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Role of Hydropower as a Confidence Building Measure in India - Nepal Border Management

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ABSTRACT

India and Nepal do not merely share an open border; their relationship is deeply rooted in historical, cultural, and religious ties. The 1,751-kilometre-long porous border between the two countries symbolizes centuries of people-to-people connections, yet it also presents complex challenges for national security. Border management is a highly sensitive issue for any sovereign nation, and this holds especially true in the context of India-Nepal relations. Despite enjoying strong diplomatic relations and economic interdependence, occasional tensions arise due to border-related disputes. For Nepal, India remains a crucial trading partner and strategic ally, while for India, Nepal's geographical and political significance cannot be understated. In this context, hydropower cooperation emerges as a vital Confidence-Building Measure (CBM), offering opportunities for mutual development, energy security, and regional integration. Enhanced collaboration in hydropower projects not only strengthens bilateral ties but also contributes to long-term stability and peace in the region. This paper explores the dynamics of India-Nepal border relations and the potential of hydropower as a tool for fostering trust and strategic partnership and long-term stability.

Key Words: India- Nepal Relation, Hydropower, Confidence building measure, Border.

Introduction:

The bilateral relations between India and Nepal are deeply rooted in history, geography, and shared civilizational heritage. The two nations share an extensive open and porous border of approximately 1,800 kilometers, which allows for the free movement of people and goods, as established under the Nepal-India Peace and Friendship Treaty of 1950. This open-border arrangement has fostered strong people-to-people ties, familial relationships, and cross-border cultural and linguistic affinities, reinforcing a unique model of bilateral interaction in South Asia. These religious, ethnic, and cultural linkages create a shared identity that influences diplomatic relations and shapes mutual perceptions.

Geographically, Nepal is nestled along the southern slopes of the Himalayas and shares a significant northern border with the People's Republic of China. India's security concerns have historically viewed Nepal as a vital strategic partner, especially after China annexed Tibet in the early 1950s. The 1962 Sino-Indian war further intensified India's strategic sensitivity regarding its northern frontiers, reinforcing Nepal's role as a buffer state. This unique geopolitical positioning of Nepal has drawn the attention not only of India and China but also of global powers. While British India regarded Nepal as a safeguard against Russian influence, independent India continued to see it as essential to the defense of its Himalayan borders.

Despite the closeness in historical and cultural terms, the India-Nepal relationship has experienced fluctuations and periodic tensions. These often arise from the friction between India's strategic expectations and Nepal's desire for sovereign policy space. While Nepal seeks to balance its foreign relations, especially between its two large neighbors—India and China—India remains wary of any external influence that may undermine its regional interests. This has occasionally resulted in diplomatic discomfort, particularly in areas such as border disputes, trade restrictions, and political interference.

The relationship between India and Nepal is not confined merely to political and strategic domains but spans the entire gamut of socio-cultural, economic, and developmental cooperation. The deep-rooted people-to-people connections, shared religious practices, linguistic affinities, and mutual dependencies in trade and employment reflect the intertwined nature of their societies. However, the same interconnectedness can sometimes become a source of friction, as domestic political changes within Nepal often influence bilateral dynamics with India. In essence, India-Nepal relations are characterized by both intimacy and complexity. While geography, culture, and shared history have brought the two nations close, divergent political aspirations and strategic compulsions have also created challenges. The need, therefore, arises to carefully identify areas of mutual benefit and potential strain, and to promote sustained dialogue and cooperation for long-term regional stability and partnership.

Border Management Challenges between India and Nepal

Despite the deep-rooted cultural ties and the long-standing open border policy, the management of the Indo-Nepal border presents a complex set of challenges that require nuanced understanding and collaborative solutions. The approximately 1,800-kilometer-long porous border facilitates free movement of people, labor, and goods, which has historically enhanced socio-economic ties between the two countries. However, this very openness also renders the border vulnerable to a range of transnational issues, including illegal trade, human trafficking, arms smuggling, and the infiltration of anti-national and insurgent elements.

One of the most pressing challenges is the lack of formal documentation and infrastructure at many crossing points, making it difficult for security agencies to monitor and regulate movement effectively. This loophole is frequently exploited by smugglers and traffickers. In particular, the trafficking of narcotics, counterfeit currency, and essential commodities like fuel and fertilizers remains a recurring issue. Moreover, human trafficking—particularly of women and children from Nepal into India and beyond—is a grave humanitarian concern.

Another challenge stems from the security threats posed by insurgent and terrorist groups, who at times exploit the open border for safe passage or as a base for logistics. Given the rise in regional and international security threats, including from global terror networks, an unmanaged open border could become a soft target for destabilizing activities. Cross-border encroachments and disputes over boundary demarcations in regions like Kalapani, Lipulekh, and Susta have occasionally led to diplomatic tensions. These disputes are compounded by the lack of clear and updated cartographic references and border pillars, especially in remote and rugged terrains.

