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Hydropower as Statecraft: Electricity Trade as a Tool for Nepal's Foreign Policy

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Abstract

Nepal is a landlocked country located between two large economies, India and China. Nepal, despite being a small country compared to its neighbors, boasts abundant water resources, with a hydropower potential of up to 83,000 MW. However, nearly 43,000 MW is considered achievable from the technical perspective. Nepal has focused on hydropower production as a major foundation of its development in recent years. The production of hydropower and its export to neighbors is a recent development associated with Nepal's foreign policy. This study examines the relationship between hydropower and Nepal's statecraft, considering Nepal's utilization of hydropower as a diplomatic tool. Nepal's location between large countries and its rich water resources and recent production of hydropower and export have placed it in a unique stage from where it is poised to accelerate economic prosperity and join the regional integration. For the research, a mixed-method approach is applied, where qualitative content analysis is used. The policy documents, including the power trade pact, official reports, and datasets, are studied and applied under this. Similarly, quantitative analysis, especially of the electricity trade pattern, is made. Nepal's power trade between India and Bangladesh is presented as a case study to enrich the article. The impacts of the power trade with these two countries and subsequent relations in regional geopolitics and energy have shed light. The data collected over nine months were analysed for a comparative study. With this, the cross-border electricity trade and diplomacy, and the opportunities and barriers surrounding it are explained. The findings of the study showed that bilateral involvement with India was deepened while bringing together Bangladesh in the power agreement. Bangladesh has emerged as a credible partner

for power trade in addition to India. Nepal's pact with India and Bangladesh created an opportunity for Nepal to secure a status in the energy regime of South Asia. The hurdles relating to infrastructure and regulatory dependence on India are also shed light on, showing the risks of over-dependence while diversifying the energy market. Even the geopolitical sensitivities this has caused have dented Nepal's negotiating capacity. Nepal can leverage its hydropower potential as a foreign policy tool, but only with careful management of energy markets and institution-building.

Keywords: *Energy statecraft, electricity trade, economic diplomacy, foreign policy, hydropower*

Introduction

The countries with abundant water resources are harnessing hydropower not only for forwarding development activities but also to stand on the global wave of increasing adoption of clean energy. It is one of the effective methods to reduce carbon emissions, which is detrimental to the planet's health. In addition to the response to climate change impact, clean energy production has resulted in cross-border power trade. The power trade is again working as a strategic tool that bears the capacity to shape regional cooperation, interdependence, and geopolitical bargaining (IEA, 2023; Marzouk, 2025). Hydropower makes up over half of the world's renewable electricity. Energy storage and regional integration, which are evident in Asia, are likely to witness increasing demand in the next decade (World Bank, 2024). Hydropower is not a mere facility to light households and run industries but a significant tool with links to trade, diplomacy, and changing power dynamics among states.

Although as much as 83,000 MW of hydropower generation is thought possible in Nepal, the figure technically achievable is 43,000 MW. The abundance of water resources and recent ambition and endeavors to accelerate hydropower have helped Nepal to identify as South Asia's energy arena (NEA, 2021). Nepal has long struggled in its bid to translate this tremendous resource into tangible economic benefits or diplomatic prowess. However, the political instability, weak investment, and complicated regulations remained sheer barriers for the materialization (Pandey, 2020; Shrestha et al., 2016). Gradual progress has been witnessed, finally leading Nepal to the status of an electricity importer to an emerging exporter. It is indeed a huge achievement that Nepal has made in clean energy production and cross-border trade. Long-term agreements with India have been signed, and a similar agreement made with Bangladesh, which intensified Nepal's export of hydropower to both neighbors. Bangladesh is even willing to import more electricity from Nepal. It is an evident example that Nepal's hydropower is more than an economic resource- now a diplomatic asset, attracting new interest from scholars exploring how small states can exert influence in the region (Bhattacharya & Ohdedar, 2020). However, challenges cannot be denied in this regard. In this connection, most studies are found to be concerned with technical details, economics, or infrastructure of hydropower, while paying little attention to its strategic role in Nepal's foreign policy. Here, a missing point can be how hydropower can also be applied as a statecraft tool by Nepal, the country surrounded by geopolitically larger neighbors India

and China. The way Nepal uses power trade as a diplomatic tool with its negotiating capacity, so that it can secure its image in South Asia, warrants a study. The hydropower production and export to India and Bangladesh bear significant meaning in regional engagement and geopolitics as well. It is vital to know about how the interdependence in South Asia will be further enhanced through Nepal's hydropower. In this light, this research has three objectives. First, outline the essential features of Nepal's hydropower-based energy statecraft; second, examine how it counts in Nepal's foreign policy and regional approach; and third, explore the emerging threats and challenges Nepal confronts with its increasing dependence on power trade as a foreign policy tool.

