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# Institutional Determinants of Indo – Nepal Hydro Cooperation Abridged Report

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## About the Report:

his report has been funded by the Australian Government's Department of Foreign Affairs and Trade (DFAT), as part of its Sustainable Development Investment Portfolio (SDIP), being implemented by The Asia Foundation and it's partners. The goal of the SDIP program is "to increase water, food and energy security in South Asia to support climate resilient livelihoods and economic growth, benefiting the poor and vulnerable, particularly women and girls." This research report investigates Indo-Nepal Water Treaties within the larger geopolitical and functional map of the India-Nepal relationship and South Asian dynamics. It constructs a historical narrative investigating the larger political, ideological and bureaucratic underpinnings which animated India-Nepal water relations and gave momentum to certain joint projects. Specifically, the project asks two interconnected questions – what were the larger political, economic and ideological factors which led to the particular outcomes in India-Nepal water relations and how those outcomes, in turn, affected the larger political, economic and ideological concerns in both countries. This paper focusses on cooperative hydrological projects between India and Nepal, which are designed to benefit both sides. Its scope does not include aid projects built with Indian assistance.

# Structural Impediments in Trans-boundary Water Cooperation Case Study of Indo-Nepal Negotiations on the Kosi Basin

### Introduction

One of the great tragedies of India-Nepal relations has been the inability of the two neighbors to significantly exploit the enormous water resources shared by them. Seven decades after the South Asian decolonization, the trans-boundary rivers flowing from Nepal to India remain highly underutilized, despite their immense promise. Nepal alone has been estimated by its government to have a hydropower potential of 83,000 megawatts. In addition to the possibility of enormous energy generation as well as irrigation potential if the rivers are properly harnessed, the inability to do so poses a significant threat to both riparian countries due to risks of flooding, erosion, and devastating ecological damage.

Geography necessitates close cooperation on trans-boundary water resources between India and Nepal. The long-standing political intimacy between them should have ensured it. Moreover, the border between the two countries has been a site for mammoth ambitions even before Indian independence. The first major hydrological project conceived on an India-Nepal trans-boundary river in 1946 was the Kosi High Dam. It was planned to be the world's highest dam at the time - at 750 feet above the bedrock, producing 1.8 million kilowatts, irrigating 3 million acres of land, all the while eradicating floods and malaria. In the following decades, both sides proposed several other major hydrological projects which offered enormous benefits to the people of the region and beyond. Yet, almost 75 years later, the two neighbors have been able to achieve relatively little. To date, they have together produced a total of two barrages, marginal power generation capacity, some irrigation systems, and inadequate flood protection. It is not an overstatement to say that the mechanism for India-Nepal cooperation on water issues appears broken.

<sup>1. &</sup>quot;Nepal's Water Agreements with India," US Embassy in Kathmandu, 1 December 2008, Diplomatic Cable, Public Diplomacy, Wikileaks.

<sup>2. &</sup>quot;Kosi River Development Scheme. Surveys and Investigations of the Kosi Dam project in Nepal", 2(24) NEF/47, MEA, 1947, National Archives of India, New Delhi [Henceforth, NAI].

Much ink has been spilled to understand the cause of this persistent failure of India-Nepal cooperation. The conventional view and explanation for this challenge points towards fundamental mistrust between India and Nepal, due to historical experiences of cooperation between the two countries. In other words, the root of the problem is perception. Nepal fears India will use its asymmetrical power and resources to gain disproportionate advantages for itself in any cooperative project. As one report put it starkly, "Although Nepal is the upstream water source, it feels manipulated by its much larger downstream neighbor, India, outmanoeuvred by India's tough negotiating tactics, and constrained by agreements negotiated initially over 50 years ago." On the other hand, New Delhi feels frustrated over Kathmandu's intransigence to its good-faith initiative. As an official from the Indian Ministry of External Affairs noted, "In bilateral relations between Nepal and India, while superficially Nepal may look weak, her hands are really strong. The capacity of Nepal to obstruct and frustrate Indian objectives is great... Nepal, therefore, is considered by the Governmental organizations to be strong enough to take care of its interests and get a favorable deal from India."

It is undeniable that hydrological cooperation between the two countries is a highly sentimental and politically complex issue, particularly in Nepal. Indeed, this paper will attempt to unpack some of these perceptions in a later section. However, focusing squarely on the problem of mistrust places the risk of obscuring other factors at play. In fact, despite the tensions between the two countries, New Delhi and Kathmandu have over the years sought to cooperate on multiple major projects at different times like Karnali, Pancheshwar, West Rapti, Burhi Gandaki, Kosi High Dam, Kamala, and Bagmati. All of them have been stalled, sometimes for decades. Nevertheless, neither side has formally backed out of any of the projects. All of them are continually reported to be at some stage of negotiation. This suggests a mutual desire to cooperate despite the political sensitivities.

Therefore, this paper asks a key question – why do India-Nepal negotiations take so long? It argues that despite persistent disputes between the riparians, there is a demonstrable scope to gain agreement on the fundamentals of some particular projects. However, it is while trying to agree on the specifics of such projects that the two partners get stuck. If mistrust were the sole driver in this dynamic, it could be overcome through instrumental solutions like specificity in agreements, stronger enforcement, dispute resolution mechanisms, joint consultations, permanent committees, etc. Indeed, this has often been prescribed by analysts on both sides. Ramaswamy Iyer notes that

<sup>3.</sup> See: Dhungel, Dwarika N., and Santa B. Pun, eds. *The Nepal-India water relationship: challenges.* Springer Science & Business Media, 2009; Gyawali, Dipak. "Nepal-India water resource relations." *Power and negotiation* (2002): 129; Untawale, Mukund G. "The political dynamics of functional collaboration: Indo-Nepalese river projects." *Asian Survey* 14.8 (1974): 716-732.

<sup>4. &</sup>quot;Nepal's Water Agreements with India," US Embassy in Kathmandu, 1 December 2008, Diplomatic Cable, Public Diplomacy, Wikileaks.