To address these multifaceted issues, technological interventions such as Geographic Information Systems (GIS), Global Positioning Systems (GPS), and satellite surveillance can be deployed for accurate mapping and real-time monitoring of border activities. These tools can help in identifying disputed zones, unauthorized routes, and movement patterns. Additionally, biometric identification systems and smart border fencing at sensitive points could enhance regulatory control without undermining the open-border ethos.

Institutional and bilateral coordination also needs significant strengthening. Both countries must regularly engage in joint border coordination meetings (JBCMs), intelligence sharing, and capacity-building programs for border personnel. Mechanisms such as the Joint Working Group on Border Management, and agreements on mutual legal assistance, need to be reinvigorated to respond to evolving threats. While the open border between India and Nepal symbolizes historical friendship and shared cultural identity, the emerging border management challenges necessitate a fine balance between openness and security. Proactive, cooperative, and technology-driven border governance is the need of the hour to protect the integrity, sovereignty, and well-being of both nations.

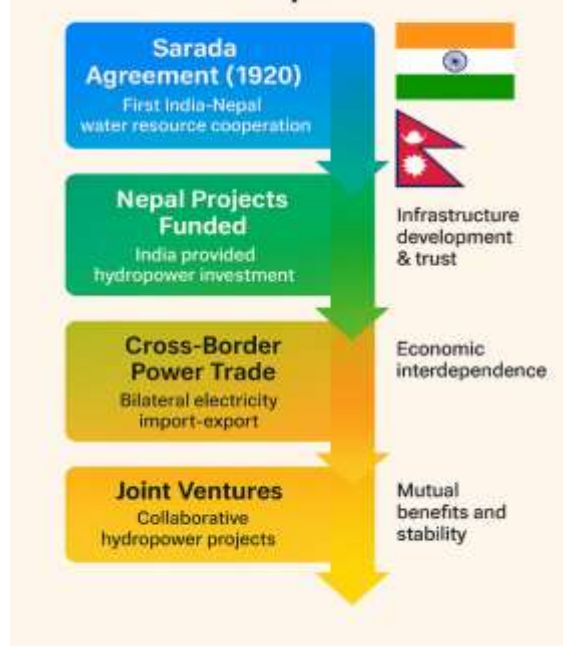
Role of Confidence Building Measures (CBMs) in Border Stability

Confidence Building Measures (CBMs) are pivotal mechanisms in international relations, particularly in regions marked by historical disputes and enduring geopolitical sensitivities. Their primary purpose is to foster trust, reduce the likelihood of misunderstandings, and prevent conflict escalation. In South Asia—a region frequently characterized by complex inter-state dynamics and contentious borders—CBMs serve as essential instruments for promoting regional stability.

In the specific context of India–Nepal relations, CBMs assume critical importance due to the nations' shared socio-cultural ties, open border, and occasional political and territorial disagreements. Though India and Nepal enjoy traditionally strong ties, periodic tensions—such as disputes over areas like Kalapani, Lipulekh, and Susta—have underscored the need for consistent dialogue and trust-building frameworks. Here, CBMs play a vital role in managing sensitive border issues and preserving overall bilateral harmony.

CBMs between India and Nepal span various domains, including diplomatic engagement, military-to-military communication, joint economic ventures, and people-to-people initiatives. These efforts aim to prevent misperceptions, improve transparency, and institutionalize routine communication channels. In particular, regular meetings between border security forces, joint inspection mechanisms, and high-level diplomatic exchanges are integral to ensuring smooth border management and preventing localized incidents from escalating into broader crises. One of the most critical areas for the implementation of CBMs is transboundary natural resource management, especially regarding water sharing and hydropower development. The two countries share several rivers, and cooperation in this sector is both necessary and sensitive. Trust and transparency are prerequisites for successful collaboration on large-scale infrastructure projects like dams and power stations. CBMs ensure that both parties have a platform for information exchange, technical coordination, and conflict mitigation over shared resources.

Moreover, CBMs help in addressing border demarcation challenges and enabling local-level dispute resolution mechanisms. Through joint technical committees and public information campaigns, both governments can reduce suspicion and demonstrate a mutual commitment to peaceful coexistence. Social and cultural exchanges, cross-border trade cooperation, and mutual investment initiatives also contribute to a more stable and interdependent relationship. CBMs are not just tactical arrangements; they are strategic imperatives for long-term peace and cooperation. For India and Nepal, the successful implementation and institutionalization of CBMs is indispensable in ensuring that temporary disagreements do not derail their enduring partnership. These measures facilitate a stable environment for negotiation, mutual benefit, and sustainable development, especially in sensitive areas like border security and shared ecological resources.

Border Management Challenges**Hydropower Cooperation and Peace Between India and Nepal****Overview of Hydropower Resources in Nepal**

Nepal is uniquely positioned in South Asia with abundant hydropower potential, thanks to its rugged Himalayan topography and dense network of perennial rivers such as the Koshi, Gandaki, and Karnali. Initial theoretical estimates suggest a potential of over 83,000 MW, while refined assessments using Geographic Information Systems (GIS) technology place economically feasible hydropower potential at around 53,000–72,000 MW, depending on project types and environmental considerations (run-of-river vs. storage projects).