Conceptual Framework and Literature Review

Energy Statecraft

Energy statecraft refers to the practice of a state using energy as a strategic tool for both internal development and external influence (Stulberg, 2007). The primary goals of this statecraft are energy security, economic prosperity, and international influence. Energy policy and energy statecraft represent conceptually distinct dimensions. Policy pertains to technical and administrative arrangements such as supply, transmission, and tariffs, whereas statecraft seeks to leverage these policies alongside national power and diplomacy to achieve strategic objectives (Blondeel et al., 2021). Similarly, Murton et al. (2018) argue that statecraft is a tool that utilizes domestic regulations and incentives, financial mechanisms, cross-border trade agreements, market access, and strategic communications.

In the international context, energy statecraft is linked to two major trends. First is the geopolitics of energy supply, where the elements determining the balance of power are control over resources, routes, and markets. Structures like pipelines, transmission lines, and ports themselves become instruments for projecting power (Huda & Ali, 2017). Meanwhile, in view of Poudel and Kumar (2025), the second is the green transformation, which has been forwarded as an effective measure across the globe to reduce reliance on fossil fuels while increasing the role of renewables and grid integration. For the renewables, issues surfacing side by side are the factors of regulation, along with the weather-induced variability and storage requirements, marketing modality, and regional coordination. Thus, energy statecraft is beyond energy- the convergence of reliability, environmental considerations and cross-border regulations.

In countries like Nepal, the logic of energy statecraft is somewhat different. It is characterized by a small market size, limited financial capacity, and reliance on run-of-river power projects, which influence pricing negotiations and may not be as robust as those of larger, wealthier countries. (Scholten et al., 2020). Consequently, small countries can adopt two effective measures. First, they can devise a specialized strategy that promotes a sustainable competitive advantage in the energy resources they possess. Second, they can leverage international rules and relevant institutions to their advantage (Pandey & Patodiya, 2024). The energy diplomacy of small countries generally focuses on hedging and diversification. According to Miller (2020), long-term risks can be mitigated through trade

policies that target multiple markets and avoid dependence on a single transmission line by employing strategic statecraft.

Hydropower as a key variable

Hydropower has emerged as a vital instrument in modern global politics. Unlike fossil fuels, hydropower is clean, renewable, and generally under the direct control of the power-producing country. Investments in hydropower focus on shaping relations with neighboring states and building influence without dependence on fossil fuels (Yergin, 2020). Importantly, hydropower represents a unique combination of development, environmental goals, and diplomacy. Cross-border power trade not only generates foreign currency but also fosters trust and connectivity. While resource-rich countries often dominate global affairs, even smaller countries can secure substantial financial benefits through power trade (Bovan et al., 2020).

As the world takes stronger actions against climate change, hydropower stands out. Unlike the fossils' price, which can fluctuate widely, hydropower projects built through joint ventures promote long-term partnerships. This ensures sustainability and benefits for all involved. Østergaard et al. (2022) argue that hydropower trade leads to reliable agreements between countries. Such agreements foster lasting partnerships and build trust among neighbors. Therefore, hydropower helps countries establish stability and influence in their regions.

Nepal's mountainous landscapes and heavy monsoons provide great hydropower potential (Aryal et al., 2024). Most of its hydropower is from run-of-river plants, which supply energy during monsoons. However, production drops in the dry season. Nepal is also building dams for hydropower, but faces challenges like improving infrastructure and creating smooth regional markets. Boosting domestic demand is crucial too. Østergaard et al. (2022) note that Nepal can gain steady financial benefits through balanced power trade with India and Bangladesh.

This shows that hydropower is more than just electrification for Nepal; it is central to its national policy. Ghimire and Kim (2018) argue that hydropower statecraft aims to reduce imports, earn foreign currency through exports, and promote industrial growth, regional cooperation, and climate action. Yergin (2020) views small nations' hydropower projects as ways to build credibility in the region. As a small, least developed country, Nepal can use mutual trust to elevate hydropower as a means of cross-border influence. Bovan et al. (2020 suggest that hydropower can be a key part of Nepal's foreign policy, while also meeting domestic energy needs.

Power Trade as a Means of Foreign Policy and Diplomacy

Foreign policy is the expansion of domestic policy, where trade is an inherent element. Trade boosts the economy, enhances cross-border interactions and supports diplomatic objectives. To drive economic growth, export policies need trade agreements, financial incentives, and subsidies. These shapes diplomatic relations while preserving domestic