<sup>5.</sup> For instance see: Verghese, Boobli G., and Ramaswamy R. Iyer, eds. *Harnessing the Eastern Himalayan Rivers: Regional Cooperation in South Asia*. South Asia Books.

<sup>6. &</sup>quot;Political Report No. 7 for the Month of July, 1966", 4 August 1966 in "Monthly Political Reports (other than annual) from Kathmandu", HI/1012(27)/66, 1966, MEA, NAI.

"differences in interpretation and practical operations are quite common in the case of most treaties and they do get resolved through mechanisms envisaged in the treaties themselves." In the last sixty years, the institutional cooperation framework between India and Nepal has become increasingly sophisticated including agreements with precise details, specific deadlines, and complex dispute resolution mechanisms. Since the late 1990s, India and Nepal have also established several joint committees on various aspects of their water relationship. Nevertheless, the problem persists.

The lack of Nepal's bargaining power is the central argument of this paper for persistent delays in negotiations. The structure of the India-Nepal trans-boundary river relationship presented in this paper creates bounded negotiations, consequently resulting in unidirectional bargaining. Nepal is often in a position where it can only make demands but does not have an opportunity to make concessions or side-payments to India. Resultantly, Nepal is left with only one bargaining chip – stalling. This becomes the reason for long delays in negotiations.

Analyses of the India-Nepal hydrological relationship often focus on the three major water-related treaties between the two nations – Kosi (1954), Gandak (1959), and Pancheshwar (1996). However, this paper contends that these treaties and the history surrounding them do not capture several key aspects of the relationship. Rather than examine these discrete events, this paper explores the long-term continuous negotiation between the two riparians spanning several decades. While it considers several aspects of the relationship, it uses the negotiations over the Kosi river as its case study. It treats these negotiations as one uninterrupted process starting in 1946 and continuing to this day. To build this case study, the paper employs a variety of archival sources including documents from the Ministry of External Affairs, Prime Minister's Office, Ministry of Water Resources, Planning Commission, the US State Department, media reports, personal correspondence of leaders such as Jawaharlal Nehru and Rajendra Prasad, minutes of various India-Nepal committee meetings, and the Bihar Assembly.

The rest of the paper is divided into three broad sections. The first lays out the model of the structural dynamics of the India-Nepal hydrological relationship. The second offers the long history of India-Nepal negotiations over Kosi spanning 73 years as a case study. Finally, the paper offers its conclusions and recommendations.

I1993 Iyer, Ramaswamy R. "Conflict-resolution: Three river treaties." Economic and Political Weekly (1999): 1509-1518.

# I. Structural Dynamics of India-Nepal Trans-Boundary River Relationship

The puzzle of this paper appears straightforward. Consider an India-Nepal trans-boundary hydrological project of mutual benefit that both riparians have committed to in principle. Ideally, both sides would enter a period of negotiation on the specifics of the project, resulting in an agreement and a coordination body which will oversee the implementation of the said project. However, in the case of India and Nepal, this phase is fraught with delays that can sometimes last for decades. Moreover, sometimes even an agreement does not result in the conclusion of negotiations. At different times, both sides have sought to revise the agreement they have just concluded. It is these persistent delays that ensure the project never gets off the ground even when both sides desire it so. Why should this be the case?

To better understand this problem, this paper attempts to capture the structural dynamics of the India-Nepal trans-boundary river relationship. It is within the larger ambit of this relationship that both sides negotiate. To holistically explain it, the paper suggests a multi-layered model which seeks to include the overarching political economy of the relationship. Drawing from the long history of India-Nepal negotiations, this model identifies repeating patterns that can point to the causes of long-term delays. This model has three main components. First, the overarching framework of the relationship informs the overall behavior of the two countries. Within this framework, both sides agree to set a particular agenda i.e. an agreement to negotiate on a particular project. Finally, the two parties go through several iterations of negotiation cycles on the said project which may last for decades.

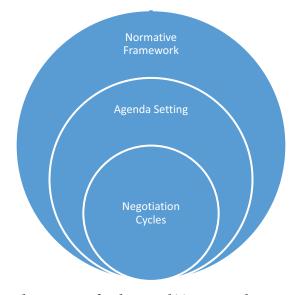


Figure: Structural Dynamics of India-Nepal Trans-Boundary River Relationship

#### The Overarching Framework

Over the years, the two neighbors have developed a respective set of unarticulated norms and practices that govern their behavior with each other in their trans-boundary river relationship. It is important to note that most of these norms and practices emanate from India's policies and choices. This is largely due to the enormous power asymmetry that New Delhi enjoys with Kathmandu, allowing it to politically set the tone of their relationship. There are a few key aspects of this framework that are important to bear in mind:

- 1. **Reluctance to Employ Coercion:** The India-Nepal relationship not only suffers from an extreme power imbalance, but New Delhi in the past, has also been willing to employ its superior position to coerce Kathmandu on various issues. The most recent instance of this is the 2015 economic blockade of the smaller country which created widespread scarcity. However, on the question of water-related issues, India has historically been reluctant to employ naked coercive tools to force Nepal's hand. This is most likely because such issues are of lower significance to New Delhi and do not warrant excessive measures.
- 2. **Respecting Nepal's Sovereignty:** Aware of Nepal's political sensitivities, India is often circumspect to physically carrying out any hydrological activity within its neighbor's territory without its express consent. Excepting the famous instance of the Tanakpur dispute, New Delhi has historically been reluctant in appearing to violate Nepal's sovereignty by construction or other activities, even when it believes it has legal right to do so.
- 3. **No Third-Party Mediation:** Largely due to the Indian stance, the hydrological relationship between the two neighbors does not allow for any third-party arbitration of their disputes. Historically, neither side has attempted to approach the International Court or raise its concerns in any multilateral forum like the UN or SAARC. This reluctance to allow for third-party mediation likely emerges from India's experience of international mediation in the Kashmir dispute.
- 4. **Weakened Enforcement:** The above three factors combined result in a weakened enforcement of any agreement reached between the two sides. Since India is neither willing to employ coercion nor use an international forum to address its complaints, it is often unable to enforce any arrangement without willing cooperation of Nepal. Similarly, Kathmandu is often left with no mechanism to force New Delhi to keep up with its side of the bargain without the latter's desire to do so.
- 5. **Possibility of Renegotiation:** Given this weakened enforcement as a feature of India-Nepal hydrological relationship, it becomes possible for either side to renege from the terms

<sup>8. &</sup>quot;Nepal blockade: Six ways it affects the country", 12 December 2015, BBC.

of the previous agreement and seek revisions. Thus, the door for renegotiation remains open even after an agreement has been reached.

