asian nations from the British transformed South Asia, but the colonial legacy endured until the 1990s with India's influenced supremacy and thought-out security architecture reigning in the region. At this point, the geopolitical trends, economic expansion, and political influence through the Belt and Road Initiative (BRI) are also expanding in South Asia, which traditionally used to be India's area of interest and influence.*

*The Indian Himalayan region, spanning 11 Indian states, has been the basis of contention with China over border disagreements.*

## Introduction

India has advanced over years as well as desires to stay put as superlative in South Asia while, at the same time, China intends to safeguard its alternative route for resources and political unity. China's repositioned stature to become a global player and the United States' (US) perseverance as a global power have again emphasised the importance of the Himalayan region and South Asia more than ever. The political will of the great powers has led to the finding out of the narratives and that countries will have to look at the doctrinal imperatives, occurrences in the Himalayas with possibilities of long-term strategic impacts with the question – what is the 'new great game'?

## Background

There is no denial that the global switch from Europe to the Indo-Pacific region is one of the main factors for the Himalayas to be more vibrant for many decades to come. The six nations (Afghanistan, Bhutan, India, Myanmar, Nepal and Pakistan) along the Himalayas, the strategic routes through the Himalayas, and the large population in the sub-continent are viabilities. The growing militarisation by both China and India, and China's political and military engagements with the nation states in South Asia are on the rise. The South Asian security situation is deteriorating with the great powers' resolute political and diplomatic support to the nation states along the Himalayas. The military coup in Myanmar and the Taliban takeover of Afghanistan in 2021 are prominent instances. All competence is either being centred in the Indian Ocean or the Pacific Ocean and in the continental. However, a key region is also the Himalayas. The Himalayas makes India a significant player among the security concerns surrounding the Indo-Pacific region.

*All parties are perplexed about the upcoming regional order.*

The Himalayas is the gateway to the Indian Ocean, where Chinese and Indian interests intersect, where the resources are and where democratic values contradict along with increasing militarisation. Nations along the Himalayan borders, China and India as well as the three nations meeting the Indian Ocean – Bangladesh, Maldives and Sri Lanka – are now searching for space in the traditional security architecture. All parties are perplexed about the upcoming regional order.

For better understanding, the Himalayas can be divided broadly into three regions – the eastern, central and western and seven sub-regions: the Far-Eastern (Myanmar), Eastern (Arunachal Pradesh, India), Centre (Bhutan; Sikkim, India; and Nepal), Middle (Uttarakhand and Himachal Pradesh), Western (Ladakh, India; Gilgit-Baltistan and Pakistan) and Far-western (Afghanistan).

## Doctrinal Imperatives

The transpiring events in the Himalayan range from border disputes between China and India, Nepal and India, Bhutan and China; modernisation of infrastructure by China and India; political constitutional amendments with the overthrow of the elected government in Myanmar; and the Taliban's reign in Afghanistan. All such developments may lead to changes in political security, politico-economy, political-social dynamics, and regional and global implications.

## Modified Geography

The Himalayas and south of the Himalayas have changed and have become more accessible due to the variation in the environment, infrastructure development, political interest and political will. The mountains that used to be barriers are now accessible. Strategic communication networks have been constructed and connectivity among the bordering states has increased not only geographically but also through ideas, values and cultures.

China's economic assistance and military engagement have enabled its political influence and strategic interests to expand in South Asia. Through the BRI, Beijing has expanded its political and economic influence in many parts of South and Central Asia, and in the Indo-Pacific region.

All these countries lie on the Himalayas or along the Indian Ocean. Though China is promoting President Xi Jinping's thoughts like the BRI and the Chinese Communist Party's relationships with the communist parties of the region, an inclination to communist ideology is not of concern to China. The viewpoint of working with the government of the day is to achieve one thing at a time is Beijing's philosophy.

*The viewpoint of working with the government of the day is to achieve one thing at a time is Beijing's philosophy.*

An indication of the Chinese gaining foothold in the south of the Himalayas was the skirmishes that occurred in the Doklam plateau in 2017. Sikkim and Nepal's stretch of 1,414 kilometres (km) is the most

subtle and apparent probability of threat to China and India. Nepal stood as a buffer between the two states. However, the opening and the likelihood of the strategic connectivity with air, land and train through the Himalayas to the borders of India and the trends of geopolitical linkages will uphold security, diplomatic, economic and political corollaries. The central sub-region is now a buffer to China when Tibet is inevitably part of China and the 'One China' policy.

There are six mountain passes from China to Nepal, which are vibrant and strategically promising. The Kalapani area is 416 km to New Delhi, located at the northwestern end; and the easternmost Olanchunggola is 41 km to the Siliguri Corridor, known as the 'Chicken's Neck' of India. These are the only two districts that border both China and India.

Siliguri, in the state of West Bengal, is a vital intersection that connects Bhutan, Nepal and Bangladesh. Darjeeling hills, the North-eastern part of India and Sikkim are equally significant. The two landlocked tiny Himalayan South Asian nations, Bhutan and Nepal, along the Himalayas and the northeastern parts of India, also known as the 'Seven Sisters', are the most vital strategic constituents in South Asia, all of which lie in the central part of the Himalayan arc.

Kathmandu is 70 km from Rasuwagadi and 71.4 km from Khasa. Both are located at the centre of Nepal from the Chinese border. Of the strategic networks, the Koshi corridor, Kimathanka-Jogmani in Bihar, is 367 km. The Kali-Gandaki corridor is 435 km from Korola to Uttar Pradesh, and the Karnali corridor from Jamuna Hilsa to Dhuliyabit, Uttar Pradesh, is 403.52 km.

*The transport and transit agreement protocol allows Nepal to use four seaports and three dry ports in China.*

The transport and transit agreement protocol allows Nepal to use four seaports and three dry ports in China. These corridors were built to boost economic activities. However, as confrontation evolves between China and India, they are likely to bear the same ramifications. The border in the central sub-region of the Himalayas, where Nepal, Bhutan and Sikkim hold tactically advantageous grounds for both China and India to make offensive responses to incursions. At the same interval, China has stretched out bilateral and multilateral

associations with Asian states, particularly Bangladesh, Myanmar, Nepal, Pakistan, Singapore and Sri Lanka with respect to economy, political and military cooperation, thereby implying the strategic shifts in China's policy towards the Himalayas and South Asia.

### Diverse Geopolitical State of Affairs

A geopolitical narrative with China's rise and political influence across the Himalayas can be assumed in the power competition, cooperation and recent confrontation between China and India. The militarisation along the borders of the Himalayas can be an example of the two powers' interests being more political, with risks of threats for the small nations in defending the Himalayan region. For Beijing, the province of Xinjiang, Tibet and Yunnan, alongside the Himalayas, are, in the same way, imperative for Chinese stability.

The South Asia policy of the US calls on India to increase its investments in Afghanistan and take a more active role as a partner in the region. The US positions "competitive diplomacy" with extensive economic tools like "fair and reciprocal" trade agreements and sanctions. The economy is composed of the US national power, with China and Russia as competitors that have emerged to "challenge American power, influence, and interests".<sup>1</sup>

The boundaries adjoining China along the Himalayas will, therefore, continue to be a matter of concern to both China and India and the five states that border both powers. These concerns are also likely to escalate because of what is happening at the macro-level in the region. For example, the surfacing of the border dispute between Nepal and India in the Kalapani area in the far Himalayas is a matter of concern. Then, there is a growing competition between China and the US in Nepal. The Chinese-led BRI and the US-sponsored Millennium Challenge Corporation (MCC) Nepal Compact are seen by many

*These concerns are also likely to escalate because of what is happening at the macro-level in the region.*

<sup>1</sup> "United States Foreign Policy in South Asia", US Department of State, 18 May 2004, <https://2001-2009.state.gov/p/sca/rls/rm/32599.htm#:~:text=U.S.%20foreign%20policy%20in%20South,taken%20root%20and%20proven%20elusive>.



commentators as countervailing to each other. Individual political leaders, experts and political forces have been in the public domain to counter misinformation and disinformation about the MCC, arguing that it is a grant based on Nepal's request for economic gains while others argue that it is a crucial part of the Indo-Pacific strategy.

### Great Power Rivalry is Shifting in the Indo-Pacific

*Though effective diplomatic management does gather momentum, China and India's confrontation is evidently detectable, considering that India-China and India-US relations are constantly changing.*

The China-US rivalry is evolving in the Indo-Pacific region, and the Himalayas remains imperative to the issue. The US National Security Strategy has identified China and Russia as competitors, and Washington uses economic tools, allies and partnerships to counter their influence. The five policy documents of the US – the 2017 National Security policy, 2019 Indo-Pacific Report, National Defence Strategy, Policy of South Asia and Nuclear Posture Review – coupled with the withdrawal from Afghanistan revealed and delineated the American responsibility in the Indo-Pacific region. The military coup in Myanmar and the Taliban's return to power are two significant setbacks to the recently earned democracies. Both may be linked to US-China power competition. Though effective diplomatic management does gather momentum, China and India's confrontation is evidently detectable, considering that India-China and India-US relations are constantly changing.

American President Joe Biden has declared that the US is prepared for "extreme competition" with China and that he stated that his approach would be different from his predecessor, "I'm not going to do it the way [Donald] Trump did. We are going to focus on the international rules of the road".<sup>2</sup>

The grand strategic goals, geo-strategic plans and diplomacy campaigns being executed by great power rivalry during the COVID-19 pandemic will lay the course for conceivable disorder or a new order in the forthcoming global landscape. Together with

<sup>2</sup> Amanda Macias, "Biden says there will be 'extreme competition' with China, but won't take Trump approach", CNBC, 7 February 2021, <https://www.cnbc.com/amp/2021/02/07/biden-will-compete-with-china-but-wont-take-trump-approach.html>.

the 76<sup>th</sup> United Nations General Assembly (UNGA) meeting, the first in-person summit of the Quadrilateral Security Dialogue (Quad), consisting of four major democracies – Australia, India, Japan and the US – have presented a united front to pursue a free and open Indo-Pacific region “undaunted by coercion” amid shared concerns about China in Washington on 24 September 2021. The joint statement posited that “We stand for the rule of law, freedom, of navigation and overflight, peaceful resolution of disputes, democratic values, and territorial integrity of states”. The border clashes between China and India are of concern and fall on the statement. Beijing criticised the Quad grouping as one that is “doomed to fail”.<sup>3</sup>

The US and the European Union (EU) nations are advancing to the Indo-Pacific region, justified by the conclusion of the 46<sup>th</sup> G7 summit in June 2021. The summit, conducted amid the COVID-19 pandemic with the goal to “Bring Back Better World”, discussed the issues of ecology, economy and infrastructure connectivity with the wealthiest nations and 10 democracies – one of them being India. The meeting of the North Atlantic Treaty Organization (NATO) with 29 allies deepened the alliance’s strength as parties and ascertained common defence goals, including dealing with Russian aggression, the strategic challenge from China, malicious cyber activity, terrorism and climate change. Chinese Foreign Minister Wang Yi has observed that the China-US relations face their most serious challenge since they established diplomatic ties. The diplomatic approach of Indian Prime Minister Narendra Modi with his ‘Neighbourhood First’ policy and his efforts to bring together the multilateral organisation, the South Asian Association for Regional Cooperation or the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation, are also being questioned. Further, the traditional security architecture is being contested with better openings from China.

*Chinese Foreign Minister Wang Yi has observed that the China-US relations face their most serious challenge since they established diplomatic ties.*

The focus and priority of the US defence forces and NATO defence assets in the region, the building up of the Chinese defence assets

<sup>3</sup> Ananth Krishnan, “Quad “doomed to fail”, says China ahead of summit”, *The Hindu*, 14 September 2021, <https://www.thehindu.com/news/international/quad-doomed-to-fail-says-china-ahead-of-summit/article36459377.ece>.

along its Tibetan plateau and India's 'Neighborhood-First' and 'Act East' policies are indications of a larger power game involving the competition between the two largest economies of the world. The signing of the trilateral security pact between Australia, the United Kingdom (UK) and the US, commonly known as AUKUS, is complementary to the revitalisation of the Quad. To underline this, the US is strengthening security arrangements through partnerships and alliances with nearly all the nations on China's borders, including Central Asia, Mongolia and the Korean Peninsula and enhancing other strategic cooperation and measures with almost all the countries in East and Southeast Asia, with the aim to establish an "Arc of Democracy". Therefore, the upcoming geopolitical evolution of the Himalayan region is an important area of concern.

China has expressed serious concern over the nuclear submarine cooperation underlined in AUKUS, which Beijing perceives to have purposefully aggravated regional anxieties, accelerated the arms race, portended regional stability and destabilised international nuclear non-proliferation efforts.

The tension between Beijing and Washington, the world's two largest economies, soared under the Trump administration, and it looks like it will continue in the years to come but with a different modus operandi.

### Geopolitical Compulsion is Visible

*At the same time, the competition between democracy and totalitarian communism is underway.*

Values based on democracy and human freedom dimensions are also making inroads. At the same time, the competition between democracy and totalitarian communism is underway. The economy will continue to remain a tool of national power. Military threats will be more visible than before. Former Chief of the Indian Army Staff, General M M Naravane, mentioned, "The regional security environment is characterised by Chinese belligerence in the Indo-Pacific, the rising footprints of China in India's neighbourhood and its attempts to unilaterally alter the status-quo along our disputed

borders have created an environment of confrontation and mutual distrust.”<sup>4</sup>

In the intermediary moment in US foreign policy, Biden pledged a peaceful, prosperous future for all with global health security, climate change and human freedom as the theme at the 76<sup>th</sup> UNGA meeting. During the same meeting, Xi emphasised inclusiveness and rejected the zero-sum game with his offer for a global developmental initiative. The world is facing severe challenges. While China is eyeing the greater good for humanity, multilateralism and responsibility, the US is attempting to cover up glitches and blunders it made that hurt many countries worldwide, including its allies.

Besides trade, the EU entered the Indo-Pacific region with naval diplomacy when France took the lead with then member of the EU – the UK – in establishing a military footprint in the Indo-Pacific region. The EU has announced the establishment of relations with the Quad countries on subjects of common interests such as technology, vaccines and climate change, areas where the EU is a vital actor globally.

One of the fundamentals of the India-China relationship is the “politics of space” with political interests, resources management, security leverages and economic stability as priorities among the shift in public opinion. Domestic nationalism has been a trend in politics with more anti-India and anti-China rhetoric and attempts to curb American engagement in the region. The Chinese “Wolf Warrior” diplomacy is often witnessed, and competing political interests have produced a miniature crisis that threatens to grow into a bigger one.