priorities and international competitiveness (Harrison & Rodríguez-Clare, 2010; Bown & Reynolds, 2015). Strategic exports also help build competitiveness and serve diplomatic aims (Maharani, 2015). Nepal's trade policy aligns with the foreign policy, where regional agreements are made to popularize Nepal's products, including medicinal herbs, handicrafts, and garments (Ministry of Industry, Commerce, and Supply, 2021). However, political instability, a weak workforce, and poor infrastructure hinder these goals (Khanal et al., 2005; Dahal, 2011). Nepal's diplomatic ties with its neighbors are important for expanding trade. (Kastner & Pearson, 2021). Cross-border trade involves regulatory measures like quotas, tariffs, quarantine, and incentives in customs. These measures help protect national interests in the international arena (Yarbrough & Yarbrough, 2014; Bown & Reynolds, 2015; Hoekman & Nicita, 2011). Trade diplomacy, therefore, is not limited to economics but has the agency to integrate a nation into regional and international ambitions and actions on pressing issues like poverty and climate change through the promotion of trust and cooperation. It acts further as a soft power (Donelan, 1969; Kara, 2008; Pigman, 2016; Ruffini, 2016). Economic diplomacy is a channel to develop regional alliances and frameworks to cope with the shared problems relating to security and economic stability. The diplomatic initiatives witness flexibility and effectiveness when they are supported by bilateral trade.

Power Trade as a Tool of Energy Diplomacy

Fossil fuels, oil and gas, and their trade across borders have remained vital for a long time. The countries with abundant oil and gas have enriched themselves through sales, while others engaged in supply, propping up their economies. Those in sheer need have remained passive recipients, resulting in an imbalanced distribution of power. However, those without oil and gas in recent decades opted for renewable energy sources, which helped minimize trade deficits. With the transition to renewables, the regulatory system and technicalities also differed in trading energy. The infrastructures and standards are unlike those of the previous fossil fuel trade. Regional grids such as the Nordic Power Pool, the ASEAN Power Grid, and the Southern African Power Pool stand out as prominent drivers of economic growth in their regions. Diplomatic forums host debates on new modes of power trading and regional mechanisms. Hydropower production and trade are therefore shifting from the traditional power exchange, spurring issues of energy politics worldwide (Hart & Siniver, 2020). Accordingly, academia has studied electricity trade through the lens of diplomacy. Those able to produce an adequate surplus of hydropower for cross-border trade have established bilateral, trilateral, and regional mechanisms for facilitation. To secure a rewarding market and influence regional policy, such alliances are significant. Nepal's hydropower has not only helped in earning revenue but also in integrating it into the regional sphere, which, in turn, augments its diplomatic stature. The traditional geopolitics dominated by oil and gas is gradually giving way to renewable geo-economics.

Diversifying Energy Partnerships and Balancing Diplomatic Relationships

Nepal has been involved in power trade with its southern neighbour, India. Increased hydropower in Nepal in the recent decade has given a boost to the bilateral power trade. As India has become an emerging economy, wielding significant influence in the regional and

global political landscapes of late, Nepal is facing a condition to balance its relations by keeping intact its national interest. The energy partnership with Bangladesh comes as per this very notion, so that the risk of overdependence on a single country, India, would be gradually reduced and power trade diversified accordingly. It is also the initiative Nepal took to mitigate possible political conflict or economic fluctuations for its relations with India (Bazilian et al., 2011). With the diversification of power trade, Nepal has augmented its status in regional negotiations, which would further facilitate its increasing role of electricity exporter. Energy interdependence and common interest fostered through power trade would be in Nepal's favor, ruling out the possibility of their engagement in a zero-sum game for regional clout (Sovacool & Bulan, 2013).

Methodology

This research investigates the way Nepal uses energy trade with India and Bangladesh as a foreign policy tool. The questions for the study are: In what ways does hydropower diplomacy shape Nepal's evolving role in the region? How does this serve the broader energy strategy of Nepal? The interpretive and constructionist foreign policy theories have shaped the qualitative approach employed in the study. A thorough probe into the meanings and narratives is launched to know how Nepal utilizes hydropower as a diplomatic tool (Wendt, 1999; Adler, 2013). The perspective of critical constructionist also presented in the study, considering the structural imbalances and historical dependencies that Nepal has with India over the power trade decisions (Tickner, 1992; Katzenstein, 1996).

Data collection for the qualitative source ranges from the systematic gathering of government documents to official bilateral agreements, policy reports, energy trade guidelines, and regional cooperation frameworks, such as the SAARC Energy Framework Agreement and BBIN policy papers. The scholarly articles, policy analyses, media archives, and institutional reports from the related agencies like the Ministry of Energy, Water Resources and Irrigation (MoEWRI), Nepal Electricity Authority (NEA), and Ministry of Foreign Affairs (MoFA) add up to the information, which helps generate concrete evidence and build interpretive perspectives on Nepal's approach to hydropower diplomacy.

Identification of the dominant themes, meanings, and diplomatic narratives in Nepal's energy policy and regional interactions is drawn through qualitative analyses. Case studies are equally applied in the methodology of Nepal's electricity trade negotiations with India and Bangladesh from 2013 to 2025. Breakthroughs in Nepal's energy policy and foreign policy were made during this period. Institutional analysis and exploration of digital archives are tools under this. However free and full-fledged access to the required bilateral agreements and diplomatic notes was limited. There was no uniformity in information disclosure, either across some governments or in different years. For instance, the evolving nature of Nepal-India energy negotiations meant that policy updates sometimes came late, after the analyses of related documents, thereby necessitating a cross-check for comparisons.