- 6. **No Multilateralism:** India has traditionally eschewed any multilateral framework for tackling trans-boundary water-related issues even though the Eastern Himalayan rivers are shared between multiple riparians. Since the 1970s, Nepal and Bangladesh have been attempting to bring India into a trilateral dialogue over the Gangetic Basin. However, New Delhi has resisted all attempts. This is likely because New Delhi feels that dealing with various riparians bilaterally makes its position stronger, given its unique geographical position.
- 7. **No Issue-Linkages:** Historically, India has also been resistant to the idea of issue-linkages i.e. linking its water-related negotiations with other aspects of the India-Nepal relationship. For instance, when India and Nepal in 1971 were locked in a particularly contentious negotiation over the revision of their Trade and Transit treaty, Kathmandu offered to make concessions on the Kosi Project in exchange for concessions in the treaty revisions. However, New Delhi flatly refused. Even within the river relationship, India prefers to keep its negotiations over each project separate from the other.
- 8. **No Royalties:** India has consistently refused to accept the idea of paying royalties to Nepal for the usage of water, although this has been a persistent Nepalese demand since 1946. 

  Indian policy on the issue has been informed by a principle that flowing water does not belong to any riparian. Additionally, it is also concerned that should it accede to the Nepalese demand, it may have to make similar arrangements with other neighbors.
- 9. **Dampened Effect of Diplomatic Downturns:** Over the years, India and Nepal have gone through several ups and downs in their relationship. There have been multiple periods of extreme tensions between the two neighbors. These diplomatic downturns are often a contributing factor leading to delays in negotiations. However, it is important to note that even high levels of strain on the political relationship have only a limited impact on the ongoing water-related engagement between the two countries. For instance, when the political relationship was severely strained between the two countries in the early 1960s, India continued to construct the Trishuli hydropower project, which it had given to Nepal as aid (however, New Delhi did not discuss new aid or cooperation projects until political relationship was stabilized). Similarly, when India imposed an economic blockade on Nepal in 1989-90, bilateral discussions on the Karnali project continued informally. <sup>12</sup>

<sup>9. &</sup>quot;Nepal-Bangladesh Joint Economic Commission Meeting", US Embassy in Dhaka, 26 October 1978, Diplomatic Cable, Public Diplomacy, Wikileaks.

<sup>10. &</sup>quot;Political Reports Other than Annual", 1971, MEA NAI.

<sup>11. &</sup>quot;Kosi River Development Scheme: Surveys and Investigations of the Kosi Dam Project in Nepal", File 791-CA 1946, External Affairs Dept, CA Branch, NAI.

<sup>12. &</sup>quot;Karnali Preparation Project – Phase I", Report No. 11013, 7 August 1992, The World Bank.

#### Agenda Setting

Both sides attempt to set agendas of their preference within this overarching framework. This is to say that India and Nepal propose particular hydrological projects to gain in-principle agreement from the other side so that negotiations can begin. Typically, a project is proposed by a riparian because of its internal requirements. For instance, the Kosi and Gandak projects were conceived by India in the late 1940s primarily to control the flooding problem in North Bihar. The Karnali hydropower project was suggested by Nepal in the early 1960s as the nation sought to tap its natural resources for economic development. The proposing country then seeks concurrence from the other to get the project on the agenda. To be sure, the proposal and the in-principle agreement is followed by a period of investigation, feasibility study, and planning. This period can be long, sometimes spanning decades. Both sides often use this period as part of the negotiations. Each side can use stalling or evading tactics to delay this preparatory phase to gain greater concessions.

The in-principle agreement is primarily given for two reasons. Either the riparian expects to reap significant benefits from the project or due to political expediency. It is important to note that historically, India has been far more successful in influencing the process of agenda-setting than Nepal. In other words, New Delhi can get Kathmandu to begin negotiations on its proposed projects more often. This is largely due to the asymmetric power relations between the two nations. Given its resources and institutional capacity, India enjoys the power to go-it-alone. In theory, it can implement its desired projects on its own should Nepal consent. On the other hand, Nepal is dependent upon India for the execution of its desired projects on several fronts. Lacking resources, Kathmandu requires support from either India or a third party to execute any major projects. Moreover, in the case of major hydropower projects, India is also the only power market available to Nepal which can buy enough electricity to financially justify the project. For instance, when Nepal first attempted to raise support for its Karnali project from sources other than India in 1962, it discovered the constraints of such an approach. As the Indian Embassy noted, "The Nepalese authorities who last year somewhat triumphantly signed an agreement with the UN Special Fund, without consultation with the Government of India, for a pre-investment survey of the Karnali basin, had come to realize that close cooperation with Indian authorities was essential not only for the data required for the survey but also for the marketing of the power that may eventually be produced."13

Counter-intuitively, this disproportionate influence of the agenda-setting process combined with the overarching framework of India-Nepal hydrological relationship ends up working against India's aims. This is because it creates a situation where Nepal's ability to manoeuvre becomes bound peculiarly. Within the agenda set by India and backed by its go-it-alone power, Nepal has little to contribute other than its consent as an upper riparian. Once this consent is given at the agenda-

<sup>13. &</sup>quot;Monthly Political Report No. 3 for 1963", 16 April 1963 in "Political Reports (Other than Annual) from Kathmandu, 1963, HI/1012(27)/63, MEA, NAI.

setting stage, there is little else it can offer which would be significant for India in a bargaining process. Accordingly, Nepal is often the one making demands during the negotiations that India must satisfy. This creates a unidirectional bargaining process where it seems as if the former is constantly asking for more while the latter must always give. At the same time, since the agenda has been set by India, it often appears as if India has more to lose from delays in the project. Moreover, the given constraints of the relationship framework create space for Nepal to engage in delaying tactics as a bargaining tool. It would be unfair to say that it is always Nepal stalling the negotiations. However, as we will see, it is a common enough pattern to be recognizable.