The Himalayan region is strategically more viable for exerting political pressure amongst the elephants in the room – China, India and the US. The risk of regional polarisation, stability of foreign policy, multi-

*Domestic nationalism has been a trend in politics with more anti-India and anti-China rhetoric and attempts to curb American engagement in the region.*

<sup>4</sup> “China’s Attempts To Alter Status Quo On Borders Created “Mutual Distrust”: Army Chief”, NDTV, 13 February 2021, <https://www.ndtv.com/india-news/chinas-attempts-to-alter-status-quo-on-borders-created-mutual-distrust-army-chief-2369546>.

alignment and non-alignment amid political chaos and competition are at crossroads.

Three strategic possibilities are as follows:

*Multi-dimensional infrastructure development like air, land and water-based infrastructure connectivity is important.*

1. **Foster geo-strategic connectivity:** This can be achieved by using bilateral resources for multilateral and regional benefits, for example, the efficient and effective use of water resources for energy, fresh water and irrigation. Multi-dimensional infrastructure development like air, land and water-based infrastructure connectivity is important.
2. **Cultivate multi-dimensional engagement:** This can be done by focusing first on youth engagements, then on building inter-cultural and inter-religious engagements that bring people together. We should then also formulate inter-government arrangements with a focus on bureaucratic engagements. Lastly, we should foster consistent National policy-based engagement and create advanced security engagement to confront common challenges.
3. **Build public opinion that influences internal and external factors of international relations:** The shifting of public opinion has a direct impact on the level of trust amongst people and the source of political power that can be utilised or mis-utilised for political convenience. Information, or, more often than not, disinformation, may sway public opinion. Promise versus action-led perception is necessary. A bilateral understanding of respective perceptions on global affairs must be pursued.

# Geopolitics and Security Challenges in the Himalayas: Pakistan's Perspective

Zafar Nawaz Jaspal

## Summary

*The boundary controversies between the Himalayan states have been taxing their bilateral relations. A few of these controversies are possible flashpoints for devastating armed conflicts. In recent years, the Himalayas experienced several territorial-related tensions between India and Nepal, Bhutan and China, and India and China.<sup>1</sup> Besides, the 'ugly' stability between India and Pakistan risks the region to nuclear Armageddon.<sup>2</sup> Moreover, the transformation in geopolitics and emerging strategic competition between China and the United States (US) systematically increase security challenges in the Himalayas.<sup>3</sup>*

*A few of these controversies are possible flashpoints for devastating armed conflicts.*

## Introduction

China and India's failure to reconcile strategically resulted in their troops' deadly embroil in the Himalayas on 15 June 2020, which has confirmed China, in the Indian eyes, as an adversary, with China sharing the same view of India. Another alarming factor is that both the Chinese Communist Party and the Indian Bharatiya Janata Party (BJP) stoke nationalist sentiments to maintain domestic political support by asserting territorial claims against foreign enemies. Thus, there is a real risk that the Kashmir dispute between India and Pakistan could turn violent mainly because the BJP, which is fanning anti-Pakistan sentiments to sustain political support to govern the

<sup>1</sup> Wini Fred Gurung and Amit Ranjan, "China's Territorial Claims and Infringement in Bhutan: Concerns for India", ISAS Working Paper, No. 341, 1 April 2021, <https://www.isas.nus.edu.sg/papers/chinas-territorial-claims-and-infringement-in-bhutan-concerns-for-india/>.

<sup>2</sup> Ashley Tellis coined "ugly stability" to describe the India-Pakistan strategic relationship in the shadow of nuclear weapons. As full-scale war becomes increasingly unlikely, there are incentives for the countries (and non-state actors) to mount low-level operations, such as incursions or assaults on military installations. Karthika Sasikumar, "Sticks, stones, and words: 'Ugly stability' between India and China", Bulletin of the Atomic Scientists, 13 July 2020, <https://thebulletin.org/2020/07/sticks-stones-and-words-ugly-stability-between-india-and-china/>.

<sup>3</sup> Michael Clarke and Anthony Ricketts, "U.S. grand strategy and national security: the dilemmas of primacy, decline and denial", Australian Journal of International Affairs, Vol. 71 (2017): p. 489-490, <https://www.tandfonline.com/doi/abs/10.1080/10357718.2017.1342760>.

country. Simultaneously, Pakistan has been diplomatically and morally supporting what it terms as the freedom movement in Kashmir, and Islamabad officially calls it “illegally Indian Occupied Kashmir.”

*The alarming factor is that nuclear weapons now back up India’s war rhetoric against Pakistan.*

The country that stands to benefit the most from the disputes between/among the Himalayan states is the US. Geopolitically, Washington designated China as its principal adversary, which necessitated a strategic realignment of the US in South Asia. As a result, the US has successfully set in motion attempts to contain China regionally by instituting a strategic partnership with India and quashing its seven-decade strategic alliance with Pakistan.<sup>4</sup> Currently, the US views India as a “net security provider” to the littoral states, especially in the so-called Indo-Pacific region.<sup>5</sup> Besides, Indian Prime Minister Narendra Modi’s ambition to turn his country into a world power has witnessed New Delhi redefining its relations with the US to counter China and adopt an aggressive muscular strategy towards Pakistan.<sup>6</sup> The alarming factor is that nuclear weapons now back up India’s war rhetoric against Pakistan.

Currently, there are two hostile pairs in the Himalayas: Pakistan versus India and China versus India. Pakistan and India’s strategic rivalry and spiralling China-India strategic competition risk the Himalayas’ strategic stability. Besides, increasing geopolitical competition between China and the US in Asia also indirectly contributes to the Himalayas’ insecurity. The following are four essential factors that directly and indirectly cause insecurity in the Himalayas.

## **Destabilising the Devastating Arms Race**

Since the dawn of the 21<sup>st</sup> century, India has changed its military doctrine from defensive-defence to offensive-defense and modernised

<sup>4</sup> Pakistan-US relations steadily deteriorated due to the US’ failure to defeat the Afghan Taliban, for which Washington blamed Islamabad. As a result, the US’ assistance to Pakistan has been curtailed since 2017.

<sup>5</sup> US Department of Defence National Security Strategy, 2018, [www.defense.gov](http://www.defense.gov).

<sup>6</sup> Dmitry Trenin, “Major Powers in the Middle East and North Africa”, in *Middle East Crisis: Scenarios and Opportunities*, edited by Viatcheslav Kantor (International Luxembourg Forum on Preventing Nuclear Catastrophe, 2020), p. 22, [http://www.luxembourgforum.org/media/documents/2020\\_Middle\\_East\\_Crisis-Scenarios\\_and\\_Opportunities\\_\\_TEXT\\_FULL\\_middle\\_east\\_eng3\\_2.pdf](http://www.luxembourgforum.org/media/documents/2020_Middle_East_Crisis-Scenarios_and_Opportunities__TEXT_FULL_middle_east_eng3_2.pdf).

its armed forces accordingly. India's doctrinal choices are two-front: war-fighting capability and controlling or a security provider in the Indian Ocean region. Its military doctrine is the 'Cold Start' doctrine, proactive military operation strategy, and tactical planning as a surgical strike. The Indian military system has gradually expanded, creating new agencies, commands and positions and purchasing new advanced weaponry. The Indian strategic planners are alarmed about the People's Liberation Army's (PLA) objective of wanting to become a "world-class" military by the end of 2049.<sup>7</sup> Therefore, New Delhi has been reorganising the Indian Armed Forces' current structure into integrated theatre commands.

The transformation in the Indian Armed Forces and cementing India-US strategic partnership increases Pakistan's insecurity. "The India-US strategic partnership has bolstered the Indian revisionist mindset, which, in turn, has led to the destabilisation of the regional centric deterrence, a reduced possibility of the resumption of dialogue around the peace process, and an increased probability of war in South Asia."<sup>8</sup> Though Islamabad cannot afford an arms race with New Delhi, it has been struggling to maintain the balance with India with its nuclear weapons capability. Pakistan's struggle to solidify its defensive fence to prevent its archrival's military aggression resulted in the evolution of a 'Full Spectrum Deterrence' policy and the completion of the nuclear triad.

*Though Islamabad cannot afford an arms race with New Delhi, it has been struggling to maintain the balance with India with its nuclear weapons capability.*

In December 2017, Pakistan's military doctrine or war-fighting modern strategy, like the 'synchronisation' of its conventional and nuclear weapons capability essence, was articulated by National Command Authority adviser, retired Lieutenant General Khalid Kidwai. He pointed out that the 'Full Spectrum Deterrence' policy guides the development of nuclear capability, which brings every Indian target into Pakistan's striking range. Consequently, Pakistan is developing a

<sup>7</sup> Zhao Lei, "PLA to be world-class force by 2050", *China Daily*, 27 October 2017, [https://www.chinadaily.com.cn/china/2017-10/27/content\\_33756453.htm](https://www.chinadaily.com.cn/china/2017-10/27/content_33756453.htm)

<sup>8</sup> Rizwana Abbasi and Zafar Khan, *Nuclear Deterrence in South Asia: New Technologies and Challenges to Sustainable Peace* (Routledge, 2020), p. 65, <https://www.routledge.com/Nuclear-Deterrence-in-South-Asia-New-Technologies-and-Challenges-to-Sustainable/Abbasi-Khan/p/book/9781032091655>.



“full spectrum of nuclear weapons in all three categories – strategic, operational and tactical, with full range coverage of the large Indian landmass and its outlying territories”, including the Andaman and Nicobar Islands.<sup>9</sup> Secondly, Pakistan is manufacturing “appropriate weapons yield coverage and the numbers to deter the adversary’s pronounced policy of massive retaliation.” Third, Islamabad is mastering nuclear weaponry with the “liberty of choosing from a full spectrum of targets, notwithstanding the Ballistic Missile Defence, to include counter-value, counter-force and battlefield” targets.<sup>10</sup> When one comprehends the ‘Full Spectrum Deterrence’ policy with ‘first-use and ‘last-resort’, it indicates that Pakistan uses its nuclear weapons in response to the use of nuclear and other weapons of mass destruction against it. Moreover, in the event of aggression against it with the use of conventional weapons, Pakistan will resort to nuclear weapons when the very existence of its conventional forces is in jeopardy.

*Additionally, they are arming their armed forces with nuclear triad capability and preparing militarily to conduct combat operations in a nuclear environment.*

India and Pakistan are involved in flexing their military muscles in the region, particularly in the Himalayan terrain. This reflects their unequivocal desire to improve their ability to combat any perceived threat, including the nuclear-weapon states’ realpolitik pursuits in South Asia. Indeed, they desire to guard their critical unsettled boundaries – the Line of Control and the Line of Actual Control (LAC) – which are imperative to their military security. Therefore, both have been sharpening their nuclear postures to hedge against the intimidation of the nuclear-weapon state. Additionally, they are arming their armed forces with nuclear triad capability and preparing militarily to conduct combat operations in a nuclear environment.

## India-US Strategic Partnership

The US designated India as a “major defence partner” in June 2016, which elevated the bilateral defence partnership to a level commensurate with Washington’s closest allies and partners.

<sup>9</sup> Fahad Aziz Taherani, “Pakistan’s full spectrum deterrence keeps Indians away”, *Global Village Space*, 31 May 2021, <https://www.globalvillagespace.com/pakistans-full-spectrum-deterrence-keeps-indians-away/>.

<sup>10</sup> “Rare light shone on full spectrum deterrence policy”, *Dawn*, 7 December 2017, <https://www.dawn.com/news/1375079/rare-light-shone-on-full-spectrum-deterrence-policy>.

Consequently, the bilateral defence trade and technology cooperation grew to approximately \$16 billion in 2018 from almost zero in 2008. These developments resulted in the transfer of previously unavailable advanced military technology and equipment to the Indian Armed Forces. Moreover, Washington supported New Delhi comprehensively in its crises with Islamabad and Beijing. The US' National Security Strategy (NSS) 2017 manifested the US competition with China, flattered India and ignored Pakistan. It reiterated Washington's commitment to strengthen India's military power and enhance its role in the Asian strategic setting. The NSS stated that "We [the US] welcome India's emergence as a leading global power and stronger strategic and defence partner. We will seek to increase quadrilateral cooperation with Japan, Australia and India."<sup>11</sup>

The increasing tension between the US and China immensely improved India-US strategic convergence. The US has expressed its solidarity with India on its border clashes with China. In October 2020, after meeting with India's National Security Advisor Ajit Doval in New Delhi, US Secretary of State Mike Pompeo announced, "The US will stand with India in its efforts to defend its sovereignty and its liberty. Our nations are committed to working together into expanding our partnerships across many fronts."<sup>12</sup> Washington has been transferring state-of-the-art weapons and sharing geospatial intelligence for military purposes with New Delhi to pursue their strategic objectives in the Himalayas and Asia-Pacific, including checkmating China's steadily increasing presence in the Himalayas region.

*The US has expressed its solidarity with India on its border clashes with China.*

The overall defence ties between the US and India improved with the signing of the bilateral Logistics Exchange Memorandum of Agreement and the Communications Compatibility and Security Agreement. Furthermore, on 27 October 2020, New Delhi and Washington signed the Basic Exchange and Cooperation Agreement (BECA). The BECA is focused on the sharing of geospatial intelligence for military

<sup>11</sup> National Security Strategy of the United States of America, White House, Washington, December 2017, p. 46, <https://www.whitehouse.gov/wp-content/uploads/2017/12/NSS-Final-12-18-2017-0905.pdf>.

<sup>12</sup> "US With India In Efforts To Defend Sovereignty: Pompeo On Galwan Clash", *NDTV*, 27 October 2020, <https://www.ndtv.com/india-news/galwan-clash-secretary-of-state-mike-pompeo-says-us-will-stand-with-india-in-its-efforts-to-defend-its-sovereignty-2316387>.

purposes. Resultantly, the US will share classified advanced satellite and topographic data, like maps, nautical and aeronautical charts, commercial and other unclassified imagery, geophysical, geomagnetic and gravity data with India. Admittedly, the motive behind Washington's sharing of information received from reconnaissance satellites is to check against China, but it simultaneously multiplies Pakistan's insecurity.

*The Quad's focus is the Asia-Pacific region but it also boosts India-US strategic partnership, which has contributed negatively to the decades-old conflicts in the Himalayas.*

The change of guard in Washington furthered the US-India strategic partnership. On 12 March 2021, the US, Australia, India and Japan virtually convened the first-ever summit-level meeting of the Quadrilateral Security Dialogue (Quad). The grouping has been understood to be a new kind of 21<sup>st</sup> century security alliance to take a more significant role in fighting against nontraditional and traditional security risks. The Quad's focus is the Asia-Pacific region but it also boosts India-US strategic partnership, which has contributed negatively to the decades-old conflicts in the Himalayas. This is due to the Quad being viewed by China as an alliance to curtail its increasing influence in the Indo-Pacific region, whereas India is an important member of the Quad. Moreover, the US-led North Atlantic Treaty Organization considers both the Quad and AUKUS imperative to maintaining the balance of power and ensuring deterrence against China in the region.