Relevance, authenticity, and importance of documents are aligned with the research objectives. Therefore, the sources with direct links to the hydropower development, power

trade, energy diplomacy, or mechanism on regional cooperation among Nepal, India, and Bangladesh are attached with high priority. With the blend of constructionist theory, qualitative content analysis, case studies, and interpretive techniques, this research comes up with a meticulous cognizance of how Nepal uses hydropower as a means of diplomacy and regional engagement.

Data Presentation

Hydropower Diplomacy in Nepal's Foreign Policy

Nepal's hydropower ambition projects the production of 43,000 MW of electricity, considering it technically feasible (NEA, 2021). It, however, takes a long time for Nepal to achieve the present status that has a positive bearing on boosting the national economy and diplomatic caliber. The factors behind it are not new either: laws and policies lacked consistency; bureaucracy was inactive; and domestic funding was elusive. (Basnyat, 2023). With gradual address to these bottlenecks, Nepal has begun exporting electricity, playing a vital role to reshape nation's strategy. The export of electricity has changed the notion that electricity is more than an infrastructure of development, a diplomatic tool, reinforcing Nepal's position in South Asia**.**

Nepal's increasing hydropower production and power export to Bangladesh through India is a progress in expanding economic diplomacy. India agreed to Nepal for allowing its grid to secure cross-border transmission, while Bangladesh shared the plan to purchase as high as 500 MW of Nepali electricity via Indian transmission lines. It is a stride in cross-border power trade that opened the way for Nepal to integrate its energy into its diplomatic arsenal (Shrestha et al., 2016). The hydropower has become a means to strengthen bilateral and trilateral relations and spur engagement, boasting Nepal's growing clout in the regional framework, disregarding its size and hard power.

Nepal's hydropower export is a landmark opportunity to create an atmosphere for reducing carbon emissions and fortifying energy security in the region, and a moment to give a message to the world for green energy transition. Proper alignment of Nepal's diplomacy with energy initiatives is, however, imperative so that hydropower can be furthered in a way to reinforce foreign policy. Institutional set-ups with good governance, delicate balance, coordination with neighbors, and climate action as per pledges bear significance in this regard**.**

Electricity Trade and Nepal's International Relations

For a long time, Nepal, a country sandwiched between two giant neighbors, India and China, was engrossed in a survival strategy. During the Cold War, Nepal emphasized its independence and non-alignment. Now, Nepal is poised to graduate from the "least developed countries" category to enjoy the status of a developing nation, which warrants its foreign policy to focus on utilizing electricity trade to foster stability, augment its strategic value, and contribute to sustainable growth. The power trade that continued with India for a long time is now expanded with the beginning of electricity export to Bangladesh.

However, power trade with India is not full of comfort and much benefit for Nepal. Both opportunities and challenges greet Nepal. Both countries gave hydropower cooperation official recognition, paving the way to the large-scale projects (Salman & Uprety, 1999). In 2024/25, Nepal exported 2380 GW of electricity to India, which is 22 per cent more than the previous fiscal year (NEA, 2025). The establishment of additional transmission corridors provides an opportunity for Nepal to increase power production. It also enhances India's trust in Nepal for its contribution to its renewable energy. The power trade has helped Nepal address seasonal short supply of electricity and improve its balance of payments, and reduce yawning trade deficits.

Similarly, Nepal's negotiations over electricity trade with Bangladesh are encouraging for trade diversification. Currently, Nepal made agreements to export up to 1,000 MW of electricity to Bangladesh by 2025. More than revenue, it is a strategic move to reduce Nepal's overdependence on India and expand its influence in South Asia (Ishaq et al., 2022). Exporting power to Bangladesh via India with a trilateral arrangement shows Nepal's growing capacity to navigate the region's complex politics. Besides this positive development, cross-border transmission infrastructures are still subpar to meet increasing demands. Unclear and inconsistent regulatory mechanisms can cost a lot. As on the globe, the vulnerability posed by climate change is a defining challenge for hydropower output (Bhattarai et al., 2018; Nepal Electricity Authority, 2021). Although Nepal has aimed at forwarding energy diplomacy as part of the national prosperity and a tool for maintaining interdependence, its geography is a cause for massive damage to infrastructure. It ultimately disrupts power production and its exports. As such, Nepal faces a testing time to keep intact energy relations with India, while the latter is emerging as a global power.