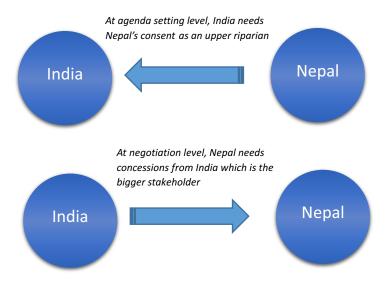


Figure 2: Unidirectional Bargaining of India and Nepal

#### Negotiation Cycles

This dynamic sets the possibility of repeated negotiating cycles which result in persistent delays. In simplified terms, these cycles can be understood in the following manner. At some point during the negotiations, Nepal issues a new demand or pursues an old demand with renewed determination. India refuses to concede. Nepal employs stalling tactics, having no other viable strategy. Using its advantageous position as an upper riparian, Nepal can do so in many ways. For instance, it can delay permitting entry to Indian engineers, delay necessary land acquisitions and transfers, nit-pick technical details, demand unnecessary clarifications and sometimes, simply not respond to correspondence. This results in a stalled project. Given the normative constraints on both parties, it becomes impossible to move forward without Nepal's active consent and participation. This can often lead to years of delay as both parties remain deadlocked in negotiations.

At some point, India is faced with a new external pressure to move forward with the project. The pressure usually comes from one of two sources. Either India faces a renewed pressure from its

domestic constituency - after all, the projects proposed by India are meant to serve its interests. These interests sometimes assert themselves, creating new urgency to move the project forward. Another source of pressure can be diplomatic. In some cases, India needs to reset its relationship with Nepal after a particular period of strain. In such a situation, conceding to a sticky negotiation can be presented as a gesture of goodwill to appease Nepal. Regardless of the reason, the cycle is only broken after India concedes. At this point, negotiations resume until a new demand is tabled, starting the cycle all over again. These cycles can often last for years, sometimes decades, thus resulting in interminable delays of project implementation.

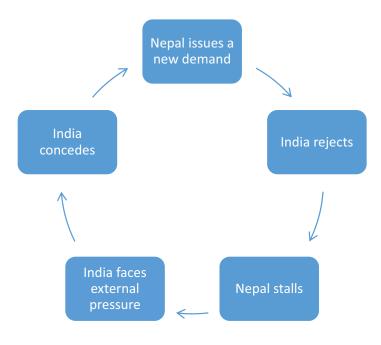


Figure 3: Negotiation Cycle

## II. The Kosi Case Study

To understand how the structural dynamics of the India-Nepal hydrological relationship plays out in practice, one needs to take a detailed look at the history of interaction between the two countries on a particular issue. In this section, the case study of 73 years of India-Nepal negotiations on the Kosi River is presented.

#### Ecological Background

Next only to Indus and Brahmaputra, Kosi is the third largest of the Himalayan rivers. One of the most dynamic river systems in the world, Kosi originates from the Tibetan Himalayas. Some of its tributaries start from glaciers around world-famous peaks like Everest and Kangchenjunga. Seven major rivers feeding into Kosi merge into three. These three – Arun, Sun Kosi, and Tamur – meet in Tribeni to form Kosi. The river debouches into the plains after passing through the long and narrow Chatra Gorge around a place called Barakshetra in Nepal. It then travels through Southern Nepal and North Bihar, draining 60,000 sq. km of area before merging into the Ganges. In total, it travels through a distance of 736 km. As we will see, this geography is important to understand because of the influence it has on the hydrological options available to engineers and the nature of the India-Nepal negotiations.

Floods in Kosi are a regular phenomenon in the lower Terai region of Nepal and North Bihar. For centuries, these floods have been devastating and awe-inspiring to witness. Sometimes, the river may rise to over 30 feet within 24 hours. J Inglis, an adventurer from New Zealand travelling in Bihar in 1888, wrote: "when swollen by the melting of the snows or by the annual rains, the river overflows its banks, and at such times presents the appearance of a broad swiftly-flowing sea, for its breadth from bank to bank is often ten and in some places nearly twenty miles across... [The river's] streams seem to run at random over this deltaic plain, diverging here, re-uniting there, forming a wide bend in one place, and cutting directly through the country sandy soil in another. The face of the country is split up into an infinitude of islands." <sup>15</sup>

Appearing in some of the most densely populated regions of the state, these floods had earned the river the infamous moniker "the sorrow of Bihar" by the turn of the twentieth century. Not only did they annually affect hundreds of thousands of people and cause enormous damage, they brought a host of other problems with them. The heavy silt of the river washed over wells and other water

<sup>14.</sup> Jain, Vikrant et al. "The Dynamic Kosi River and Its Tributaries" in Singh, Dhruv Sen, ed. *The Indian Rivers: Scientific and Socio-economic Aspects*. Springer, 2017.

<sup>15.</sup> Inglis, James. Tent Life in Tigerland: With which is Incorporated Sport and Work on the Nepaul Frontier, Being Twelve Year's Sporting Reminiscences of a Pioneer Planter in an Indian Frontier District. A. Hutchison and Son, 1888.

sources of the area making it undrinkable. The destruction of crops caused food shortages. As water levels receded, malaria and cholera invariably followed. The silt created and swept away islands within hours, making navigation impossible.

To make matters worse, Kosi has a peculiar feature that makes it even more dangerous – it shifts course at an incredibly fast pace. In the last 250 years, the river has laterally shifted westwards by almost 120 km. Its average frequency of channel movement is 24 years, one of the fastest in the world. In comparison, the Mississippi river shifts its course only once every 1400 years. Kosi constantly creates new channels, with some appearing within a matter of hours. All it needs is a small spill into a new drainage point near a channel bend. Soon, the river starts pushing greater amounts of water into the spill and in a very short time, what was previously a small surface drain becomes an angry, turbulent flood flowing with the ceaseless gurgling swish so typical of the Kosi where the scour is occurring. The megafan created by Kosi spreads across North Bihar and lower Terai, with its apex at the Chatra Gorge from where Kosi emerges after its tributaries meet. In other words, Kosi has been shifting its course like a pendulum for centuries with the mouth of the gorge as its pivot. While research on the cause of Kosi's rapid migration is still ongoing, the common explanation offered is the enormous amount of silt carried by the river which keeps choking off existing channels and forcing water into new ones.