### **China-India Failure to Settle the LAC**

Bilateral relations between China and India have remained hostage to their conflicting claims over 50,000 square miles of territory adjoining the frontier at the Himalayas.<sup>13</sup> Since 1954, their border forces have occasionally clashed along the contested LAC. Hence, the tensions along the northeastern border near the Indian state of Arunachal Pradesh, which Beijing asserts is part of China's Tibet region, and near the Aksai Chin region at the western end Qinghai-Tibetan Plateau-Ladakh. Chinese and Indian patrols encounter each other along the

<sup>13</sup> K S Shelvankar, "China's Himalayan Frontiers: India's Attitude", *International Affairs*, Vol. 38, No. 4 (October 1962): pp. 472-484, <https://www.jstor.org/stable/1324555>.

disputed border, and both sides often accuse each other of border incursions. However, Chinese and Indian military leaderships have regularly interacted with each other since the 2017 Doklam standoff and have generally kept disputes from further escalation. However, their efforts have not always succeeded, with the violent clashes between the Indian Armed Forces and the PLA in the Galwan Valley in the Ladakh region on the night of 15 June 2020.

The Galwan Valley clash left 20 Indian troops, including the commanding officer of 16 Bihar, the clash unit, dead.<sup>14</sup> China also acknowledged casualties on its side without any publication of figures. Indian strategic pundits have blamed China for ingress into Indian territory west of the LAC.<sup>15</sup> Significantly, India deployed a warship to the South China Sea soon after the deadly border clash.<sup>16</sup> On 19 June 2020, Pompeo tweeted, "We extend our deepest condolences to the people of India for the lives lost as a result of the recent confrontation with China."<sup>17</sup> Nevertheless, unfortunately, there has been little sign of reducing tension at the contested Himalayan border. On 29 and 30 August 2020, the Indian Armed Forces captured a strategic point in a "pre-emptive move against the PLA at the LAC in eastern Ladakh along the southern bank of the Pangong Tso Lake".<sup>18</sup> While confirming the Indian violation of the LAC, Beijing demanded the withdrawal of troops from the area.<sup>19</sup> Evidently, the Modi government's attempts to demonstrate India's China military posture since 2017 by receiving American political, military, and economic favours have resulted in increased tension in the Himalayas.

*Evidently, the Modi government's attempts to demonstrate India's China military posture since 2017 by receiving American political, military, and economic favours have resulted in increased tension in the Himalayas.*

<sup>14</sup> Over 100 other soldiers from the unit received non-life-threatening injuries. Three days after the clash, the PLA returned 10 captured Indian Army personnel, including a lieutenant colonel and three majors.

<sup>15</sup> Sanjeev Miglani and Devjyot Ghoshal, "India's Modi says there was no border intrusion in a deadly clash with China", *Reuters*, 19 June 2020, <https://www.reuters.com/article/us-india-china/indias-modi-says-there-was-no-border-intrusion-in-deadly-clash-with-china-idUSKBN23Q0NS>.

<sup>16</sup> Keegan Elmer and Shi Jiangtao, "China-India border: defense ministers to converge on Russia amid standoff tensions in disputed territory", *South China Morning Post*, 2 September 2020, <https://www.scmp.com/news/china/diplomacy/article/3099878/china-india-border-defence-ministers-expected-converge-russia>. Before the Galwan incident, Indian and PLA troops clashed on 5 and 6 May 2020 and then on 16 and 17 May 2020 in the Pangong area. As a result, at least 72 soldiers on the Indian side sustained injuries, and the commanding officer of the unit, 11 Mahar, sustained life-threatening injuries.

<sup>17</sup> Debanish Achom, "Deepest Condolences To People Of India: US On Soldiers Killed In Action", *NDTV*, 19 June 2020, <https://www.ndtv.com/india-news/us-says-extend-deepest-condolences-to-people-of-india-for-lives-lost-as-a-result-of-recent-confrontation-with-china-2248669>.

<sup>18</sup> Rahul Bedi, "With New China Faceoff, India's Nightmare of a Two-Front War May Be Coming True", *The Wire*, 31 August 2020, <https://thewire.in/security/india-china-pakistan-two-front-war>.

<sup>19</sup> "India, China accuses each other of provocation in new border standoff", *Dawn*, 31 August 2020, <https://www.dawn.com/news/1577185/india-china-accuse-each-other-of-provocation-in-new-border-standoff>.

## The Kashmir Dispute: Enduring Strategic Rivalry

*The Kashmir dispute has locked both countries into a prolonged conflict consisting of border skirmishes, ceasefires, dialogue-deadlock, violent uprisings and crises with a nuclear dimension.*

Over the last five decades, Pakistani and Indian armed forces have been embroiled in many conflicts. The cause of every skirmish was due to Islamabad and New Delhi's conflicting claims in the Himalayan region, like the chronic Kashmir dispute. The Kashmir dispute has locked both countries into a prolonged conflict consisting of border skirmishes, ceasefires, dialogue-deadlock, violent uprisings and crises with a nuclear dimension. In August 2019, the situation between the nuclear-armed belligerent neighbours further deteriorated when New Delhi enacted the Jammu & Kashmir Reorganising Act 2019. The Act revoked Articles 370 and 35A of the Indian constitution, which granted special status to what Pakistan calls the Indian Occupied Kashmir. The abrogation of Article 370, largely already overridden in practice, was not only a breach of India's constitution, but it was also a violation of the United Nations Security Council (UNSC) resolutions that declared Kashmir a disputed territory.<sup>20</sup>

Pakistan appealed to the UNSC to implement its resolutions on the 70-year-old dispute. India opposed the holding of the UNSC meeting to camouflage its atrocities in Indian Occupied Kashmir. In August 2019, the UNSC convened a consultative meeting on the subject and nullified India's claim that the annexation of Kashmir was an internal matter of India. This vindicated Pakistan's position that the UNSC resolutions were intact. Therefore, holding a free and fair plebiscite was the only approach to resolving the protracted Kashmir dispute between the two nuclear-armed states. The permanent members of the UNSC, other countries and the representatives of international institutions advised both India and Pakistan to exercise maximum restraint in their policies and urged both to resolve the dispute through dialogue instead of invoking the military.

<sup>20</sup> "The principle of a plebiscite prescribed in Security Council resolution 47 (1948) and subsequent resolutions reflects the legal recognition of the right to self-determination of the people of Jammu & Kashmir. Furthermore, the United Nations General Assembly, in Resolution 2649 (1970), and several subsequent resolutions, has repeatedly affirmed the legitimacy of the struggle of peoples under colonial and alien domination, "recognized as being entitled to the right of self-determination", to "restore to themselves that right by any means at their disposal, including armed struggle." These resolutions, furthermore, also recognise the right of such peoples "to seek and receive all kinds of moral and material assistance" in the "legitimate exercise of their right to self-determination", Munir Akram, "Kashmir: India's Afghanistan", *Dawn*, 18 August 2019, <https://www.dawn.com/news/1500179>.

However, the Modi government closed all doors to peaceful negotiations over the Kashmir dispute. New Delhi was neither willing for a bilateral dialogue with Pakistan nor did it permit any third-party mediation. Further, India responded negatively to US President Donald Trump's statement on his eagerness to mediate between the two neighbours over Kashmir.<sup>21</sup> In the words of former Pakistani Ambassador to the US, Maleeha Lodhi, "The unilateral action by India to further consolidate its illegal occupation of the internationally-recognised disputed territory of Jammu and Kashmir, in flagrant violation of multiple Security Council resolutions, has engendered further volatility in South Asia, posing a grave risk to regional and global peace and stability."<sup>22</sup>

*New Delhi was neither willing for a bilateral dialogue with Pakistan nor did it permit any third-party mediation.*

The increasing tension at the Line of Control between India and Pakistan is also causing another threat variable for the Pakistanis, that is, the probability of the end of the Indus Waters Treaty (IWT) of 1960. Notably, Pakistan is the third most water-stressed country and is vulnerable due to its position as a lower riparian state compared to India. The Modi government has threatened to cut off all water to Pakistan. In September 2016, Modi commented that "blood & water cannot flow simultaneously".<sup>23</sup> This comment was made following a militant attack in Uri in which 19 Indian soldiers were killed. The Modi comment generated fear that New Delhi might violate the IWT. In response, Islamabad warned that a violation of the water-sharing pact would be considered an act of war.<sup>24</sup> Thus, the probability of a conflict in the Himalayas over water resources between India and Pakistan cannot be ruled out.

<sup>21</sup> "Is Donald Trump already mediating, not on Kashmir but between Modi and Imran?", *India Today*, 25 September 2019, <https://www.indiatoday.in/news-analysis/story/is-donald-trump-already-mediating-not-on-kashmir-but-between-modi-and-imran-1602984-2019-09-25>.

<sup>22</sup> "India's 'hegemonic pretenses and aggressive actions' threat to regional peace: Maleeha", *Dunya News*, 17 October 2019, <https://dunyanews.tv/en/Pakistan/514395-India-hegemonic-pretenses-and-aggressive-actions-threat-to-regional>.

<sup>23</sup> "Indus Treaty: Blood and water cannot flow together, says PM Modi after meeting", *India Today*, 26 September 2016, <https://www.indiatoday.in/india/story/indus-waters-treaty-meeting-narendra-modi-pakistan-343297-2016-09-26>.

<sup>24</sup> "Revocation of Indus Waters Treaty can be taken as an act of war: Sartaj Aziz", *Dawn*, 27 September 2016, <https://www.dawn.com/news/1286437>.

## Conclusion

*The Chinese leadership termed the China-Pakistan Economic Corridor (CPEC) as a flagship project of the BRI.*

With the Belt and Road Initiative (BRI), Chinese President Xi Jinping has spun China's financial potential into a geopolitical advantage. The Chinese leadership termed the China-Pakistan Economic Corridor (CPEC) as a flagship project of the BRI. The Pakistani leadership has also responded optimistically, dubbing the CPEC a "game-changer project" in the region. Conversely, the Indian leadership called it a destabilising project because it passes through what Pakistan calls the Azad Jammu Kashmir while India terms the area as Pakistan Occupied Kashmir and the trans-Karakoram tract of Shaksgam, ceded by Pakistan to China on 2 March 1963 under a provisional boundary settlement.

Strategic trends in contemporary international and regional politics indicate the hardening of a geopolitical rivalry, contestation and competition between China and India and between Pakistan and India in the Himalayas. The military impasse among these strategic rivals has raised concerns about an all-out military conflict in the Himalayas.

# Reluctant Rivalry: Border Disputes along the Himalayas from Beijing's Perspective

Zheng Haiqi

## Summary

*China has a different perspective on border delimitation between India and China, believing that India holds the sole responsibility for inter-state border conflicts, and that China is simply forced to respond in a legitimate manner, owing to the threat of India crossing the line. In this regard, Beijing feels that maintaining the status quo along the Himalayan border is in the best interests of both parties. However, as the consensus between China and India continues to weaken, China does not rule out the consolidation of border defence such as infrastructure construction, in the border areas.*

## China's Basic Approaches to Border Affairs

China maintains the principle of decoupling border issues from bilateral relations, thereby removing an impediment to economic development and international cooperation. Following Indian Prime Minister Rajiv Gandhi's visit to Beijing in 1988, both India and China agreed that border disagreements should not hinder other aspects of China-India relations. These included economic and trade cooperation. Both parties followed this consensus over the next three decades. However, India is presently abandoning this consensus to pursue strategic gains and regional hegemony. India's Foreign Minister S Jaishankar has stressed the importance of peace and stability along the borders as a precondition for further China-India cooperation. In contrast, Beijing disagrees and still adheres to the original consensus that China-India border issues should not impede bilateral cooperation in other areas.

*India's Foreign Minister S Jaishankar has stressed the importance of peace and stability along the borders as a precondition for further China-India cooperation.*

Following the 2020 Galwan Valley skirmishes, the Chinese Ministry of Foreign Affairs has repeatedly stated that the border issue



*Despite the deterioration of bilateral relations following the Galwan incident, Beijing remains New Delhi's largest trading partner in 2020, with a total trade volume of about S\$117 billion.*

between China and India will not be linked with bilateral relations.<sup>1</sup> By separating border issues from bilateral ties, Beijing gains more opportunities for cooperation. Despite the deterioration of bilateral relations following the Galwan incident, Beijing remains New Delhi's largest trading partner in 2020, with a total trade volume of about S\$117 billion. In 2021, Brazil, Russia, India, China and South Africa (BRICS) grouping came up with the New Delhi Declaration, where India and China recognised the importance of strengthening cooperation on international organisations reforms and COVID-19 relief. Given the benefits of bilateral cooperation, China proposed to set aside the border disputes and invest more in building mutual interest between India and China, hoping that bilateral ties will mature and eventually lead to a resolution of the border disputes at no cost.<sup>2</sup> The other principle that China prefers to handle disputes is through a bilateral approach rather than multilateral means. Beijing insists that border conflicts remain bilateral matters that should not be influenced by extra-regional forces, particularly by the United States (US). In June 2017, Indian Prime Minister Narendra Modi paid a state visit to the US and reached a joint communiqué with President Donald Trump, in which the US urged China and India to resolve their dispute peacefully and in accordance with international law. The US also expressed its unwillingness to intervene. This contrasts with the Doklam standoff in 2017, where Washington noticeably interfered in the border conflict and was more inclined to support New Delhi.

After the China-India tensions in 2020, Trump quickly expressed his willingness to mediate the Himalayan border standoff. Later, US Secretary of State Mike Pompeo criticised China for its “incredibly aggressive action” in Ladakh.<sup>3</sup> Even though India and China completed their disengagement from the border in early 2021, Washington continued to keep a close eye on the border dispute in the hope of a peaceful solution. Beijing is strongly opposed to

<sup>1</sup> “Border issue shall not be linked with China-India bilateral ties: spokesperson”, *Xinhua Net*, 29 January 2021, [http://www.xinhuanet.com/english/2021-01/29/c\\_139707485.htm](http://www.xinhuanet.com/english/2021-01/29/c_139707485.htm).

<sup>2</sup> Zheng Haiqi, “China-India Relations: How Different Perceptions Shape the Future”, ISAS Insights No. 659, 1 April 2021, <https://www.isas.nus.edu.sg/papers/china-india-relations-how-different-perceptions-shape-the-future/>.

<sup>3</sup> “Pompeo says China took ‘incredibly aggressive action’ in recent clash with India”, *Reuters*, 8 July 2020, <https://www.reuters.com/article/us-india-china-usa-pompeo-idUSKBN2492D7>.

American interference. China maintains that Beijing and New Delhi can more effectively handle their border conflicts through bilateral communications. There is no need for any “third party” to intervene in the disputes, which could endanger regional peace and stability.<sup>4</sup> India concurs with this principle. However, one of the three hurdles in China-India relations, according to Vikram Misri, India’s Ambassador to China, is the viewing of bilateral relations through the lens of relations with other countries.<sup>5</sup>

### China’s Threat Assessment on Border Disputes

Border disputes with India are hardly China’s most pressing concern but they are increasingly factoring into Beijing’s strategic calculations. Contrary to most Western speculators, Tanvi Madan and Michael Kugelman have observed that China prefers to keep the status quo rather than drastically altering the situation. This stems from assessments that neither India nor China would fight a real war along the border. Beijing believes that both sides are unwilling and incapable of fighting along the Himalayas due to the factor of nuclear deterrence.