Trade is the Means of Diplomacy Between Nepal, China and India

Nepal's international trade is woefully imbalanced. In 2023, Nepal imported goods worth NPR 306 billion from China but exported only NPR 1.2 billion, exposing a huge trade deficit (Nepal Rastra Bank, 2024). Nepal's trade deficit with India is even wider. India alone makes up nearly 63 per cent of Nepal's total trade and supplies over 80 per cent of its fuel needs (Trade and Export Promotion Centre, 2023). In the fiscal year 2023/24, Nepal exported NPR 156 billion worth of goods to India while importing stood at NPR 848 billion, creating a trade deficit of about NPR 692 billion (Nepal Rastra Bank 2024). This dependency is, however, not new. It dates back to the 1950 Treaty of Peace and Friendship, which opened borders and provided special access to Indian markets. Later agreements, the Power Trade Agreement (2014), added energy cooperation, enabling electricity trade and hydropower projects (Salman & Uprety, 1999; Ministry of Energy, Water Resources and Irrigation, 2023). Yet, India's dominant position is sometimes costly to Nepal's political course. For example, the 2015 unofficial trade blockade worsened Nepal's condition because of its overreliance on a single transit route (Carnegie Endowment for International Peace, 2021).

Investment patterns do not show balances at all. India is the largest investor in Nepal, making up nearly a third of total foreign direct investment. It is followed by the immediate neighbour in the north, China, with some 13 per cent, mainly in manufacturing and

infrastructure (Department of Industry, 2024). Chinese activities show that it was for expanding roles in Nepal, but had to be limited owing to the hostile Himalayan rampart and unpredictable policies relating to investments compared to India's. Such a trade scenario is, however, inviting both challenge and an opportunity for Nepal, while Nepal has regarded and forwarded its hydropower production as a robust and reliable asset. It has placed the country in a higher bargaining giving a boost to the national economy (Government of Nepal, 2017). Nepal's negotiation with Bangladesh has further reinforced the notion that its hydropower is a new tool for regional diplomacy, economic leverage, and collaboration (Ishaq et al., 2022). Ultimately, Nepal's trade with China and India goes beyond the economy, for it carries transformative capacity to the navigating regional sphere. Trade now counts much for its diplomacy in practice.

Electricity Trade Initiatives of Nepal

Considering hydropower potential to meet domestic needs and earn foreign currency, Nepal has forwarded the schemes of vast hydropower reserves into a major export. Nepal's electricity trade agreements with India and Bangladesh are more than commercial transactions, as they are bringing a shift in Nepal's development approach. The power trade is therefore vital in Nepal's foreign policy and economic diplomacy. It is also a noticeable move to secure Nepal's position in global engagement. For the country that mostly depended on remittances and imports for a long time, the focus on hydropower exports broadened its economic base, reducing trade deficit and strengthening the state coffers. These steps are a clear sign that Nepal is in a place to become a rising energy hub in the Himalayan region.

Nepal–India Electricity Trade

Although Nepal began exporting energy to Nepal for some years, it was India's first launch of the power trade to Nepal. Nepal started importing electricity from Bihar and Uttar Pradesh in the 1960s (Raghuwanshi & Arya, 2019). It was because of scant hydropower production in Nepal and the sheer lack of infrastructure, e.g., transmission lines. The trade was one-way till 1990s, when Nepal bought much energy from India. In exchange, Nepal supplied little power to India in the monsoon season, the time of surplus power.

Nepal and India signed the Mahakali Treaty in 1996, which created a debate on cross-border hydropower benefits. It was the first time Nepal and India made an official decision to work in collaboration on water management, irrigation, and hydropower (Salman & Uprety, 1999). Irrespective of taking a landmark decision by both countries paving the way for energy diplomacy, progress was so protracted that barriers to implementation were rife, and political disagreements surfaced over benefit-sharing. Even the bilateral mechanisms, such as the Power Exchange Committee (PEC) and the Power Trade Agreement (PTA) in 2014, later emphasized power trade. Nepal's Electricity Authority (NEA) was permitted access to India's electricity market through designated transmission corridors as per PTA. It was also a significant policy shift toward structured, market-driven trading from the conventional and ad hoc deals (Ministry of Energy, Water Resources and Irrigation, 2014).

A milestone was awaited till January 4, 2024. Nepal and India signed a 25-year Long Term Power Trade Agreement, outlining plans for Nepal to export 10,000 MW of hydropower to India over the next ten years (SASEC, 2024). Nepal's most ambitious energy diplomacy effort was in place, which also exposed India's demand for renewables and displayed Nepal's objective to be a powerful pillar of green energy in the region. Nepal now has more than 2,800 MW of installed production capacity. Half of it suffices for domestic demand. Similarly, India updated its Cross-Border Trade of Electricity rules. It has further created an opportunity for Nepal to sell power in India's Day-Ahead and Real-Time markets. It comes with more flexibility for Nepal and a chance to compete in a more beneficial manner.