For the victims of Kosi, this constant migration of the river has meant a perennial sword of Damocles over their heads. None can predict when the river might move away from its existing course, bringing enormous floods to an entirely different area. Unsuspecting residents and unprepared administration of such an area can do little but suffer helplessly. Writing in 1953, Laliteshwar Mullick painted a poignant picture of such a victim: "think about the unfortunate whose entire house has been washed away by the river. The poor wretch would move to a 'safe' area to build a new hut. Even before it is ready, the 'safe' area would be flooded as well, destroying the new hut yet again." Worse still, the Kosi's floodwater subsoil damage creates lasting wastelands. As the river shifts course, the area of its damage continues to expand.

#### 1946-54: Conceiving the Project

While the discussion to tame Kosi was an ongoing process for several years, it received a fresh impetus in late 1945 when the Central government of India decided to get directly involved. During the Second World War, the Central government began building hydrological bureaucracy of its own

<sup>16.</sup> Jain, "The Dynamic Kosi River and Its Tributaries", 2017.

<sup>17. &</sup>quot;Report on Factors Affecting the Westerly Movement of the Kosi River with suggestions for further investigations", 1941 in "Scheme for Development of Kosi River in Nepal", External Affairs Department, CA Branch, 1945, FN. 485.CA (Secret), National Archives of India, New Delhi [Henceforth, NAI].

<sup>18.</sup> For instance see: Wells, Neil A., and John A. Dorr Jr. "Shifting of the Kosi river, northern India." Geology 15.3 (1987): 204-207.

<sup>19.</sup> Mullick, Laliteshwar. Kosi. Siddharth-Panchayat Press: 1953 [in hindi, above quote translated by author].

in form of the Central Waterways, Irrigation and Navigation Commission (CWINC). Its Chairman, AN Khosla<sup>20</sup> was assigned the task of formulating a plan to tackle the Kosi challenge. At the time, Khosla had no access to contour maps or other hydrological data on the river. Yet within a week, he developed a highly ambitious plan to build the world's highest dam at the time - at 750 feet above the bedrock, producing 1.8 million kilowatts, irrigating 3 million acres of land. Soon thereafter, Khosla visited the river for a preliminary survey and while on his visit, he met with the Nepal leadership at the time to discuss the plan.

In his meetings with the King and the cabinet of the Rana regime in May 1946, Khosla was able to explain his plan and point out the potential advantages for Nepal. He explained that India hoped to get Nepal's approval for the construction of the dam and was willing to bear the entire cost of the project. Nepal could draw electricity and irrigation benefits from the project, provided it put up part of the capital. The Nepal government appeared interested in the project, although it had two major concerns - "independence complex and money," as Khosla noted in his report. These two concerns - sovereignty and adequate benefits for Nepal - would continue to be the dominant concerns in Nepalese thinking in the decades to come. The meeting concluded with an approval by the Nepalese government for Indian engineers to investigate the project within Nepal territory, along with an inprinciple agreement to allow its eventual construction. Bijaya Shamsher, the President of the Industrial Board, drew up a list of requirements by Nepal for the future draft of an India-Nepal agreement. Many of these would eventually be included in the final Kosi Treaty of 1954. It is significant to note that while commentators often point out the Nepal government's lack of necessary tough negotiating skills to deal with India, the Nepalese interlocutors appear sophisticated negotiators even in 1946. Their stated requirements not only drew upon their previous experiences of the India-Nepal relationship but also knowledge of trans-boundary hydrological agreements that British-India had concluded with other princely states in the subcontinent.<sup>21</sup>

While Indian surveyors studied the Kosi problem (eventually more than a thousand of them would visit Nepal), Kathmandu's interest in the project continued. Even the collapse of the Rana rule after a prolonged crisis in 1950 did not dampen it. In 1951, Nepal agreed to contribute Rs. 2 crores of its own money into the project. However, within India, the project plan was appearing to be a challenge. The plan for the Kosi High Dam at the Chatra Gorge was finalized in 1950. It estimated the cost of the project as Rs. 117 crores, a massive undertaking for the nascent independent India. The Indian government appointed the SC Majumdar committee to explore other options. An alternative plan to build a dam at Belka in Nepal was proposed in 1953. However, this plan was only a temporary solution, likely to be silted up with 17 years. At the price tag of Rs. 55.5 crores, even this

<sup>20.</sup> AN Khosla - Oral History Transcript, 22 March 1973, No. 143, Nehru Memorial Museum and Library.

<sup>21. &</sup>quot;Kosi River Development Scheme: Surveys and Investigations of the Kosi Dam Project in Nepal", File 791-CA 1946, External Affairs Dept, CA Branch, NAI.

<sup>22. 8</sup> August 1951 (Fortnightly Summary from 16th to 31st July, 1951) in "Fortnightly Reports from Nepal", MEA, Research and Intelligence Branch, 57-R&I/51, 1951, MEA, NAI.

<sup>23. &</sup>quot;Question: Implementation of the Kosi Project", 27 April 1953, Bihar Legislative Assembly Debates, Volume 2.

didn't seem appealing to the government.<sup>24</sup> Finally, the Majumdar committee developed a plan to build a small barrage on the India-Nepal border at Hanumannagar and a series of embankments in Bihar as flood protection. While recognizing that this solution was merely temporary, it met the government's approval at Rs. 35 crores of estimated cost.

Discussions with Nepal on the Kosi project had been ongoing for many years. The two governments sought to reach an agreement on the project after the plan had been finalized. In April 1954, the agreement was negotiated in Kathmandu for over four days. India agreed to construct the project and pay for its entire cost. Nepal was promised 50% of the 20 megawatts of electricity to be generated by the project, as well as future technical assistance in constructing irrigation systems on Nepal's side.