Nuclear deterrence and growing economic interdependence are two examples of multi-level links between India and China.<sup>6</sup> The fact that India was suffering from the second wave of the COVID-19 pandemic convinced China that India would prioritise domestic affairs. Despite India’s growing assertiveness in foreign policy, China does not regard India as its main rival. Besides, South Asia and the Indian Ocean region are China’s secondary strategic directions, and they have no bearing on its future rise.<sup>7</sup> At the moment, Beijing has to focus more on the Indo-Pacific region and handle the pressure from

*Despite India’s growing assertiveness in foreign policy, China does not regard India as its main rival.*

<sup>4</sup> “Foreign Ministry Spokesperson Zhao Lijian’s Regular Press Conference”, Ministry of Foreign Affairs of the People’s Republic of China, 17 September 2021, [https://www.fmprc.gov.cn/mfa\\_eng/xwfw\\_665399/s2510\\_665401/t1907901.shtml](https://www.fmprc.gov.cn/mfa_eng/xwfw_665399/s2510_665401/t1907901.shtml).

<sup>5</sup> Embassy of India, Beijing, “Ambassador’s Remarks at MP-IDSA – Sichuan University Virtual Dialogue”, 23 September 2021, [https://www.eoibeijing.gov.in/eoibeijing\\_listview/MTA1NA](https://www.eoibeijing.gov.in/eoibeijing_listview/MTA1NA).

<sup>6</sup> Chietigj Bajpae, “China-India: Regional Dimensions of the Bilateral Relationship”, *Strategic Studies Quarterly*, Vol. 9, No. 4 (2015): pp. 109-110.

<sup>7</sup> Ye Hailin, “How Should a Rising China Address the Challenge from the Secondary Strategic Direction? A Case Study on China-India Relation in Post-Doklam Accident Period”, *World Economics and Politics*, No. 4 (2018).

Washington, as it is considered Washington's main rival. As long as the US maintains strategic competition with China, Washington will remain Beijing's biggest threat. As a result of this threat asymmetry, China will not treat India the same way it treats the US. In fact, China and India have been quick to establish communications and high-level meetings following a crisis. Shortly after the Doklam standoff, China held a high-level leadership discussion with India, alongside the BRICS summit in Xiamen, in an attempt to repair relations. In its official statements, Beijing continues to express goodwill towards New Delhi.

*The frequent interactions between high-level ministers ensure timely communication and prevent misjudgement.*

On the sidelines of the 13<sup>th</sup> National People's Congress in March 2021, Chinese Foreign Minister Wang Yi stated that China and India are each other's friends and partners, not threats or rivals. He emphasised that the relationship between China and India is primarily about how the world's two largest developing countries get along and pursue development and rejuvenation together. Wang Yi further stressed that the two countries have a wide range of common interests and areas of cooperation; the border problem is a historical issue and does not represent the entirety of China-India relations. In September 2020, Wang Yi reached a consensus with Jaishankar on border stability and crisis management. Since 2021, the two ministers have met several times on the sidelines of events such as the Shanghai Cooperation Organization summit to discuss border issues. The frequent interactions between high-level ministers ensure timely communication and prevent misjudgement.

Beijing believes that New Delhi will continue to stir up disputes and stoke tensions to challenge China's role as an emerging great power. Concerns about the border are a longstanding issue stemming from history that both parties could not resolve in a short period. Given that the two powers continue to disagree on delimitation and the scope of control, the border disputes will become a "new normal" in their bilateral relations.

As the power imbalance between India and China grows, the border issues are becoming a structural contradiction. China is concerned

with India's idea of "absolute security", based on achieving an "absolute security boundary"; this idea was inherited from the British and has led to enduring long-term aggressive measures by New Delhi.<sup>8</sup> According to the statistics collected by the author, only two disputes of international concern occurred between the signing of the "Agreement on the Political Parameters and Guiding Principles for the Settlement of the India-China Boundary Question" in 2005 and when Modi came into power in 2014. There have been 10 border clashes between the two countries since Modi took office in 2014.

While the Indian action piques Beijing's attention, it is the potential of a US-India alliance that threatens China's national security. Beijing has been concerned about this alliance since the revival of the Quadrilateral Security Dialogue (Quad) in 2017. The deepening of US-India relations places China in a strategic dilemma, as it must fight the US in the east while competing with India in the west. Since September 2021, the Quad has undergone significant improvement to include joint cooperation on a wide range of issues and has matured into a leader-level platform. The US has also strengthened defence cooperation with India, intending to confront China once conflicts arise. If India coordinates with the American operations in Western Pacific on border issues, China will have to invest both resources and attention towards the same. Moreover, backed by American support, India will take a tougher stance on border issues. According to a commentary published in Global Times, India intends to make use of the China-US competition to exert pressure on China and increase its strategic cooperation with the US, with the aim of forcing Beijing to soften its border stance and make concessions to New Delhi.<sup>9</sup>

*The deepening of US-India relations places China in a strategic dilemma, as it must fight the US in the east while competing with India in the west.*

## Prospects of China's Policy on Border Issues

China will not give up its sovereignty claims and infrastructure construction along the border in the near term. As New Delhi is

<sup>8</sup> Hu Shisheng and Wang Jue, "Behavioral Logic of India's Tough Diplomacy toward China", *Contemporary International Relations*, No. 7 (2020).

<sup>9</sup> "After one year, India needs to reflect on fact" (yinianle, xiwang zuoyingde yindu qiaogiao fansile), *Global Times*, 15 June 2021, <https://opinion.huanqiu.com/article/43Y0fTgI9h7>.

*The evidence from the Galwan Valley skirmishes demonstrates China's determination and readiness to use force when confronted by external powers.*

speeding up infrastructure construction near the border to narrow the gap with Beijing, China has realised the need to prepare for the enduring challenges and that common interests do not necessarily bring peace and stability. According to B R Deepak, China-India relations remain “fragile”, with the border problem as the basis of the trust deficit and mutual suspicion.<sup>10</sup> Consequently, Beijing will continue infrastructure building and improve border deterrence to gain an advantage over New Delhi. As a *Global Times* editorial stated, China is not afraid of wars and fighting as its military strength is much stronger than that of India.<sup>11</sup> The evidence from the Galwan Valley skirmishes demonstrates China's determination and readiness to use force when confronted by external powers. Further, as China's national confidence and capabilities grow, it is more inclined to stand firm on issues related to its core interests, such as border conflicts and to prepare for future uncertainties.

## Conclusion

China still wishes to build healthy and robust relations with India, which requires boosting shared interests while setting aside existing disagreements. China's Ambassador to India, Sun Weidong, clearly expressed the view that China's basic policy towards India remains unchanged, which is based on three conditions: China and India as the two largest neighbouring developing countries; China and India's mutual partnership and common development; China and India cannot live without each other.<sup>12</sup> Based on this judgment, Beijing stresses the importance of cultivating better bilateral ties and enhancing cooperation with New Delhi in global and regional governance. When India faced the second pandemic wave, China provided medical assistance to the country. Moreover, China wishes to strengthen cooperation with India on global affairs such as counterterrorism and climate change.

<sup>10</sup> B R Deepak, *India and China: Beyond the Binary of Friendship and Enmity* (Singapore: Springer, 2020), p. 73.

<sup>11</sup> “India must get rid of two misjudgments about the border situation” (yindu bixu zouchu dui bianjing jushi de liangge wupan), *Global Times*, 16 June 2020, <https://www.app.com.pk/global/india-needs-to-rid-of-two-misjudgments-on-border-situation-global-times-editorial/>.

<sup>12</sup> “Implement the Consensus Reached by Leaders of China and India To Bring China-India Relations Back on the Track of Sound and Steady Development – Speech by HE Ambassador Sun Weidong at the seminar on ‘China-India Relations: The Way Forward’ of ICS”, 31 July 2020, <http://in.chineseembassy.org/eng/dsxss/t1802665.htm>.

In order to build a better relationship, an informal summit between leaders could be a helpful policy choice. The Wuhan summit in 2018 and the Chennai summit in 2019 have set good examples for crisis management. When the condition permits, Beijing may propose holding an informal meeting between the leaders to focus on border issues and ease the situation within a certain period.

# **PART 2**

# **WATER POLITICS IN THE HIMALAYAS**

## Misunderstood Himalayan Waters: Hegemonic Blue versus Marginalised White, Green and Brown

Dipak Gyawali

### Summary

*Water is key to life – biophysically and economically – and it comes to us as blue (water mostly in rivers and lakes), white (in atmospheric moisture), green (in soil moisture that forests, grasslands and dryland farming are dependent on), and brown (groundwater). For the former, it comes mostly from wells and springs and is embedded in all food items – from cereals to fresh fruits and vegetables (virtual water). For economic activities, available (blue) freshwater and over-pumped brown water predominate the discourse, if not actual use. The Himalayan waters, when looked across this hydro-geological spectrum from the perspectives of Toad’s Eye Science (as opposed to the Eagle’s Eye Science), exhibit a complex relationship between availability limited by verticality and socio-economic mores. Unfortunately, international discourse is dominated by blue transboundary river waters, and other waters have been neglected, making it difficult to frame an ecologically more meaningful policy for overall water security management.*

*The Himalayan waters, when looked across this hydro-geological spectrum from the perspectives of Toad’s Eye Science (as opposed to the Eagle’s Eye Science), exhibit a complex relationship between availability limited by verticality and socio-economic mores.*

### Transboundary Doldrums

Water developments are at a standstill and agreements in the Himalaya-Ganga region are at an impasse. In the 25 years since the Mahakali Treaty was signed between Nepal and India in September 1996 despite strong opposition, it has failed to accomplish even what was to be done in six months.<sup>1</sup> The Ganges water-sharing treaty signed by Bangladesh and India in the same year is set to lapse in

<sup>1</sup> Dipak Gyawali, “चौथाई शताब्दी उही नेताहरूलाई गजियाएर बसेको महाकाली सन्धि”, *ekagaj*, 4 September 2021, <https://ekagaj.com/article/mahakali-/25678/>.

<sup>2</sup> Ibid; and Jahangir Hussain, “Ganges Treaty: What happens after 2026?”, *The Financial Express*, 22 June 2021, <https://thefinancialexpress.com.bd/views/ganges-treaty-what-happens-after-2026-1624375181>.



2026, with little clarity on what will happen next.<sup>2</sup> Old agreements on Nepali tributaries – Gandak Treaty of 1959 (amended in 1964) and the Kosi Treaty of 1954 (revised in 1966) – continue to vitiate the atmosphere with dissatisfactions inherent in them, hobbling further collaborations on newer challenges.<sup>3</sup>

*Broadly put, there are two primary reasons underlying this stalemate.*

Broadly put, there are two primary reasons underlying this stalemate. One is the failure to see water in its totality, and two is to understand its ingress into and egress from any boundary system, be it the nation-state, its sub-units or the larger hydro-ecological zone within which man-made boundaries lie. The global water cycle carries water in, at least five, if not, six modes:

**White water:** Also known as ‘sky rivers’, this is water circulating in the atmosphere which precipitates on land to provide all the rest of the other water types. Its nature, uncertain even before, now becomes even more so with climate change.

**Green water:** Much of the precipitated water remains on land as soil moisture and is the primary support of all forests, grasslands and dryland rainfed agriculture.

**Blue water:** The part of precipitated water that does not remain as green water or evaporates back into white water as atmospheric moisture is the surface flows in rivers and lakes.

**Brown water:** Precipitated white water seeps into the ground and is stored there as groundwater which many settlements depend on in their daily lives.

**Grey water:** Used water from domestic and other production processes that either require more blue water for dilution to meet environmental or other needs or with mostly organic pollutants that

---

<sup>3</sup> Diwakar Pyakurel and Birat Anupam, “Along the Koshi, flooded in Nepal, ignored by India”, *The Third Pole*, 13 August 2020, <https://www.thethirdpole.net/en/regional-cooperation/along-the-koshi-flooded-in-nepal-ignored-by-india/>.

can be used for small-scale agriculture.

**Black water:** This is industrial wastewater that requires costly recycling measures to be fit to discharge into the environment.

Food production requires one or more of these water types, and the food's water footprint – whether it uses more of the green, blue or grey waters – determines whether the food so produced is environmentally friendly or harmful. For example, maize, barley and millet are dryland crops that mainly rely on green soil moisture; they do not use much blue or grey irrigated waters. On the other hand, industrially produced vegetables can be entirely constituted of blue or brown water.<sup>4</sup>

While the excessive focus on blue water – and the ignoring of other types of water that are key to food production and ecological maintenance – distorts policymaking, the other reason for the stalemate is the failure to recognise that much of South Asia is a semi-arid region which is “rich” in four monsoon months of flood (with over 50 per cent of the rain falling in only 50 hours) and the remaining eight months of virtually precipitation-free drought. Water security studies and policymaking thus require serious conceptual broadening to be meaningful.

*Water security studies and policymaking thus require serious conceptual broadening to be meaningful.*

## Water Misconceptions

Beyond the narrow view of the Himalayan waters as mainly blue water, there is also an over-hyped fallacy of ice and glaciers (the ‘Third Pole’) being the primary source of the Himalayan rivers. While the Himalayan glaciers are important global markers of climate change, only some nine per cent of the flow of the Ganga and 12 per cent of that of Brahmaputra come from glacial melt.<sup>5</sup> The rest of it comes either from the monsoon runoff during the rainy season between June to September or from groundwater backflow during the rest

<sup>4</sup> Product Gallery, Water Footprint Network, <https://waterfootprint.org/en/resources/interactive-tools/product-gallery/>.

<sup>5</sup> Jianchu Xu, R Edward Grumbine, Arun Shrestha, Mats Eriksson, Xuefei Yang, Yun Wang, Andreas Wilkes, “The Melting Himalayas: Cascading Effects of Climate Change on Water, Biodiversity, and Livelihoods”, Society for Conservation Biology, 15 May 2009, <https://conbio.onlinelibrary.wiley.com/doi/10.1111/j.1523-1739.2009.01237.x>.

of the dry months. Snow and glacial melt are essential contributors to river flow during the dry pre-monsoon months of March to May. However, that benefit is valuable only to the low-lying plains in the Tarai or Ganga plains, and not to the mountainous areas where snow-fed river flows are often hundreds of metres below habited villages, forcing them to rely on tributary streams fed by monsoon rains and winter westerlies as well as springs that are monsoon rains stored in mountain groundwater. Unfortunately, springs and what are called ‘marginalised rivers’ have seen very little policy attention from most governments in the region.