Table 1

Highlights of the Electricity Exports of Nepal

Particular	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025 (*)
Export Sales (GWh)	4	3	3	3	3	3	35	107	38	494	1346	1946	2380
Export Sales Growth %	-	-	-	-	-	-	1082%	207%	-64%	1200%	173%	45%	22%

* Provisional Figures (Subject to Final Audit), **Source**: *NEA, 2025*

Nepal–China Electricity Trade

Nepal's electricity trade with India is earning a profit, and it's managed through due process. However, the story with China is otherwise. China is also one of Nepal's biggest investors in hydropower. There are no mechanisms between Nepal and China for power trade. China's investors showed keen interest in Nepal's hydropower sector and have poured money accordingly. Between 2010 and 2024, Chinese companies assisted in over 35 hydropower projects in Nepal. It makes up nearly 40 percent of all foreign investment in Nepal's energy sector. Some notable examples are projects like Upper Trishuli-1 (216 MW), Hongshi Shivam Cement's Captive Plant (132 MW), Seti River-6 (125 MW), and West Seti (750 MW). These instances provide a deep interest in investing in Nepal's hydropower.

Despite China's mega investment in Nepal's hydropower sector and Nepal's yearning for hydropower production and economic development through power trade, no cross-border transmission line exists between the two countries to run high-voltage power. There is, however, a mention of Kerung–Rasuwagadhi–Galchhi 400 kV transmission line under the Belt and Road Initiative (BRI). It is not realized. It seems neither has mulled deeply on

power connectivity. Since 2018, the Nepal–China Joint Mechanism on Energy Cooperation has talked about how Nepal and China could work together for grid connections to renewables and training for power system management.

Currently, the relationship is more about investment than the cross-border power supply. National Energy Strategy (2023–2043) and the revised Hydropower Development Policy (2023) are the policies that have provided an adequate signal to reflect Nepal's initiation for linking the power grid with China in the future by minimizing risks and diversifying power trade and enjoying its own strategic freedom (Ministry of Energy, 2023).

Nepal–Bangladesh Power Trade

Nepal's efforts to expand cross-border power trade go beyond profits, for the efforts are a strategic choice. Nepal had been depending heavily on India for hydropower exports for a long time. Although this collaboration ensured immediate benefits, it pushed Nepal further into vulnerability. Whenever political tensions rose or trade faltered, Nepal felt the impact. So, the attempt to export energy to Bangladesh is not mere exploration of new markets for electricity sales but a spreading of risk and forging of new partnerships.

Meanwhile, Bangladesh has realized an increasing need for electricity by over 10 percent each year, and by 2030, the country will require around 34,000 MW. Domestic power generation is slow off the mark, and most of the power plants are based on imported fossil fuels. These have resulted not only in financial strain but also in significant damage to the environment. Nepal has surplus power production during the monsoon season. So, selling the surplus electricity to Bangladesh aligns perfectly with Bangladesh's yearning for renewables. On December 6, 2023, someone reached a milestone agreement. Bangladesh agreed to import 40 MW of electricity from Nepal, using Indian transmission lines. It was India's NVVN (NTPC Vidyut Vyapar Nigam) ensuring facilitation for the deal, so that all three countries- Nepal, India, and Bangladesh came under a single electricity transmission for the first time in history. The electricity is now transmitted through the Bahrampur–Veramara 400 KV line. Although the initial volume was only 40 MW, the agreement set a significant precedent, reaching 1,000 MW in 2025. It is a paradigm shift in Nepal's foreign policy from survival consciousness to regional togetherness.

Another benefit for Nepal with this new collaboration with Bangladesh is Nepal's position to boost its ties with the Bay of Bengal region. Bangladesh is interested in investing in Nepal's hydro projects, such as Upper Karnali and Sunkoshi-3, and has shown readiness for long-term agreements. Such investment will certainly open a stable market for Nepal, setting a path for broader cooperation in infrastructure, transportation, and climate resilience.

Current State of Power Trade Agreements Between Nepal, India and Bangladesh (2013-2025)

Between 2013 and 2024, Nepal's power trade agreements with India and Bangladesh took a strategic shift, enabling Nepal to leverage its hydropower surplus for the development of the

fronts of energy security, economic growth, and regional cooperation. Nepal's export-oriented energy policy is materialized with the abundant hydropower potential, utilized especially during the monsoon season. Nepal and India could develop a framework for bilateral electricity exchange through the Electricity Trade Agreement in 2014, which was followed by the hydropower generation from projects like the Upper Tamakoshi Hydroelectric Project and the cross-border transmission lines in place, including Dhalkebar-Muzaffarpur and Inaruwa-Posta (SASEC, 2024).

Finally, Nepal's electricity exports to India reached 2380 GWh, deepening integration into India's power market. The Power Trade Agreement with Bangladesh in 2018 pave way for Nepal to take advantage of Bangladesh's growing energy demand. Transmission lines through India and augment export of as high as 1,000 MW are positive reminders of Bangladesh's interest in Nepal's green energy resources (Rising Nepal, 2024).