At the time, both sides saw the project capable of bringing great benefit to Nepal. Along with the electricity share of Nepal, it was also seen as a vehicle of enormous investments. In July 1954, the Indian Ambassador in Kathmandu, BK Gokhale declared that "I have no hesitation in saying that this project, when completed, will be our biggest single contribution to the prosperity of Nepal." In a press conference, the Nepalese Prime Minister MP Koirala explained that not only would the Kosi project bring benefits for his country, India had also offered separate assistance of Rs. 3 crores, which Nepal was utilizing to build the Trisuli hydropower project. In the meeting where the Kosi Treaty was negotiated, India also offered to offer support in broadening Nepal's narrow-gauge railways and gave Rs 50 lakh for minor irrigation projects. This larger context of Indian aid at the time helps to shed light on the enormous agenda-setting power New Delhi enjoys when it wishes to use it.

#### 1954-1959: Rise of Anti-India Sentiment

Unfortunately, the Kosi Treaty of April 1954 coincided with a particularly contentious period of Nepalese internal politics. Politics in Kathmandu had been unstable since the collapse of the Rana regime in 1950. In 1954, it took a particularly dramatic turn after the split between the Koirala brothers, who were the leading politicians in the country at the time. MP Koirala became the Prime Minister, while BP Koirala was kept out of the government and had become a fierce opponent of his brother's rule. One of his ways to rally support for his party was to rouse extreme nationalist sentiments in the public, especially by portraying India as the enemy.

<sup>24.</sup> Journal Entry in Choudhary, Valmiki, ed. *Dr. Rajendra Prasad: correspondence and select documents.* Vol. 15. Allied Publishers, 1987.

<sup>25. &</sup>quot;Annual Report on Nepal for 1954", 3(45) R&I/55, 1955, MEA, NAI.

<sup>26. &</sup>quot;Press Interview of the Nepalese Prime Minister MP Koirala", 3 June 1954, Kathmandu, Bhasin, Avatar Singh (ed.), Nepal-India/Nepal-China Relations, Vol I, Geetika Publishers, 2005, pp.340-341.

<sup>27. 9</sup> May 1954 ("Summary No.4 for the period 1st April to 30th April 1954) in "Monthly Summaries from the Ambassador of India in Nepal", MEA, NEF Section, N/54/1391/3, 1954, NAI.

The Kosi Treaty proved to be a potent target of this effort. The Indian Embassy reported, "The hand of the Nepali Congress, which spares no opportunity to malign the Government and to discredit India, can easily be discerned in the latest outburst of propaganda against the Kosi project. The Nepali Congress propaganda machine has accused MP Koirala's Government of bartering Nepal's sovereignty by yielding the administration of the barrage in Nepal territory to India. It is said that a situation similar to that in the Sue Canal Zone has been created; that India will no doubt station her troops in Nepal territory to protect the barrage and that Nepal will find herself in the same predicament as Egypt vis-à-vis the British." Similarly, the Indian intelligence noted that in some statements, BP Koirala "regarded the Kosi project as an outrage on Nepal on the lines of the privileges Japan obtained from China in Manchuria." India believed most of these statements to be posturing. Indeed, during this period Koirala was also secretly courting Indian political support. However, the propaganda against the Kosi project proved to be immensely effective and made a lasting impression on some sections of the Nepalese public. By the end of the decade, the Kosi project was dubbed by the Indian Ministry of External Affairs as the "bete noire" of Nepalese politics.

Ironically, BP Koirala's actions came to haunt him when he became the Prime Minister in 1959 and signed another treaty with India to construct a similar project on the Gandak river. It was now he who was accused of betraying the country and bartering Nepal's sovereignty by his opponents. His principal opponent, Tanka Prasad Acharya started a campaign to agitate against the treaty. As an instance of bad timing, the signing of the Gandak Treaty in April 1959 was shortly followed by laying of the foundation stone for the Kosi barrage in Hanumanagar in June 1959. The event cemented anti-Indian suspicion within Nepalese minds and once again tagged the Kosi project.

It is important to note that the Kosi and Gandak treaties were not the only victims of anti-India sentiment. At the time, practically every aspect of the India-Nepal relationship was seen as a plot to erode Nepal's sovereignty. All of the Indian aid projects in Nepal came under fire. Even an expedition from India to climb Mount Everest at the time of signing the Gandak treaty was rumored to be a plot by the Indian Military to survey the area. However, what made the Kosi and Gandak treaties unique was their lasting nature. Unlike aid projects and other India-Nepal engagements - which came to an end and were soon forgotten - the Kosi and Gandak projects persist to this day.

#### 1959-1966: Demands for Revision

In contrast to the political propaganda and public posturing by the leaders, the Nepal government did not formally complain about the treaty throughout the 1950s. The Kosi Treaty had envisioned

<sup>28.</sup> Ibid.

<sup>29. &</sup>quot;Anti-Indian Propaganda and Counteract Propaganda in Nepal – 1955", Ministry of External Affairs, 1955, F.37(5)-NEF/55 Secret, NAI.

the creation of a Kosi Coordination Committee between India and Nepal to resolve any disputes. The committee was chaired by the sitting Nepalese Prime Minister. The committee met until 1964 when the work on the barrage was completed.

From 1954 to 1959, India constructed embankments in Bihar on the Kosi River. It was only in 1959 that the work on the Nepal side began. At the same time, Kathmandu first began articulating new needs from the Kosi project. The Nepalese first broached the subject of greater assistance from India when the Indian Prime Minister, Jawaharlal Nehru visited Nepal for the foundation laying ceremony of the Kosi project. Soon thereafter, BP Koirala wrote to Nehru, requesting an additional canal system for Nepal from the Kosi project called the Chatra Canal. Nehru agreed and promised Rs 4 crore for the canal's construction. This represented an addition of nearly 30% to the aid of Rs. 14 crores that India had already promised to Nepal for its second Five Year Plan. With a plan to irrigate 67,000 hectares, the Chatra Canal promised to be the largest irrigation project in Nepal by far, with an irrigation area twice the size of the combined existing irrigated area in the country in 1961.