Another major misconception is the view that only ‘modern’ methods, such as ferrocement-led civil engineering water storage and diversions, constitute proper development. In Nepal, as in much of South Asia, significant sections of the population still benefit from traditional water harvesting structures built centuries ago; brushwood dam diversions still provide irrigation waters to fields in the dry season which gets washed away with the monsoon when water is no longer required.<sup>6</sup> Similar is the case with the *baudis* of western India or tanks in the Deccan plateau.<sup>7</sup> These traditional technologies have managed to harvest white water before they are lost as flood waters and store them in ponds and tanks as well as groundwater and soil moisture.

*Many of the rural and urban poor do not have access to benefits from the formal economy and still have to rely on informal infrastructure, including those water bodies.*

These practices that have held sustainably over the centuries need to be revisited as they are more suited to the semi-arid hydro-ecology of South Asia, and they still form the bedrock of the vast rural and informal urban economies that provide sustenance to millions. Many of the rural and urban poor do not have access to benefits from the formal economy and still have to rely on informal infrastructure, including those water bodies. As we assess national produce – from crops grown to items produced – for their climate-friendliness, we will also have to determine what kind of water and energy are embedded

<sup>6</sup> Dipak Gyawali, “Rethinking Transboundary Waters”, *Geopolitics and Ecology of Himalayan Waters*, 4 October 2020, <https://www.himalayanwaterproject.org/post/rethinking-transboundary-waters>.

<sup>7</sup> Anil Agarwal and Sunita Narain, “Dying Wisdom: Rise, Fall and Potential of India’s Traditional Water-harvesting Systems”, Centre for Science and Environment, 1997, <https://www.environmentandurbanization.org/dying-wisdom-rise-fall-and-potential-indias-traditional-water-harvesting-systems>.

in them. More often than not, we would find that the informal economy uses mostly green water, whereas the formal economy uses blue and brown water with much higher water and energy footprints.

### The Eagle's Eye versus the Toad's Eye Science

To be able to see and properly assess the informal economy and its water use, one will have to rely more on the Toad's Eye Science which goes to the grassroots and speaks to the local users. This contrasts with the Eagle's Eye Science of remote sensing and questionably estimated and aggregated national data.<sup>8</sup> State hydrocracies, populated as they mostly are with civil engineers trained to tame the blue waters of rivers, poorly manage brown groundwater and ignore the role of green or grey waters in the national economy.

To make matters worse, climate change is making philosophical mincemeat out of large hydrotechnical engineering: if there is one particular message that climate change is giving, it is that the future is not going to be like the past. If such is the case, given that dam designs are based on flood estimates derived from projections of historical data – much of it limited and questionable in the Global South – predictions based on past data are bound to be epistemically questionable. Floods and droughts will inevitably become more intense and frequent if future rainfall events do not follow the past pattern. This alone would force us to downscale our plans for river control from large dams, even before bringing into consideration increased sedimentation, which would drastically shorten reservoir life.

Thus, “many 10 per cent solutions” of smaller dams spread across different river basins would make more sense from a risk diversification perspective than a perfectly optimised single big solution.<sup>9</sup> This is especially true in the Himalayas. In Nepal, for instance, it is estimated that there are some 6,000 streams and rivers in four major snow-

*Floods and droughts  
will inevitably  
become more intense  
and frequent if  
future rainfall  
events do not follow  
the past pattern.*

<sup>8</sup> Dipak Gyawali and Michael Thompson, “Restoring Development *Dharma* with Toad's Eye Science?”, Institute of Development Studies, 2016, <https://bulletin.ids.ac.uk/index.php/idsbo/article/view/2822/ONLINE%20ARTICLE>.

<sup>9</sup> Ibid.

fed basins as well as in many non-snow-fed ones. From a climate risk perspective, it would make more sense to plan smaller dams in different basins and sub-basins that cannot all expect similar flood or drought levels simultaneously than to plan for one mega-dam. Moreover, dams would serve the water needs of settlements below it, not above it. And, in Nepal, it is mainly settlements in hills which suffer from the problem of verticality: a ridge-top village may have a perennial river below it, but that could be hundreds if not thousands or more meters below it. Hence, even if a village has water in its horizontal proximity, it is inaccessible vertically. Thus, it has to rely on a nearby spring that is fed by white atmospheric and percolated brown groundwater, both relatively understudied in blue-water focused hydrocratic silos.

*It is the conflicts at the local level between sub-national levels over springs and smaller streams that have led to more stressful situations.*

The Toad's Eye Science views of the water problem have implications for understanding water conflicts of the past and impending ones that will exacerbate with the onset of climate change. Scholars have highlighted that nation-states have rarely gone to war over water: rather, they have collaborated, albeit slowly, in the face of water stress.<sup>10</sup> It is the conflicts at the local level between sub-national levels over springs and smaller streams that have led to more stressful situations.<sup>11</sup> Hence, international treaties that have been enacted without sufficient consultation with the grassroots or outside agency silos face real danger. The treaties may end up being irrelevant at best or lead to a difficult impasse at worst. The Mahakali Treaty between Nepal and India, inked in 1996, is an example of a treaty in which neither party has been able to move an inch forward since then.

To correctly plan for a future made even more uncertain by climate change, it is necessary to widen the concept of water to include its many different manifestations and understand their various roles

<sup>10</sup> Evan Barnard and Sharif Wahab, "Aaron Wolf on Transboundary Water Conflict and Cooperation", *New Security Beat*, 30 November 2018, <https://www.newsecuritybeat.org/2018/11/aaron-wolf-transboundary-water-conflict-cooperation/>.

<sup>11</sup> Binod Sharma, Santosh Nepal, Dipak Gyawali, Govinda Sharma Pokharel, Shahriar Wahid, Aditi Mukherji, Sushma Acharya and Arun Bhakta Shrestha, "Springs, Storage Towers, and Water Conservation in the Midhills of Nepal", International Centre for Integrated Mountain Development, Working Paper 2016/3, <https://lib.icimod.org/record/32016>.

in the broader economic life of villages, regions and countries. New possibilities for cooperation across sectors and silos have emerged with India's push to develop inland waterways transport. This will require a complete conceptual overhaul of the traditional approach to water resources development and the building of an alliance of market players and environmental activists.<sup>12</sup>

## Conclusion

Riparian states in South Asia will have to opt for more inclusive and high-technology collaborative water science, especially in white and brown waters. Governments must promote and share technologies for treating grey and black waters. Water must not be viewed as a private good that can be managed by markets (they cannot without excessive cost externalisation). It needs to be perceived as a public good that is to be managed or at least well-regulated by the state bodies, and as a common pool good that this generation should manage as custodians for posterity.

In this regard, the policymakers would have to bring in new and academic-sounding concepts such as water and energy footprints, for better taxation formulas to meet climate change and other sustainability needs. Further, they could utilise the nexus approach to ensure better trade-offs between contending players and sectors. It is with the pluralisation of the policy terrain that we can ensure a less conflict and impasse-ridden water future.<sup>13</sup>

*Governments must promote and share technologies for treating grey and black waters.*

<sup>12</sup> Dipak Gyawali, "Will Inland Navigation Shift South Asia's Water Discourse Positively?", *Spotlight*, 31 August 2016, <https://www.spotlightnepal.com/2016/08/31/will-inland-navigation-shift-south-asias-water-discourse-positively/>.

<sup>13</sup> Dipak Gyawali, "Nexus Governance: Harnessing Contending Forces at Work", Nexus Dialogue Synthesis Papers, International Union for Conservation of Nature, 2015, [https://iwa-network.org/wp-content/uploads/2016/03/1448008531-Nexus-Governance-Harnessing-Contending-Forces-at-Work\\_Dialogue-Synthesis-Paper-2015.pdf](https://iwa-network.org/wp-content/uploads/2016/03/1448008531-Nexus-Governance-Harnessing-Contending-Forces-at-Work_Dialogue-Synthesis-Paper-2015.pdf).

# Water Politics in the Himalayas: The View from Islamabad

*Shafqat Kakakhel*

## Summary

*This chapter reviews the implementation of the Indus Waters Treaty (IWT) in 1960, which had divided the six main rivers of the Indus Basin between India and Pakistan, giving the three eastern rivers to India for its exclusive use and allowing the three western rivers to Pakistan. The treaty permitted India to build hydropower plants using the waters of the western rivers before they flowed down into Pakistan subject to stringent conditions to ensure that the power projects did not entail storage of water. The IWT also provided for the exchange of river flow data as well as cooperative measures agreed between India and Pakistan.*

## Introduction

*Pakistan must take urgent measures to address its water conundrum or endure worsening food and health crises and sluggish socio-economic development, leading to increased poverty and deprivation.*

Pakistan faces the twin challenges of declining per capita availability and deteriorating freshwater quality. Its water woes have been caused by exponential growth in population, economic development, mounting demands of all water user sectors, especially in agriculture, and governance and management deficits. The impacts of climate change have aggravated these fault lines. Pakistan must take urgent measures to address its water conundrum or endure worsening food and health crises and sluggish socio-economic development, leading to increased poverty and deprivation.

Pakistan's water-related problems have domestic and external dimensions that must be tackled simultaneously. This chapter deals with the external dimension in light of recent developments in India-Pakistan relations. It also takes cognisance of suggestions agreed upon at the so-called Track II dialogues between Indian and Pakistani stakeholders.

The external dimension of Pakistan's water-related challenges is defined by its critical dependence for over 70 per cent of its surface water on the Indus River Basin (IRB). The IRB consists of seven major rivers – the three eastern rivers, namely, Beas, Ravi, and Sutlej; the three western rivers, namely, the Indus, Chenab and Jhelum; numerous smaller rivers and the Kabul River. The seven rivers originate in or transit through foreign countries – India or Afghanistan. The IWT, signed by Pakistan and India on 19 September 1960, elaborates on their entitlements to the eastern and western rivers. However, it is silent on the Kabul River originating in Afghanistan, which contributes over 20 per cent of the assets of the IRB when it drains into the Indus after entering Pakistan.

The Kabul River has flowed from Afghanistan into Pakistan for millennia without any hindrance. However, the absence of an agreement makes Pakistan fear that if Afghanistan builds more multi-purpose dams on the Kabul River to meet the growing power, drinking water, irrigation and sanitation needs of its capital's over four million Afghan residents, the water flowing into Pakistan would be reduced. While the two countries have not formally discussed matters relating to the Kabul Basin, the Track II dialogues between Afghan and Pakistani stakeholders in recent years have garnered support for holding official talks on mutually beneficial collaboration concerning the basin. Given the current turmoil in Afghanistan, a bilateral dialogue on the Kabul Basin will have to wait for a modicum of peace and domestic stability.<sup>1</sup>

*Given the current turmoil in Afghanistan, a bilateral dialogue on the Kabul Basin will have to wait for a modicum of peace and domestic stability.*

## The Implementation of the Indus Waters Treaty

The IWT awarded exclusive use over its eastern and western rivers to India and Pakistan respectively. India was allowed to use small amounts of water from the western rivers for human consumption and irrigation as well as to operate run-of-the-river power plants without live storage. India must await Pakistan's consent before building plants over which the latter had raised objections. Article

<sup>1</sup> Shafqat Kakakhel, "Pakistan's Water Security: The Transboundary Dimension", *Criterion Quarterly*, 25 June 2019, <https://criterion-quarterly.com/pakistans-water-security-transboundary-dimension/>.



6 of the IWT requires both parties to exchange data on river flows and floods while Article 7 notes the possibility of mutually beneficial cooperation related to the Indus Basin.

The IWT established the Permanent Indus Commission (PIC), consisting of a commissioner from each party to facilitate communication and the implementation of its provisions between India and Pakistan. It also created an elaborate dispute settlement mechanism: the PIC or high-level officials of the two countries; technical issues could also be referred, by mutual agreement, to a neutral expert for mediation; and disputes which entail technical and/or legal questions may be referred, by mutual agreement, to the Permanent Court of Arbitration for arbitration.

*The only issue that has defied attempts over four decades through high-level talks is what India calls the Tulbul navigation project at the mouth of the Jhelum while Pakistan describes it as the Wullar Barrage.*

Since the 1970s, each method of settling disputes has been employed successfully. Discussions between the foreign secretaries resolved the dispute over the Salal Dam on the Chenab River in 1978; the dispute over the Baglihar Dam (also on the Chenab River) which arose in 2005 was referred to Raymond Lafitte, a renowned Swiss engineer, who served as a neutral expert and issued his verdict in 2007; the dispute over the Kishanganga project on the Jhelum was settled by a Court of Arbitration in 2013. The only issue that has defied attempts over four decades through high-level talks is what India calls the Tulbul navigation project at the mouth of the Jhelum while Pakistan describes it as the Wullar Barrage.

Except for the disagreement over the Wullar Barrage, all the differences and disputes between India and Pakistan are related to Indian hydropower projects on the western rivers. India has carried out an ambitious plan to exploit the full potential of the western rivers for power generation. It has built dozens of hydropower plants on the western rivers, raising concerns in Pakistan about the environmental and security risks posed by cascades of hydropower plants on a single river.

India and Pakistan have often reiterated their support for the IWT. However, Pakistani officials have voiced a number of complaints

regarding Indian attitude and behaviour. These complaints include that India often begins work on power projects without informing Pakistan; India has provided insufficient data and technical information; India deliberately delays the implementation of binding decisions of external mediation or arbitration; and their release of flood water into the eastern rivers has caused environmental damage on the Pakistani side. There is clearly a need to re-energise the operations of the PIC, for which recommendations have been made by Pakistani experts.<sup>2</sup>

*There is clearly a need to re-energise the operations of the PIC, for which recommendations have been made by Pakistani experts.*

Experts on water resources and climate change from within and outside the subcontinent have pointed out that the IWT, negotiated during the 1950s, does not address several issues which either did not exist in the past or have become more severe in recent decades. These issues include the effects of climate change such as the rapid melting of ice and snow in the glaciers of the Himalayas-Karakoram-Hindu Kush (HKH) and more intense weather events like floods and droughts, and erratic patterns of monsoon winds in terms of timing and volume; dwindling water flows in the upstream of the Indus Basin; the excessive abstraction of ground water in both countries; inefficient utilisation of water; pollution from industrial and agricultural runoff in the watershed of the western rivers affecting the quality of water flowing into Pakistan; and the imperative of maintaining minimum environmental flows in the eastern rivers.<sup>3</sup>

## India-Pakistan Track II Dialogues on Transboundary Issues

India and Pakistan have not yet discussed the non-implementation of Article 6 concerning the exchange of hydraulic data, which has been erratic. Article 7, which calls for mutually agreed-upon cooperation beyond the provisions of the IWT, has remained unimplemented.

<sup>2</sup> Ashfaq Mahmood, *Hydro-Diplomacy: Preventing Water War Between Nuclear-Armed Pakistan and India* (Institute of Policy Studies Press, 2018), <https://www.ips.org.pk/hydro-diplomacy-preventing-water-war-nuclear-armed-pakistan-india/>; and Shafqat Kakakhel, "The Indus Waters Treaty: Negotiation, Implementation, Challenges, and Future Prospects", *Pakistan Horizon* 67, no. 1 (January 2014): 43-57, <https://www.jstor.org/stable/23726076>.