In early 2024, Nepal and India recorded a milestone in bilateral relations with the signing of a landmark 25-year agreement for 10,000 MW electricity export from Nepal to India in ten years, with provisions for automatic renewal. It showcased the potential for long-term power trading and broader regional energy integration. The agreement also fits Nepal's Energy Development Strategy, which aims at producing 28,000 MW of hydropower over 12 years. It shows hydropower as a vital move to reduce trade deficits and prop up economic growth (The Himalayan Times, 2024).

Irrespective of the strategy and agreement in place, cross-border infrastructure awaits reinforcement. An initiative to strengthen Nepal-India power relations is the Raxaul-Parwanipur and Kataiya-Kusaha high transmission line, which was launched in 2024. As India is facing an increasing need for electricity, the imports are on the rise, nearing 1,000 MW. The surplus sales had generated over Rs. 15 billion annually (Rising Nepal, 2024). Nepal is encouraged to unlock its further hydropower potential with Bangladesh's plan to import as high as 9,000 MW by 2040. It signals additional space opening for Nepali hydropower in the South Asian markets.

Bringing Bangladesh and India Together on Power Trade

Bringing Bangladesh and India together for power trade, Nepal has developed genuine partnerships for national growth. The dialogues held with these neighbors resulted in the export of electricity from Nepal to India and Bangladesh. There is valuable negotiation for regional togetherness where Nepal has presented itself as a country of energy exporters from the once passive recipient of such help. It evidently showed negotiation skills that helped cut through policy hurdles and meet the criteria for a long-term arrangement of power trade throughout South Asia. With a gradual increase in power production at home and export, Nepal is expecting its key role in the production of clean energy and its trade. It is the utilization of natural resources that not only ensures national benefit but also helps cement ties to regional players and encourages forward sustainable development initiatives in this area.

Table 2

Electricity Trade Dialogue with Bangladesh and India

S.N.	Date	Types of Dialogue	Remarks
1	3-4 Dec. 2018	Trade Dialogue of the Power Sector	Nepal-Bangladesh
2	20-21 Jun. 2019	Trade Dialogue of the Power Sector	Nepal-Bangladesh
3	13-14 Sept. 2021	Trade Dialogue of the Power Sector	Nepal-Bangladesh
4	24-25 August 2022	Trade Dialogue of the Power Sector	Nepal-Bangladesh
5	16 May 2023	40MW Electricity Trade Agreement	Nepal-Bangladesh
6	20 Nov. 2014	Trade Dialogue of the Power Sector	Nepal-India
7	28-29 Jan. 2016	Trade Dialogue of the Power Sector	Nepal-India
8	27-28 June 2016	Trade Dialogue of the Power Sector	Nepal-India
9	13-14 Feb. 2017	Trade Dialogue of the Power Sector	Nepal-India
10	16-17 April 2018	Trade Dialogue of the Power Sector	Nepal-India
11	23-24 Jan. 2019	Trade Dialogue of the Power Sector	Nepal-India
12	14-15 Oct. 2018	Trade Dialogue of the Power Sector	Nepal-India
13	10-11 Dec. 2020	Trade Dialogue of the Power Sector	Nepal-India
14	23-24 Feb. 2022	Trade Dialogue of the Power Sector	Nepal-India
15	17-18 Feb. 2023	Trade Dialogue of the Power Sector	Nepal-India
16	02 June,2023	25 Yrs LTA of PTA,1000MW Electricity Trade in 10 yrs, 40MW Electricity export to Bangladesh via Baharampur-Bhedemara Grid	Nepal-India

Source: *MoEWRI, (2025)*

In the initial period from 2014 to 2018, Nepal and India especially emphasized the policy landscape that helped make clear regulations and establish a legal foundation for cross-border power trade. This homework ultimately led to the signing of the 2014 Power Trade Agreement. It paved the way for further progress that entered the practical issues of trade from 2019 to 2023. It included the launch of actual electricity flow, grid alignment, access to the real-time market, and the long-term power purchase arrangements. India's 2024 commitment to buying as high as 10,000 MW of electricity from Nepal manifested the achievement Nepal made in this sector. Nepal started talks for a partnership with Bangladesh to export hydropower in 2018, which also progressed positively. Finally, Nepal witnessed a breakthrough in December 2023: a trilateral power trade agreement, under which Nepal would export power to Bangladesh via India. The togetherness of bureaucrats, technical teams, and diplomats from the respective three countries played a vital role in taking the regional coordination. The trilateral engagement, with some meetings and through dialogue, marked a transition in Nepal's approach, which was heading to regional cooperation and integration from conventional overdependence on bilateral deals.

Discussion

Nepal's diplomacy since historical times has attached much significance to safeguarding sovereignty with cautious navigation between its huge neighbors, India and China. It has, however, witnessed a change in the 21st century along with the change in geopolitical undercurrents in the region and across the globe. Nepal's foreign policy now chases economic pragmatism in view of the roles trade, foreign investment, and energy deals play. For this, hydropower has come out on top in its economic and energy diplomacy. Present resource-based engagement is achieved with the hydropower investment and the power trade Nepal has forwarded as a diplomatic instrument. Such diversification of economic activities is bolstering neighbor relations and regional integration. It further nurtures interdependence and paves the way for stability and peace across South Asia (Bazilian et al., 2011).