Unfortunately, before the Chatra Canal agreement could be finalized, Nepal suffered an internal coup leading to the removal of BP Koirala and the capture of power by the Nepalese King. The event precipitated a dramatic downturn in the India-Nepal relationship, given India's continued support for democracy in the country. Threatened by possible Indian interference, the King took a hard-line stance. As relations increasingly turned icy, the King even began partaking in conspiracy theories of a potential Indian invasion. For the first time since 1950, the Nepal government began endorsing anti-India propaganda.

It was only after the 1962 Sino-India war that both sides began to look for a way to reset the relationship. After the war, India sought to garner support from its neighboring countries, while Nepal - concerned about Chinese aggression - also desired a revival of the India-Nepal link. <sup>33</sup> It was with the arrival of Prime Minister Lal Bahadur Shastri that a serious attempt was made to thaw the relationship once again. As one of several initiatives undertaken by him, the Chatra Canal agreement was finally signed in 1964, with work beginning immediately thereafter. The canal construction would suffer usual delays and finally be handed over to the Nepalese in 1975. Unfortunately, since the barrage had never solved the silt problem, the canal performed at a subpar level at the time of handover. Nepal had to immediately seek support from the World Bank to refurbish the canal.

During the cooling-off period in the India-Nepal relationship, work on several Indian-aided projects in Nepal continued. Similarly, the Kosi barrage was constructed in 1964. At the same time,

<sup>30. &</sup>quot;BP Koirala to Nehru", 2 August 1959, Sarvepalli Gopal (ed.). Selected Works of Javaharlal Nehru. Vol. 51. Oxford University Press, 2014. p. 607 [Henceforth SWJN + Vol #].

<sup>31. &</sup>quot;To BP Koirala: Aid to Nepal", 28 January 1960, SWJN Vol 57, p. 380.

<sup>32. &</sup>quot;Agricultural Sector Survey of Nepal: The General Report Volume II" 20 Decembers 1974, World Bank.

<sup>33.</sup> Rose, Leo E. "Nepal: The quiet monarchy." Asian Survey (1964): 723-728.

India constructed the Eastern Kosi Canal on its side of the border bringing enormous benefit to the people of Bihar. As the next step, India planned to construct the Western Kosi Canal. The project was approved by the Planning Commission in 1962 with the outlay of Rs 13 crores.

However, the Western Kosi Canal required construction inside a few miles of Nepalese territory. Accordingly, it required Kathmandu's consent and support in acquiring land. Nepal, while never formally refusing India, continued to delay the matter. It even allowed Shastri to lay the foundation stone for the canal in a ceremony in 1965 but continued its stalling tactics. Indian officials noted, "The Nepalese agreement to the construction of the Western Kosi Canal has been pending for a long time and India was meeting unsuspectedly stiff yet imprecise resistance from the Nepalese side. The Nepalese were unwilling to grant permission pending leisurely consideration of the revision of the basic provisions of the Kosi Project Agreement, together with an overall review of national policy on the utilization of water resources of rivers flowing through Nepal. The delay was most exasperating to India." In the meantime, Nepal demanded a revision of the Kosi Treaty particularly on the issue of Nepal's water-drawing rights and lease arrangements for the land. It was only after Prime Minister Indira Gandhi came to power and attempted a new foreign policy with the neighborhood that the Nepalese demand was conceded. In 1966, India and Nepal entered the Revised Kosi Treaty.

#### 1966-79: Demand for Side-Payments

While India expected the issue of the Western Kosi Canal to be settled, Nepal continued to delay the acquisition of land. This became a cause of consternation for India given the enormous pressure from Bihar which continued to build up throughout the decade. In 1971, Bhogendra Jha, a Member of Parliament from Bihar declared "in the last 16 years, the work on the project has been inaugurated thrice but has been put off for one reason or another." Leaders from the state regularly wrote to the Prime Minister demanding action. Frustrated, the Indian Ministry of External Affairs finally decided in 1970 that "we may inform the Nepal Government that if they are unable to grant us formal concurrence on the Western Kosi Canal within a specified date, we shall have to abandon that part of the project which involved Nepal and make other arrangements through our own territory."

During this time, Nepal raised a new demand for support in constructing other irrigation systems within its territory. Finally, in 1971, India and Nepal reached an agreement. In exchange for the Western Kosi Canal, India promised to give Nepal three different irrigation facilities. These included "a gross command area of 34,000 acres in Nepal lying south of this canal [Western Kosi Canal]...

<sup>34. &</sup>quot;Political Report No. 4 for the Month of April, 1965", 7 May 1965 in "Political Reports (other than annual) from Kathmandu", 1965, HI/1012(27)/65, MEA, NAI.

<sup>35. &</sup>quot;Kosi Project-Kosi", 17/9/1968 PMS, 1968, Prime Minister's Office, NAI.

<sup>36. &</sup>quot;A Review of India's Foreign Policy", File No.WII/101/45/70, 1970, MEA, NAI.

the Government of India has also agreed to provide lift irrigation facilities to a gross command area of about 30,000 acres lying north of the canal... it has also been agreed to renovate the existing Chandra Canal System in Nepal and extend it to serve about 3500 acres of new area."<sup>37</sup>

The work on the Western Kosi Canal began in 1972. As for the irrigation facilities for Nepal, Kathmandu made a novel suggestion. Instead of relying on India to construct its irrigation facilities as it had done so far, it requested a cash payment from New Delhi which could be used by its engineers to construct the canal. The costing process took a long time, as both sides went back and forth on the estimates. Finally, the agreement was signed in 1978 after a push from the newly-elected Janata Party government which sought to once again reset the relationship with Nepal under its new South Asia-centric foreign policy initiative. The final agreement known as the Chandra Treaty was signed on 7 April 1978. It promised Rs. 18 crores from India to Nepal. The combined irrigation works now had a gross command area of 43,462.5 hectares, up from 27316.3 hectares agreed upon in 1971.