<sup>3</sup> Shakil Ahmad Romshoo, "Indus River Basin: Common Concerns and the Roadmap to Resolution", Researchgate, March 2012, [https://www.researchgate.net/publication/236001988\\_Indus\\_River\\_Basin\\_Common\\_Concerns\\_and\\_the\\_Roadmap\\_to\\_Resolution](https://www.researchgate.net/publication/236001988_Indus_River_Basin_Common_Concerns_and_the_Roadmap_to_Resolution).

*The dialogues have produced recommendations for both the Indian and Pakistani governments to consider.*

Neither party has considered broader cooperation concerning the Indus Basin. The only water-related issue included in the “Composite Dialogue” agenda is the disputed Wullar barrage. Nonetheless, from 2010 to 2020, scores of Indian and Pakistani stakeholders, including retired diplomats, water resources officials, climate and water experts, economists and academicians, have participated in nearly half a dozen Track II dialogues funded by external partners and organised by civil society organisations in both countries. The Track II discussions have encompassed a wide range of subjects related to the IRB, including those that were not addressed by the IWT such as climate change and possible areas of broader cooperation. The dialogues have produced recommendations for both the Indian and Pakistani governments to consider.

The significant Track II dialogues include the following:

1. The Stimson Center, Washington DC, in partnership with the Sustainable Development Policy Institute, Islamabad and the Observer Research Foundation, New Delhi.<sup>4</sup>
2. The Centre for Dialogue and Reconciliation, New Delhi, and the Jinnah Institute, Islamabad.<sup>5</sup>
3. The South Asia Center of the Atlantic Council based in Washington DC, in cooperation with several Indian and Pakistani organisations.<sup>6</sup>
4. Report of the Chaophraya Dialogue Task Force on Climate Change produced by the Jinnah Institute and the Australia India Institute.<sup>7</sup>

<sup>4</sup> David Michel, “Connecting the Drops: An Indus Basin Roadmap for Cross-Border Water Research and Policy Coordination”, Stimson, 27 February 2013, <https://www.stimson.org/2013/connecting-drops-indus-basin-roadmap-cross-border-water-research-and-policy-coordination-0/>.

<sup>5</sup> Shakil Ahmad Romshoo, “Indus River Basin: Common Concerns and the Roadmap to Resolution”, Researchgate, March 2012, [https://www.researchgate.net/publication/236001988\\_Indus\\_River\\_Basin\\_Common\\_Concerns\\_and\\_the\\_Roadmap\\_to\\_Resolution](https://www.researchgate.net/publication/236001988_Indus_River_Basin_Common_Concerns_and_the_Roadmap_to_Resolution).

<sup>6</sup> “India-Pakistan Track-II Water Cooperation Dialogue”, Atlantic Council, 30 March 2014, <https://www.atlanticcouncil.org/commentary/event-recap/india-pakistan-track-ii-water-cooperation-dialogue/>.

<sup>7</sup> “Report of the Chaophraya Dialogue Task Force”, Jinnah Institute, 5 October 2017, <https://jinnah-institute.org/publication/report-climate-change-2/>.

Most of the suggestions made during the Track II dialogues were prompted by the challenges facing the IRB, particularly those posed by climate change, as documented in the reports from the Intergovernmental Panel on Climate Change and other reputed climate change research organisations. The dialogues called upon India and Pakistan to include the subject of cooperation in the Indus Basin, especially the detrimental impacts of climate change, into their formal dialogue.

The key recommendations forged by the Track II dialogues include:

1. Joint research studies on the impacts of climate change on water resources, including the HKH glaciers, in collaboration with scientific agencies and institutions in the United States (US), China and Europe with satellite-based remote sensing capacity, to generate and disseminate non-politicised, reliable data on glacial melting trends.
2. Conduct a study to probe the reasons for the diminishing water availability upstream in India, resulting in reduced water flowing into Pakistan.
3. Enhanced preparedness for and management of climate-induced extreme events, including glacial lake outburst floods.
4. Joint monitoring of the HKH glaciers, in collaboration with relevant regional and international agencies, including the International Centre for Integrated Mountain Development (ICIMOD).
5. Studies on water pollution from industrial and agricultural runoff in the catchment areas of the western rivers.
6. Regular and timely exchange of hydrological data concerning dry season flow levels as well as heavy precipitation events for use in, among other purposes, flood control.
7. Cooperation in promoting modern, micro-irrigation methods and technologies for conservation and optimum use of water.

*The dialogues called upon India and Pakistan to include the subject of cooperation in the Indus Basin, especially the detrimental impacts of climate change, into their formal dialogue.*

8. Promotion of water-use efficiency by non-agricultural users.
9. Joint research study evaluating the cumulative environmental impacts of multiple dams and cascades of run-of-river projects on a single river.
10. Increase the knowledge base on monsoon variability trends.
11. Joint studies on the shared Indus aquifer and measures to ensure its sustainability.
12. Study on the imperative of environmentally and ecologically necessary flows in the eastern rivers.
13. Consideration of the appointment of a standing Board of Umpires for swift and timely resolution of disputes, with reference to Annex G of the IWT on the Court of Arbitration. This proposal aims to reduce the heavy cost of mediation and arbitration and ensure speedier resolution of disputes.
14. Creation of a web-based data bank which would serve as a repository of all data links and resources that would be useful for analysts and researchers.

## Recent Developments and the Way Forward

*The Track II dialogues signified recognition of the growing threats to the water security of India and Pakistan.*

The Track II dialogues signified recognition of the growing threats to the water security of India and Pakistan. They underlined a widespread understanding of the climate-water nexus where all the impacts of climate change would adversely affect the supply and quality of freshwater. The discussions forged consensus among influential persons on the urgency of cooperation between India and Pakistan on transboundary waters going beyond the provisions of the IWT. Further, they stressed the need for creating a robust body of knowledge to define the parameters and scope of bilateral cooperation.

There has been no headway in implementing the suggestions formulated by the dialogues, mainly because of the perennially adversarial relations between India and Pakistan. A terrorist attack on an Indian military base in Uri on 18 September 2016 killed 20 Indian military personnel, and the Indian accusation of Pakistan's complicity in it worsened an already fraught relationship. On 27 September 2016, India announced that it would not participate in the South Asian Association for Regional Cooperation (SAARC) summit scheduled to be held in Islamabad in November 2016 and reportedly used its influence with other SAARC members to oppose the holding of the meeting in Pakistan.<sup>8</sup> Since then, India has also sought to reinforce regional cooperation initiatives whose membership does not include Pakistan to supplant the SAARC. India's anti-SAARC moves, combined with the disruptions caused by the COVID-19 pandemic, have paralysed the oldest intergovernmental organisation in South Asia devoted to promoting regional cooperation. The landmark decisions and initiatives adopted by the 16<sup>th</sup> summit hosted by Bhutan in 2010 to mitigate climate change's adverse fallout have remained dormant.<sup>9</sup> The Uri incident also led to downscaling of the high commissions of India and Pakistan and upended all kinds of bilateral contacts, including trade and travel, and "destroyed any hope of resumption of bilateral dialogue".<sup>10</sup>

The Indian government's move in August 2019 to alter the disputed status of the state of Jammu and Kashmir, in violation of the United Nations' (UN) resolutions and the Simla Accord and brutal repression in the Kashmir Valley served to exacerbate Indo-Pak antagonism and perpetuated the severance of all contacts.<sup>11</sup>

*The landmark decisions and initiatives adopted by the 16<sup>th</sup> summit hosted by Bhutan in 2010 to mitigate climate change's adverse fallout have remained dormant.*

<sup>8</sup> Dipanjan Roy Chaudhury, "Narendra Modi will not attend SAARC Summit", The Economic Times, 28 September 2016, <https://economictimes.indiatimes.com/news/politics-and-nation/narendra-modi-will-not-attend-saarc-summit/articleshow/54549784.cms?from=mdr>.

<sup>9</sup> Bishal Thapa, "Thimphu Statement on Climate Change: A mere rhetoric", SAWTEE, <https://www.sawtee.org/publications/Policy-Brief-28.pdf>.

<sup>10</sup> Riaz Mohammad Khan, "Conflict resolution and Crisis Management", Stimson Centre, 2018, <http://crises.stimson.org/conflictresolution/>.

<sup>11</sup> "UN Security Council discusses Kashmir, China urges India and Pakistan to ease tensions", UN News, 16 August 2019, <https://news.un.org/en/story/2019/08/1044401>.

In September 2016, soon after the Uri incident, India announced the suspension of the meetings of the PIC. However, it agreed to the PIC meetings in 2017, 2018 and 2021. The last meeting discussed two Indian hydropower projects – Pakal Dal (capacity: 1,000 megawatts [MW]) and Lower Kalmai (48 MW) on the tributaries of the Chenab River. Pakistan sought additional information concerning the hydropower plants that India had promised to provide. According to a press release by the Indian Ministry of External Affairs on 24 March 2021, the PIC meeting was held in “a cordial manner”, adding that “the two commissioners had reaffirmed their commitment to interact more frequently in order to resolve the issues through bilateral discussions under the Treaty.”<sup>12</sup>

*Clearly, India agreed to the PIC meetings to secure Pakistan’s consent for its pending hydropower projects.*

Clearly, India agreed to the PIC meetings to secure Pakistan’s consent for its pending hydropower projects. The only Track II dialogue process that has survived the tumults underlying Indo-Pak ties since the Uri incident is the Chaophraya Dialogue, the oldest unofficial Indo-Pak conversation convened by the Jinnah Institute and the Australia India Institute. Both institutes had established a Task Force on Climate Change in 2016 and produced a concise report on the impacts of climate change on water, agriculture, food security, cryosphere, energy and wildlife in India and Pakistan; both institutes had advocated for the two countries to adopt concerted remedial actions. Members of the Task Force met most recently in December 2019 and reviewed water security matters related to the effects of climate change. The Atlantic Council, based in Washington DC, is also likely to revive its highly productive initiative on India-Pakistan transboundary waters.

The withdrawal of the US forces from Afghanistan and the subsequent ascendancy of the Taliban have further accentuated Indo-Pak tensions. In this grim situation, the likelihood of easing the impasse, let alone any significant move on the looming water crisis, is difficult to predict. On the bright side, most of the water-related challenges posed by climate change are being addressed by the UN

<sup>12</sup> Press Release of “116th meeting of the India-Pakistan Permanent Indus Commission”, Ministry of External Affairs, Government of India, 24 March 2021, [https://www.mea.gov.in/pressreleases.htm?dtl/33717/116th\\_meeting\\_of\\_the\\_IndiaPakistan\\_Permanent\\_Indus\\_Commission](https://www.mea.gov.in/pressreleases.htm?dtl/33717/116th_meeting_of_the_IndiaPakistan_Permanent_Indus_Commission).

agencies, the World Bank, the Asian Development Bank and several global intergovernmental organisations and institutions. Numerous institutions in the US, Europe, the United Kingdom, China and other developed countries have also been supporting regional initiatives for collaboration on water resources. The ICIMOD has continued to serve as “a neutral platform for data collection, knowledge building, and joint assessment of policy lessons and best practices”.<sup>13</sup>

---

<sup>13</sup> David Mitchell, “Managing the Indus in a Warming World: The Potential for Transboundary Cooperation in Coping with Climate Change”, in *Imagining Indus: Overcoming Water Insecurity in the Indus Basin*, edited by Zafar Adeel and Robert G. Wirsing (Springer International Publishing, Switzerland, 2018).



# China's Ambitious Water Diversion Plans: Options and Implications

*Genevieve Donnellon-May and Hongzhou Zhang*

## Summary

*One of the biggest challenges facing China's future development is water. To optimise the allocation of its limited freshwater resources, China has embarked on the construction of mega engineering projects, notably, the South-North Water Diversion Project (SNWD). As the world's largest water diversion project, it has generated many controversies, both domestically and internationally. This chapter provides a brief overview of the various options for the western route of the SNWD and discusses the competing interests behind different proposals and their potential implications.*

## Introduction

*Despite being one of the top five countries with the largest freshwater resources on a per capita basis, China has been confronted with severe water shortages.*

One of the biggest challenges facing China's future development is water, which must support the country's 1.4 billion people and booming industries. Despite being one of the top five countries with the largest freshwater resources on a per capita basis, China has been confronted with severe water shortages. The shortages are further compounded by a highly uneven spatial distribution and precipitation; the densely populated north suffers from acute water shortages, whereas the south is prone to severe floods. To optimise the allocation of water resources, China has embarked on the construction of mega engineering projects, notably, the SNWD. As the world's largest water diversion project, it has generated much controversy locally and externally. This chapter focuses on the western route of the SNWD and discusses the competing alternatives and their potential implications.

## South-North Water Diversion Project

The origin of the SNWD can be traced back to 1952, when China's President Mao Zedong stated, "The south has plenty of water, the

north much less. If possible, the north should borrow a little.”<sup>1</sup> The project was designed to take water from the country’s flood-prone southern rivers to the dry north through three routes – eastern, middle and western. The eastern route transfers water through Jiangsu to Shandong and Tianjin, and it has been in use since 2013. The middle route, in usage since 2014, diverts water from Hubei province to Beijing and Tianjin. According to the official Chinese state media, the two routes of water diversion have benefited more than 120 million people over the past five years.

The most ambitious and controversial route – the western route – has yet to be built. Recent developments suggest that the construction of the western route could begin in the coming years after a decade of delay. In May 2021, Chinese President Xi Jinping announced that China would press ahead with the world’s largest water diversion project following an inspection tour. As far as plans for the western route are concerned, they can be categorised into more modest ones by the government and some highly ambitious proposals from the public.<sup>2</sup>

*In May 2021, Chinese President Xi Jinping announced that China would press ahead with the world’s largest water diversion project following an inspection tour.*

## Various Plans for the West Route

### Official Route: Linking the Yangtze River and Yellow River

First, an official plan is to connect the Yangtze River and Yellow River across the Qinghai-Tibet plateau. Under this plan, an annual diversion of 17 billion cubic metres (m<sup>3</sup>) of water would flow from the upstream of the Yangtze and its tributaries (Yalong River and Daduhe River) in Sichuan to the Taohe River, a tributary of the Yellow River in Gansu. The water would then flow into the following arid provinces: Qinghai, Gansu, Ningxia, Inner Mongolia, Shaanxi and Shanxi.

<sup>1</sup> “China has built the world’s largest water-diversion project”, *The Economist*, 7 April 2018, <https://www.economist.com/china/2018/04/05/china-has-built-the-worlds-largest-water-diversion-project>.

<sup>2</sup> Zhang Hongzhou and Genevieve Donnellon-May, “To Build or Not to Build: Western route of China’s South-North Water Diversion Project”, China Environment Forum New Security Beat, 12 August 2021, <https://www.newsecuritybeat.org/2021/08/build-build-western-route-chinas-south-north-water-diversion-project/>.