By 2024, Nepal could realize over 2,800 MW of hydropower production. The monsoon season, which receives maximum rainfall, witnesses a power surplus, forcing Nepal to think of managing excessive energy with the leverage of diplomacy (Nepal Electricity Authority, 2024). In making India and Bangladesh reliable partners for power trade, Nepal has augmented its economic partnerships with these neighbors. It is also a defining moment for Nepal's regional role on the rise. The power trading finely aligns with the economic liberalization Nepal has embraced, integrating energy policy with regional markets and bolstering bilateral agreements. However, Nepal is free of challenges. The provisions sometimes set by India that it would not import power from the Chinese-backed projects complicate the initiatives. Such a condition warrants Nepal's further cautious navigation of trade deals and traditional ties with the immediate neighbors, India and China (Gautam, 2023). It also compels Nepal to evaluate its foreign policy, whether it is comfortable for it to establish energy cooperation with only one or two partners. Transparency in cooperation is required to advance a fair deal. For instance, Nepal is in discussions with China for the Ratmate–Rasuwagadhi–Kerung 400 KV transmission line. Here, Nepal aims to strengthen its ties to its northern neighbor, which would help minimize the risk of sole reliance on India. The electricity export agreement with Bangladesh, using the Indian transmission line, reflects Nepal's increasing caliber for complex trilateral diplomacy, positioning itself as a regional energy bridge (Urja Khabar, 2024).

The hydropower diplomacy Nepal adopted in transforming its foreign policy can be observed in three key ways. First, firmly underscore development, for trade and investment count more than a traditional security-centric approach. Power trade deals of recent years are focused on advancing economic diplomacy, as evidenced by the 25-year power trade agreement with India (2024) and the energy cooperation framework agreement with Bangladesh (2023). These deals also come in line with Nepal's ambition to graduate from Least Developed Country status by 2026 and demonstrate the growth. Second, energy diplomacy has helped Nepal get gradual integration into the regional sphere. Power trade negotiations with India (2014–2023) and Bangladesh (2018–2023) created a solid foundation of cooperation even within the BBIN (Bangladesh–Bhutan–India–Nepal) framework. This has a direct bearing on boosting Nepal's bargaining power and reach in

South Asian policy (SASEC, 2024). Third, the hydropower production and its regional trade have reinforced Nepal's geopolitical positioning. It has resulted in advancing clean energy as a vital tool of Nepal's soft power and contributing to the global drive for climate-friendly public goods, along with the presentation of environmental diplomacy in regional and global policy discourse and forums (Chaturvedy, 2020).

Transparency in investment law would help advance Nepal's energy diplomacy by serving the national strategy. Robust infrastructural arrangements are other factors that attract more investments, which further reinforce Nepal's position as a vital regional player in hydropower. Nepal's cross-border power trade is a sheer shift away from defensive and survival-based diplomacy. As energy is functioning as a bargaining tool, it is taking interdependence, stability, and cooperation to a new level. Besides contributing to the national economy and regional trade, hydropower production triggers a shift in foreign policy. Unlike the conventional framework of diplomacy, which attaches much value to sovereignty, it has become a development tool with the expansion of cross-border trade involving the utilization of national resources at home. It ultimately exerts influence in the regional sphere and encourages sustainable development initiatives.

Conclusion

Nepal has focused on the production of hydropower and the sale of surplus power to earn revenue. The country, which remained dependent on a single neighbor, India, for its energy based on fossil fuel, has exported hydropower by promoting it as a tool to augment its diplomacy in the South Asian region. India and Bangladesh are the markets for Nepal's hydropower. It has both spurred the utilization of natural resources and built influence in the regional sphere. The cross-border power trade and induction of a new partner- Bangladesh- carries strategic significance to foster trilateral engagement. It is to contribute to the strengthening of ties with neighbors and to securing a national interest in expanding it as foreign policy. It has reflected Nepal's potential to secure a stable economy with long-term power trade with neighbors, which also builds Nepal's status in the regional landscape. The power trade serves as a diplomatic tool that further helps in shaping strategic perspectives and keeping oversight on international relations. Irrespective of this, leveraging natural resources fully is much awaited for Nepal's clout in the region. Nepal needs to wipe out various sorts of bottlenecks, ranging from infrastructure to investment. Sustainable power trade finds reflection in fair negotiation, the element to take ahead effective diplomacy. The hydropower projects and power deals reinforce regional cooperation and boost Nepal's influence in the geopolitical realm. In the wake of the rising strategic significance of such initiatives, Nepal can position itself as a significant actor in South Asia. Recent efforts at diversification in energy partnerships play their part in accelerating sustainable development and generating growth in prosperity.

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