#### 1979-1997: Revival of Kosi High Dam

Soon thereafter, India and Nepal found themselves locked in a new set of negotiations. In 1979, India discovered from the Asian Development Bank that Nepal was exploring the construction of a new project called Mulghat on Tamur River, a tributary of Kosi. Such a project could jeopardize any future possibility of the Kosi High Dam. It may be recalled that the Kosi High Dam - first proposed in 1950 and presented as the best possible solution for the Kosi flooding problem - was shelved due to financial concerns at the time. India now felt that the dam idea needed a revival, raising the issue with Nepal and proposing a renewed effort to construct the dam. They also suggested an extension of the Chatra Canal and large amounts of electricity as side-payments.

Nepal, reluctant to commit to a project of this scale, employed stalling tactics once again. It argued that the Kosi High Dam was an entirely new proposal and must be negotiated from scratch. India insisted the dam must be treated as part of the original treaty which had envisaged it. This impasse was to persist for the next ten years.

Finally, in 1991 a breakthrough was achieved after dramatic changes in the political landscape. In Nepal, a People's Movement brought an end to absolute monarchy and ushered in a new era of constitutional government. Meanwhile, India-Nepal relations had suffered for the last few years, culminating in the 1989-90 economic blockade of Nepal by India. In 1991, both sides sought to reset the relationship. GP Koirala, a brother of the famous Koirala family, visited India as the new Prime Minister in December 1991. He was met by PV Narsimha Rao, the new Indian Prime Minister. Together they managed to reach an understanding on a slew of agreements related to

<sup>37. &</sup>quot;Agreement with Nepal regarding Western Kosi Canal Project", 30 November 1971, Lok Sabba Debates.

<sup>38. &</sup>quot;Economic Assistance to Nepal-Indo-Nepal Projects", File No. 37/210/78-PMS, 1978, PMO, NAI.

several trans-boundary rivers. While the Tanakpur Agreement was the most prominent one, an agreement on the Kosi High Dam was also amongst them.

From 1992, a Joint Commission on the Kosi High Dam met to explore the project. However, the negotiations stalled yet again. The most likely cause for this was Nepal's desire to include inland navigation in the Kosi High Dam study, which India maintained was unfeasible. As a landlocked country, Nepal had long desired a direct route to the sea rather than connectivity via India. Kathmandu hoped to gain this desired route through the Kosi High Dam project. Although several India-Nepal meetings set aggressive deadlines to get the Kosi High Dam exploration started, there was no movement for the next four years.

A fresh impetus to break the deadlock came from India when it faced a new wave of pressure from Bihar. It began on 12 December 1996, when India concluded the Farakka Agreement with Bangladesh over the Ganges River. This development evoked a strong reaction from Bihar. The state had long believed it was facing the threat of severe water scarcity in the coming years. With this new agreement, its access to the Ganges water would be even more restricted. It feared that its water rights were being curtailed to meet India's international obligations. Widespread protests erupted across the state.

India needed another carrot to placate Bihar. It quickly revived the Kosi High Dam project, signing a new agreement with Nepal to explore the project. <sup>39</sup> In exchange, India agreed to explore inland navigation on the river for the first time. It also added a new component to the project - the Sun Kosi-Kamal diversion which was another long-standing Nepalese demand.

#### 1997-: The process continues

Since 1997, India and Nepal have continued to make slow progress on the project. Some versions of the Detailed Project Report have been finalized although it is still unclear how long before the investigations are complete. Meanwhile, both sides agreed to establish a project office in Nepal for the Kosi High Dam by 1994. The office was finally opened in 2004 and shut down almost immediately due to local protests against it. Since then, the office has continued to suffer long periods of shut down. India and Nepal, meanwhile, continue to "negotiate".

<sup>39.</sup> Gyawali, Dipak. "Institutional forces behind water conflict in the Ganga plains." GeoJournal 47.3 (1999): 443-452.

#### III. Recommendations

In 1980, while reflecting on India-Nepal water resources cooperation, a note from the Indian Ministry of External Affairs stated, "Over the past decades or so, the Nepalese have been less than forthcoming in extending full cooperation in projects of interest to us. This is partly because they realize that water is a trump card in their hands and can be utilized effectively to extract disproportionate concessions from India and partly because over the years, they have become suspicious of our motive in light of their experience of some projects which they consider have been implemented to their disadvantage."

While the above observation is correct, it is only part of the story. Decades of mistrust and a tough negotiating stance by the Nepalese have been responsible for interminable delays in India-Nepal water resource cooperation. However, it is important to recognize that Nepal's tough positioning emerges from an extremely limited space for manoeuvring. Given the asymmetry of the India-Nepal relationship, the smaller neighbor is forever stuck in a position where it has little to bargain with. What India considers Nepal's "trump card" is in actuality the only tactic available to it. Indeed, despite gaining minor concessions on a few negotiating points, the larger story of Nepal's water resources development in the last 70 years has been one of grave disappointments. Meanwhile, both riparians have been perennially locked in repeating cycles of negotiations as decades pass without any progress.

Overcoming this structural impediment requires innovative approaches. First, India should consider surrendering its influence on the agenda-setting process to some degree. Rather than projects proposed by one or the other country, both nations to form a high-powered joint commission which conceives of projects that are neither India-centric nor Nepal-centric, but truly mutually beneficial. None of the existing bilateral committees or commissions have the authority to do so. Second, the overarching framework should be slightly relaxed to allow for issue-linkages, if only within the water resources arena. This will allow Nepal to gain greater bargaining power and thus make it a more responsive partner. In a similar vein, India should insist that Nepal invest a considerable amount of resources in a particular project, making it a true stakeholder. While India and Nepal have begun the practice of sharing the investment cost in recent years, this policy does not go far enough. Finally, both India and Nepal should strive harder to enforce agreements on each other, especially sticking to their deadlines. It is only by working together in an understanding but disciplined manner that both sides can harness the true potential of the rivers they share.

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<sup>40. &</sup>quot;Coordination Briefs", 1980, File No.HI/103/1/80, AMS, MEA, NAI



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