*However, in 2006, the official western route plan was put on hold due to criticism from water experts over the plan's socio-economic consequences.*

This water transfer is massive but notably much more minor than two alternate plans targetting water transfer from the Qinghai-Tibetan plateau. However, in 2006, the official western route plan was put on hold due to criticism from water experts over the plan's socio-economic consequences.

### Shuotian Canal

Aside from the official route, one option is the Shuotian Canal, also known as Grand Western Route. Chinese water expert, Guo Kai, put forward this water diversion proposal in the 1990s. He suggested taking large quantities of water from three major transnational rivers – Yarlung Tsangpo (Brahmaputra), Nu (Salween), and Lancang (Mekong) – that begin in the Qinghai-Tibet Plateau, southwest China. By building a dam in Central Tibet to raise the water level, approximately 200 billion m<sup>3</sup> of water could be diverted through Sichuan into the Yellow River and then through Inner Mongolia to Beijing and Tianjin.<sup>3</sup>

In the 1990s and early 2000s, the proposal received support from many generals, National People's Congress deputies, and members of the Chinese People's Political Consultative Conference.<sup>4</sup> However, like the official western route, the water diversion proposal received strong criticism over its feasibility and ecological and environmental repercussions. For example, academician Wang Hao and former ministers of water resources, Wang Shucheng and Qian Zhengying, all publicly voiced their opposition against the Shuotian Canal.<sup>5</sup>

### Red Flag River

This is a large-scale, long-distance, domestic cross-basin water diversion proposal to alleviate water scarcity in northwest China. Proposed by academician and Tsinghua professor, Wang Hao, who

<sup>3</sup> "Controversial Plan to Tap Tibetan Water", Southern Weekend, translated by Shao Da for China.org.cn, 8 August 2006, <http://www.china.org.cn/english/MATERIAL/177295.htm>.

<sup>4</sup> Support for the Shuotian Canal was given by 118 generals, 208 National People's Congress deputies, and 118 members of the Chinese People's Political Consultative Conference.

<sup>5</sup> Ibid.

leads the S4679 research group, the Red Flag River plan was made public in November 2017. The Red Flag River intends to draw water near the 'Great Bend' of the Yarlung Tsangpo River (Brahmaputra) and from Yigong Zangbo (Yiong Tsangpo) and Palong Zangbo (Parlung Tsangpo) and then flows into the Nu (Salween) River, Lancang (Mekong) River, Jinsha, Yalong River and Dadu river and eventually reaches the Yellow River basin.

The Red Flag River proposes an annual diversion of 60 billion m<sup>3</sup> of water from eight rivers from the Qinghai-Tibetan Plateau, including the upstream of the Brahmaputra, Mekong, and Salween, to Xinjiang and arid northwest China. It will also create approximately 133,333 square kilometres (km<sup>2</sup>) of arable land in Xinjiang and a 150,000 km<sup>2</sup>-200,000 km<sup>2</sup> greenbelt in northwest China, using tunnels, reservoirs, rivers (Hongyan, Mobei and Chunfeng) to divert the water.<sup>6</sup> The proposal's cost is estimated between RMB1 trillion-RMB4 trillion (\$206 billion-\$824 billion), making it more expensive than the Three Gorges Dam and the South-North Water Transfer Project.<sup>7</sup> However, its feasibility has been questioned by academics and geographers.

*The proposal's cost is estimated between RMB1 trillion-RMB4 trillion (\$206 billion-\$824 billion), making it more expensive than the Three Gorges Dam and the South-North Water Transfer Project.*

### Tianhe Project

The Tianhe "Sky River" project is the world's largest weather modification and artificial rain-making system. The project was put forward by scientists from Tsinghua and Qinghai University in 2015, with direct involvement and funding from the Qinghai provincial government, to divert water vapour from Indian monsoons to northern China.<sup>8</sup> It is led by Wang Guangqian, president of Qinghai

<sup>6</sup> Xitao Zhao and Lejun Wei, "青藏高原东南部地貌特征与藏水北调源头的可能线路 – 试评“红旗河工程”构想", "(The Geomorphic Features of Southern Tibetan Plateau and the Source Section's Possible Route of Tibet-to-North Water Transfer: Comment on the Concept of the "Red Flag River" Project)", 地球学报 (Acta Geoscientia Sinica), vol.40, no.2 (2019): pp. 361-374, [http://www.cagsbulletin.com/dqxbcn/ch/reader/view\\_abstract.aspx?flag=1&file\\_no=20190212](http://www.cagsbulletin.com/dqxbcn/ch/reader/view_abstract.aspx?flag=1&file_no=20190212); and Xitao Zhao and Lejun Wei, "我国西部“五江一河”可供跨流域调取的水量究竟有多少? – 二评“红旗河工程”构想"" ("How much water can be transferred across basins in the "Five Rivers and One River" in Western China? – Second Comment on the Concept of "Red Flag River Project")", 地球学报 (Acta Geoscientia Sinica), vol.40, no.3 (2019): pp. 492-506, [https://xueshu.baidu.com/usercenter/paper/show?paperid=1c0u0ar0wt2y0myOf24d06407r035592&site=xueshu\\_se](https://xueshu.baidu.com/usercenter/paper/show?paperid=1c0u0ar0wt2y0myOf24d06407r035592&site=xueshu_se).

<sup>7</sup> Qin-ye Yang, Ke Jing and Jian-hui Xu, "质疑:“红旗河”调水功能的可行性 ("The Query: The Feasibility of the Water Diversion Function of the Red Flag River")", 自然资源学报 (Journal of Natural Resources), vol. 33, no. 5 (2018): pp. 893-898, <http://www.jnr.ac.cn/CN/10.11849/zrzyxb.20180429>.

<sup>8</sup> P. Shuwei, "青海大学校长提出“天河工程”构想 希望推动跨区域空中调水" ("The president of Qinghai University put forward the concept of "Tianhe Project", hoping to promote cross-regional air transfer"), Jie Mian, 11 September 2016, [https://www.jiemian.com/article/847166.html?\\_t=t](https://www.jiemian.com/article/847166.html?_t=t).

University. The project was included as part of Qinghai's 13<sup>th</sup> Five-Year Plan and has received funding from Qinghai University and the Qinghai government's Science and Technology Department. By using glaciogenic cloud seeding and a satellite system, the project aims to direct excess water vapour above the Yangtze River Basin to the origin of the water-scarce Yellow River on the Qinghai-Tibetan Plateau.

*As compared with the eastern and middle routes, the western route has attracted numerous domestic and international attention due to competing domestic interests and its potential implications beyond the Chinese borders.*

The Tianhe project aims to annually create between 5 billion and 10 billion m<sup>3</sup> of rain to reduce water shortages in the Yellow River Basin and other rivers.<sup>9</sup> By 2022, six satellites were expected to be in use in space.<sup>10</sup> As compared with the eastern and middle routes, the western route has attracted numerous domestic and international attention due to competing domestic interests and its potential implications beyond the Chinese borders.

### **National Food Security Concerns and Competing Local Interests**

At the national level, one of the key motivations behind China's west route is to improve the nation's food security.<sup>11</sup> Over the past decades, China increased grain production through an internal spatial fix by increasingly moving grain production to the country's northern provinces. Between 1995 and 2018, grain output in the northern provinces (with the Huai River-Qin Mountains Line as the dividing line) increased by 132.5 million tonnes, representing 87.5 per cent of China's total grain output increase during the same period. In contrast, grain production in the southern provinces merely grew by 18.8 million tonnes. Plentiful water is vital for food to grow; however, the northern provinces have a serious water shortage. The northern provinces (excluding Tibet) have only 16.5 per cent of China's

<sup>9</sup> S Chen, "China needs more water. So it's building a rain-making network three times the size of Spain", *South China Morning Post*, 26 March 2018, <https://www.scmp.com/news/china/society/article/2138866/china-needs-more-water-so-its-building-rain-making-network-three>.

<sup>10</sup> A Shen, "Storm clouds continue to cast shadows over China's Sky River rain-making project", *South China Morning Post*, 12 December 2018, <https://www.scmp.com/news/china/science/article/2177636/storm-clouds-continue-cast-shadows-over-chinas-sky-river-rain>.

<sup>11</sup> "Zhang Zhengbin: Discussion on the strategy of solving China's drought and water shortage and developing regional modern agriculture", *Chinese Academy of Sciences*, 4 January 2008, [https://www.cas.cn/xw/zjsd/200906/t20090608\\_646999.shtml](https://www.cas.cn/xw/zjsd/200906/t20090608_646999.shtml).

freshwater resources, but currently contribute more than 56 per cent of China's total grain production. What is even more astonishing is that three provinces in China's central plain (Henan, Shandong, and Hebei), with merely two per cent of the country's water resources, produced 23 per cent of China's grain. Hence, one of the key motivations of the SNWD is to safeguard the country's food security. In fact, for those advocates of the "Shuotian and Red Flag River", one of their key arguments is that with the vast amount of water transferred from the Brahmaputra River, Mekong and other transboundary rivers, China could create millions of hectares of arable land in the country's dry north, which would enable the country to solve its food problem.<sup>12</sup>

However, as the mega project involves cutting across several parts of China, it is unsurprising that the provincial governments have competing interests regarding the western route. The southern provinces, particularly the Sichuan and Hubei provinces, located upstream of the Yangtze River, strongly oppose the official west route. The reason is simple. For one, diverting waters from these provinces threatens their own water supplies. Droughts have become a common occurrence in some parts of these provinces as each province has its respective water diversion plan. For the other and perhaps more importantly, there are concerns that water diversion will severely undermine the local hydropower sectors. This is especially true for Sichuan, which has the biggest hydropower sector in the country. As a result, the Sichuan government has not only openly resisted the western route but also supported the local scientists in voicing concerns and objections towards the plan. For instance, in 2006, more than 50 scientists in Sichuan contributed to a book, *South-to-North Water Transfer Project Western Route Memorandums*, which raises serious concerns about construction at high altitudes, seismic stability, pollution in the Yangtze, climate change and the potential for reduced river flow to shutter hundreds of downstream hydropower

*The southern provinces, particularly the Sichuan and Hubei provinces, located upstream of the Yangtze River, strongly oppose the official west route.*

<sup>12</sup> "Speeding up the construction of the 'four horizontal and three vertical' backbone water network—the head of the relevant department of the Ministry of Water Resources talks about the follow-up construction of the South-to-North Water Diversion Project", *China News*, 12 December 2020, <https://www.chinanews.com/gn/2020/12-12/9360474.shtml>.

stations. To the opponents, the western route is about saving the Yellow River by destroying the Yangtze River.

*The proposals could also reduce regional inequality between the provinces by boosting the economies of the western provinces.*

The western provinces such as Qinghai, Xinjiang, Gansu, Ningxia Inner Mongolia and Shaanxi, being the major beneficiaries, have been the key supporters of the western route. To these provinces, the western route will bring forth socio-economic development by generating local employment opportunities during the construction phase and providing water for local agricultural and industrial developments. The proposals could also reduce regional inequality between the provinces by boosting the economies of the western provinces. Driven by local economic interests, these western provinces have tried to revive the route by sponsoring research projects. For instance, during the 2020 annual sessions of the Chinese People's Political Consultative Conference (CPPCC), Cui Bo, the CPPCC Chairman of Ningxia, Han Yong, the CPPCC Chairman of Shaanxi, Duojie Hotan, the CPPCC Chairman of Qinghai Province, Nurlan Abdu Manjin, the CPPCC Chairman of Xinjiang, and Zheng Futian, the CPPCC Vice Chairman of Inner Mongolia, jointly submitted a proposal "...on the construction of West route of the South-North Water Transfer Project to provide water resources for Yellow River Basin ecological protection and high-quality development."<sup>13</sup>

Interestingly, given the huge water demand and their thirst for mega projects, the western provinces prefer the more ambitious unofficial western routes, including the Shuotian Canal. Likewise, the Qinghai government has been the key financier of the Tianhe project.

## Regional Implications

In addition to competing local interests, the other key reason for the controversies regarding the western route is the international implications of those various non-official options. In particular,

<sup>13</sup> Fan Wenjie, "五省区全国政协委员为“南水北调西线工程”建言 (Five provinces and regions of the National Committee of the Chinese People's Political Consultative Conference members for the "South-North Water Diversion Project in the West" proposal)", Chinese People's Political Consultative Conference, [http://cppcc.china.com.cn/2020-06/02/content\\_76119129.htm?f=pad&a=true](http://cppcc.china.com.cn/2020-06/02/content_76119129.htm?f=pad&a=true).

the Shuotian Canal and Red Flag River have attracted international attention. To some Indian scholars, China's water ambitions and perceived weaponisation of water resources have caused alarm.<sup>14</sup> For years, India has been worried about China's plans to divert the Brahmaputra River, with many fearing that China will divert water from the Brahmaputra via the western route of the SNWD.<sup>15</sup> This is, however, a misperception. As discussed above, the official plan for the western route links the upstream of the Yangtze River and Yellow River, rather than transferring waters from those transboundary rivers. As far as the Shuotian Canal and the Red Flag River options are concerned, they have not been taken seriously at the central level despite backing from some interest groups and provincial governments in China.

Furthermore, even if China eventually decides to divert water from the 'Great Bend' of the Brahmaputra River, it is doubtful how much it will affect the downstream. Some Indian experts point out that such a massive water diversion project, once completed, could lead to the Brahmaputra River running dry, thus threatening the survival of hundreds of millions downstream. Based on river basin data, it does appear that the potential impacts of Chinese flow diversion could be huge because 50 per cent of the river basin of the Brahmaputra is in Chinese territory. While China has the largest spatial share of the basin, it generates only 14 to 30 per cent of the total basin discharge due to Tibet's climate and low rainfall. Owing to the existence of border disputes in the Indian state of Arunachal Pradesh (South Tibet in China), which also forms part of the river basin for the Brahmaputra River, and the huge difference in the water flow between the dry and monsoon seasons, it is very difficult to have a precise and accurate measurement of China's contribution to total water flows in the Brahmaputra River. Nonetheless, it is generally agreed that China's

*Some Indian experts point out that such a massive water diversion project, once completed, could lead to the Brahmaputra River running dry, thus threatening the survival of hundreds of millions downstream.*

<sup>14</sup> M Singh, "China's weaponization of water", *The Times of India*, 25 April 2020, <https://timesofindia.indiatimes.com/blogs/voices/chinas-weaponisation-of-water/>; and B Chellaney, "China's escalating water war: On top of other asymmetric tactics, Brahmaputra mega-project is a new threat India faces", *The Times of India*, 16 March 2021, <https://timesofindia.indiatimes.com/blogs/toi-edit-page/chinas-escalating-water-war-on-top-of-other-asymmetric-tactics-brahmaputra-mega-project-is-a-new-threat-india-faces/>.

<sup>15</sup> Zhang Hongzhou and Genevieve Donnellon-May, "China's hydropower plan on the Brahmaputra", *The Diplomat*, 1 September 2021, <https://thediplomat.com/2021/09/chinas-hydropower-plan-on-the-brahmaputra/>.



contribution to the total water flows is much smaller, as compared to its share by area of the river basin. Hence, even if the radical Shuotian Canal and Red Flag River are constructed, their actual impact on water flows downstream will be limited.<sup>16</sup>

## Conclusion

*As far as the competing options are concerned, the ecological impacts, technical feasibility and budgetary issues are certainly important deciding factors.*

It remains to be seen whether and when China will construct the western route of the SNWD. As far as the competing options are concerned, the ecological impacts, technical feasibility and budgetary issues are certainly important deciding factors. However, the often overlooked but critical factors include the competing interests among local governments and other interest groups as well as its impacts on China's foreign relations. Nevertheless, the strategic implications of these projects should not be discounted. To some Indian strategists, the ability to manipulate the water flows through hydroprojects at the upstream could provide China with strategic leverage over India. In times of conflict, water could be used as a strategic tool for coercion. Rather than relying on these mega water diversion projects to address the country's water challenges, China should focus more on curbing the rising water demand, improving water use efficiency, tackling water pollution, improving agricultural water irrigation efficiency and undertaking reforms to its agricultural sector.

---

<sup>16</sup> Isabel Hilton, "Diverting the Brahmaputra – Much Ado About Nothing?", *China Water Risk*, 9 February 2012, <https://www.chinawaterrisk.org/opinions/diverting-the-brahmaputra-much-ado-about-nothing/#sthash.LH8Gct8w.x8XL6srX.dpuf>.

## Appendix 1

### About the Authors

**Ms Wini Fred Gurung** is a Research Analyst at the Institute of South Asian Studies (ISAS) in the National University of Singapore. She graduated with a Master's degree in International Relations from the Jawaharlal Nehru University, New Delhi. She holds a Bachelor's degree (with Honours) in Political Science from Jesus and Mary College, University of Delhi.

Prior to joining ISAS, she interned with the Observer Research Foundation where she focused on the India-China relationship. She was also associated with the Temi Tea estate, Government of Sikkim to train the trade union on capacity building and negotiation skills.

**Dr Amit Ranjan** is a Research Fellow at the Institute of South Asian Studies in the National University of Singapore. His research interests include water disputes in South Asia, South Asian politics (India, Bangladesh, the Maldives and Pakistan), Partition of India, India's South Asia policy and India's internal security.

His latest book is *Contested Waters: India's Transboundary River Water Disputes in South Asia* (Routledge, London and New Delhi, 2020). He is also the author of *India-Bangladesh Border Disputes: History and Post-LBA Dynamics* (Springer, Singapore, 2018). He edited the following books: *India in South Asia Challenges and Management* (Springer, Singapore, 2019), *Partition of India: Postcolonial Legacies* (Routledge, London and New Delhi, 2019) and *Water Issues in Himalayan South Asia: Internal Challenges, Disputes and Transboundary Tensions* (Palgrave Macmillan, Singapore, 2019).

Dr Ranjan's papers, review essays and book reviews have been widely published in journals, including *Asian Survey*, *Asian Affairs*, *Asian Ethnicity*, *Asian Journal of Comparative Politics*, *Economic & Political Weekly*, *India Review*, *Indian Journal of Public Administration*, *India Quarterly*, *Journal of Migration Affairs*, *Journal of the Indian Ocean Region*, *Roundtable: The Commonwealth Journal of International Affairs*, *Social Change*, *Studies in Indian Politics*, *Society and Culture in South Asia*, *South Asia Research*, *Journal of Asian Security* and *International Affairs*, *Water History*, and *World Water Policy*. He has also written short pieces for *The Wire*, *The Friday Times*, *The Citizen* and *Prabhat Khabar*.

**Dr Swatahsiddha Sarkar** is an active researcher in the field of social sciences and has a teaching career at the University of North Bengal (NBU) that spans over 15 years. While he began teaching at the Department of Sociology (NBU) as an Assistant Professor in 2004, in 2018, he joined the Centre for Himalayan Studies (NBU) as a professor and is currently the Director of the centre.

Having nurtured a keen interest in Himalayan studies throughout his career, Dr Sarkar has been engaged in Nepal studies in different capacities. Funded by B P Koirala India-Nepal Foundation and Martin Chautari, Nepal, he has executed a research project on 'Fostering Academic and Policy Research Collaboration between India and Nepal and Related Activities (2015-16)'. Dr Sarkar was the recipient of Scholars Exchange Grants (2016-17) under the Indo-Swiss Joint Research Programme funded by the Indian Council of Social Science Research (ICSSR), New Delhi and the University of Lausanne, Switzerland.

Dr Sarkar's monograph, which came out in 2013, is titled *Gorkhaland Movement: Ethnic Conflict and State Response* (Concept Publishing Company Pvt Ltd, New Delhi, 2013), while he also co-edited a volume in 2013, *Ethnicity in India: Issues in Community, Culture and Conflict* (Sarat Book House, West Bengal, 2014). He is now eagerly anticipating his new book, *Contouring South Asian Social Anthropology: Connecting India and Nepal*, to be published by Routledge.

**Dr Sonika Gupta** has an MA, MPhil and PhD in Global Politics & Chinese Studies from Jawaharlal Nehru University, New Delhi. She is currently an Associate Professor in Chinese Studies and Global Politics at the Department of Humanities and Social Sciences, Indian Institute of Technology Madras, Chennai. In 2011, she founded the Indian Institute of Technology Madras China Studies Centre and was its Coordinator from April 2011 to July 2015. Since 2017, she has taught seminar courses as visiting faculty at the Bremen Hochschule, City University of Applied Sciences, Germany, in its international degree programmes in Political Management and East Asian Studies. Currently, Dr Gupta is engaged in research on Tibet and the Tibetan exile community.

Her recent publications in this area include 'Disciplining Statelessness: Fragmentary Outcomes of the Tibetan Rehabilitation Policy in India' in *Asian Studies Review* and 'Frontiers in Flux: Indo-Tibetan Border: 1946-1948' in *India Quarterly* in 2021. She has also published in *Asian Ethnicity*, *Swedish Journal of Anthropology*, *China Report*, *Strategic Analysis* and *International Studies Journals*. Her edited books include *Politics and Cosmopolitanism in the Global Age* (Gupta & Padmanabhan, Routledge, New Delhi, 2015), *Nuclear Stability in Southern Asia* (PR

Chari, Sonika Gupta and Arpit Rajain, Manohar Publisher, Delhi, 2003) and *Human Security in South Asia* (P R Chari and Sonika Gupta, New Delhi: Social Science Press, 2002).

**Major General (Retd) Binoj Basnyat** is a strategic military leader and planner with 35 years in the Nepalese Army and two engagements with the United Nations peacekeeping operations. He represented the Nepali Army and the country in various international meets, capacity building, peace efforts, reintegration, election, governance, the rule of law and humanitarian affairs. He has also headed prestigious military training institutions like the Nepali Army Military Academy, Nepali Army Command and Staff College and Chief Instructor Higher Command and Management Course, Nepali Army War College.

His qualification consists of international and national achievements through various professional schooling within and outside the country. He holds a Master of Philosophy degree in Defence and Strategic Studies, with first class, from the University of Madras, India. He is devotedly involved in advising, writing, editing and participating in intellectual capacity in geopolitics and national security.

**Dr Zafar Nawaz Jaspal** is a Professor at the School of Politics and International Relations, Quaid-I-Azam University, Islamabad, Pakistan, where he teaches various aspects of international political and defence affairs, nuclear/missile proliferation, national security, and Pakistan foreign and strategic affairs. He was the Director of the School from 5 October 2012 to 18 January 2016.

Dr Jaspal, as a guest speaker and visiting lecturer, has delivered and continues to deliver lectures at many professional and training institutions, including the distinguished NATO School, Oberammergau, Germany; NATO Defense College Rome, Italy; Center of Excellence: Defense against Terrorism, Ankara, Turkey; National Security & War Courses of Pakistan's National Defense University, Intelligence Bureau Academy, Command and Staff College Quetta, Air War College, Karachi; and the Foreign Service Academy of the Ministry of Foreign Affairs, Pakistan.

He holds a PhD and MPhil in International Relations and an MA in Political Science. He did advanced post-graduate certificate courses in Peace and Conflict Studies at the European Peace University, Austria; Peace Research, International Relations and Foreign Policy Analysis in Oslo University, Norway. Dr Jaspal is a widely published scholar. He recently authored *India's Surgical Strike Stratagem: Brinkmanship and Responses* (Khursheed Printers, Islamabad, 2019). He regularly contributes to both electronic and print media.

**Dr Zheng Haiqi** is currently a PhD candidate in the School of International Studies in Renmin University of China and a Non-Resident Fellow at the Institute of South Asian Studies (ISAS) in the National University of Singapore. He has also held appointments at think tanks such as Grandview Institution and China Overseas Security Research Institute.

His current research areas include India's ocean governance in the Indian Ocean and China's health governance in the Indo-Pacific region. His publications have appeared in ISAS as well as several Chinese newspapers. During his appointment at ISAS, he also published in peer-reviewed journals such as *East Asian Policy*.

He holds an MA in International Relations from Renmin University of China and a BA in the same research field from Xi'an International Studies University.

**Mr Dipak Gyawali** is a Pragma (Academician) of the Nepal Academy of Science and Technology and former Chair of the non-profit Nepal Water Conservation Foundation. His research focuses on the interface between technology and society and their relation to water and energy issues from the perspectives of Cultural Theory (neo-Durkheimian theory of plural rationalities and new institutionalism). He was Nepal's Minister of Water Resources from 2002 to 2003. He is currently Chair of the private research firm, Inter-Disciplinary Analysts, specialising in quantitative and qualitative social surveys. In the 1990s, he chaired Duryog Nivaran, a South Asian network of scholars and practitioners advocating for an alternative perspective on disaster resilience.

He has been a visiting professor at the United Nations (UN) University in Yokohama as well as a visiting scholar at Oxford and London School of Economics; he has served on the advisory board of Sussex University's Social, Technological and Environmental Pathways to Sustainability Centre, the UN World Water Assessment Program in Perugia and Stockholm International Water Institute's Stockholm World Water Week. He has also served as a member of the panel of experts for the Mekong River Commission, reviewing its basin development plan, and in the World Bank's Inspection Panel on the Vishnugad Pipalkoti hydroelectric project in Uttarakhand, India.

His books include *Water-Food-Energy Nexus* (Routledge Earthscan, United Kingdom, 2019), *Aid, Technology and Development* (Routledge Earthscan, United Kingdom, 2017) and *Rivers, Technology and Society* (Zed Books, London, 2003). He has a special blog on the *Geopolitics of Transboundary Himalayan Waters* for New York University's Abu Dhabi campus in 2020.

**Ambassador Shafqat Kakakhel** is a retired senior Pakistani diplomat and a former high-ranking United Nations (UN) official. His diplomatic assignments included postings in Lebanon, Egypt, Saudi Arabia, India and Kenya and positions at the Ministry of Foreign Affairs in Islamabad. He served as Deputy High Commissioner in New Delhi (1987-1992) and High Commissioner to Kenya and Uganda as well as Permanent Representative to the UN Environment Programme from 1994-1998. Ambassador Kakakhel served as UN Assistant Secretary-General and Deputy Executive Director of the UN Environment Programme (1998-2007). He retired in December 2007 and returned home.

Ambassador Kakakhel's efforts to contribute to sustainable development in Pakistan include membership of the Task Force on Climate Change (2008-2010), the Advisory Committee of the Ministry of Environment, the Board of Governors of the Sustainable Development Policy Institute (SDPI), the Energy Conservation Fund, the Mountain and Glacier Protection Organization (MGPO) and Civil Society Coalition for Climate Change. Ambassador Kakakhel is currently Chairperson of the SDPI Board of Governors and Board of Directors of MGPO.

Ambassador Kakakhel has written and lectured extensively on transboundary rivers in South Asia, Pakistan's water-related challenges, the Indus Waters Treaty and climate change. He has actively participated in Track II dialogues between Pakistan, India and Afghanistan to promote cooperation on water and climate change issues.

**Ms Genevieve Donnellon-May** is a Master's candidate in Water Science, Policy and Management at the University of Oxford, England. She previously worked as a research assistant at the Institute of Water Policy at the Lee Kuan Yew School of Public Policy in the National University of Singapore and at the Asan Institute for Policy Studies in South Korea. Ms Genevieve completed her undergraduate and honours studies at the University of Melbourne, where she received the New Colombo Plan Scholarship, the Melbourne Global Scholars Award and a Chinese Government Scholarship. Her research interests include China, Africa and the food-energy-water nexus.

**Mr Zhang Hongzhou** is a Research Fellow with the China Programme at the S. Rajaratnam School of International Studies in Nanyang Technological University, Singapore. His main research interests include China and regional resources governance (food, water, fisheries, land and energy).

He is an author/editor of three books, including *Securing the 'Rice Bowl': China and Global Food Security* (Palgrave, London, 2018), *China and Transboundary Water Politics in Asia* (Routledge,

London, 2017, with Dr Li Mingjiang) and *China's Global Quest for Resources: Energy, Food and Water* (Routledge, London, 2016, with Dr Wu Fengshi). In addition, he has published in peer-reviewed journals, including *Global Food Security*, *Pacific Review*, *Marine Policy*, *Water International*, *Global Policy*, *Asia Policy*, *Contemporary Southeast Asia*, *Globalizations*, *International Journal of Water Resources Development*, *Copenhagen Journal of Asia Studies*, *Harvard Asia Quarterly*, *ISPI Analysis*, *Southeast Asia Studies* and *Cambridge Journal of China Studies*, among others. He has also published op-ed articles in major newspapers and magazines in the Asia-Pacific, such as the *National Interest*, *South China Morning Post*, *The Interpreter*, *East Asia Forum*, *YaleGlobal Online*, *the Diplomat*, *China Dialogue*, *Asia Global Online*, *Today*, *Lianhe Zaobao*, *the Nation*, *the Jakarta Post*, *IPP Review*, *All China Review*, *Fair Observer* and *RSIS Commentary*. He is frequently interviewed by or featured in news articles in *The New York Times*, *BBC*, *Wall Street Journal*, *The Economist*, *National Geographic*, *WIRED*, *Reuters*, *Channel News Asia*, *Bloomberg*, *The Washington Post*, *CNBC*, *Forbes*, *People's Daily*, *The Straits Times* and *South China Morning Post*, among others.

**INSTITUTE OF SOUTH ASIAN STUDIES**

National University of Singapore  
29 Heng Mui Keng Terrace  
#08-06 (Block B)  
Singapore 119620

Tel (65) 6516 4239  
Fax (65) 6776 7505  
URL [www.isas.nus.edu.sg](http://www.isas.nus.edu.sg)