Despite the vast natural potential, Nepal has struggled to convert this into installed capacity. As of 2025, the country has developed approximately 3,255 MW, or less than 10% of its feasible capacity. A combination of political volatility, financial constraints, and institutional inefficiencies has obstructed steady development. Seasonal variability in river flows, environmental fragility (including landslides and glacial lake outburst floods), and limited grid infrastructure further hamper the sector's growth.

Nevertheless, with growing domestic demand and an expanding regional power market, hydropower continues to represent a transformative economic and strategic opportunity for Nepal, contingent on improved governance, regulatory clarity, and stakeholder collaboration.

Nepal's Hydropower as a Regional Energy Asset

Nepal's hydropower surplus during the monsoon season presents a unique opportunity for regional electricity trade, especially with neighboring India. The capacity to export power when domestic generation exceeds demand not only strengthens the economy but also improves energy cooperation across South Asia.

In this context, Nepal's hydropower becomes more than an internal asset—it is a regional energy resource. Seasonal variations lead to energy deficits in winter and surpluses in summer, opening pathways for energy banking, where electricity exported during the wet season can be returned during dry months. These dynamics support the vision of a South Asian regional power grid and initiatives such as the Bangladesh-Bhutan-India-Nepal (BBIN) energy cooperation framework.

Hydropower diplomacy through long-term Power Trade Agreements (PTAs) and cross-border transmission infrastructure strengthens interdependence, reduces political friction, and promotes economic integration across national boundaries.

Dependence and Opportunities with India's Energy Market

India's rapidly growing energy demand—driven by population growth, industrialization, and urban expansion—provides a strategic market for Nepal's hydropower exports. Bilateral energy trade has expanded, guided by enabling agreements such as the India-Nepal Power Trade Agreement (2014) and the development of cross-border transmission lines like the Dhalkebar-Muzaffarpur 400kV line.

However, multiple regulatory, economic, and technical challenges persist. India's competitive electricity market—dominated by low-cost coal power in some regions—means that Nepal must enhance competitiveness, optimize cost structures, and meet quality standards. Furthermore, grid bottlenecks, uncertain policy environments, and pricing risks deter investment.

Nonetheless, private sector participation and regional interest in clean energy suggest that Nepal can benefit by aligning with India's renewable energy goals, especially as India transitions to a cleaner energy mix by 2030.

Theoretical Foundations of Hydropower in CBMs

The principles of equitable utilization and downstream benefit-sharing—as recognized in international water law—form the foundation for hydro-cooperation between riparian states. In the case of India and Nepal, these norms provide a legal and ethical basis for turning water resource disputes into frameworks of cooperation.

Hydropower cooperation allows both countries to institutionalize benefit sharing, reduce asymmetric power perceptions, and build mutual trust. Historical analyses reveal that collaborative over conflictual interactions dominate in India-Nepal hydro-relations, offering fertile ground for cooperative frameworks embedded within CBMs.

Hydropower Projects as Instruments of Diplomacy

Hydropower ventures like Arun III and Upper Karnali serve as diplomatic tools that integrate economic interdependence with political stability. These projects demonstrate how shared infrastructure and revenue generation mechanisms can create peace dividends. Participation in regional initiatives such as BBIN and SAARC Grid Connectivity further elevates hydropower into a multi-country diplomatic platform. By jointly managing and financing projects, India and Nepal reduce zero-sum outcomes and institutionalize cooperation.

Overcoming Challenges in Hydropower Cooperation

Hydropower cooperation offers significant opportunities for shared growth and energy development in South Asia, but it continues to face several deep-rooted challenges. Political mistrust remains a major barrier, particularly in Nepal, where there are lingering concerns about sovereignty and perceptions of Indian dominance in joint projects. This distrust is often amplified by historical tensions and imbalanced power dynamics. At the grassroots level, resistance is common among local communities—especially in regions like Madhes and among indigenous groups—who fear displacement, cultural erosion, and exclusion from the benefits of development. Environmentalists also raise valid concerns about the potential harm to fragile ecosystems, biodiversity loss, and disruption of natural river flows. Adding to these complications is the absence of robust legal and financial structures, including a lack of effective transboundary governance and long-term investment mechanisms. For example, past delays in the execution of the Pancheshwar Multipurpose Project between India and Nepal illustrate how political and institutional bottlenecks can stall progress for decades. Overcoming such hurdles requires a shift towards transparent decision-making, inclusive participation of affected communities, strong institutional frameworks, and cross-border collaboration rooted in mutual respect and shared benefits.

Hydropower cooperation holds immense potential for regional energy security and economic development, yet it faces persistent challenges that hinder its progress. Political mistrust, particularly in Nepal, stems from concerns about national sovereignty and fears of Indian dominance, creating hesitation in bilateral engagements. Additionally, local resistance, especially from ethnic groups such as the Madhesi and indigenous communities, often arises due to inadequate consultation and fears of marginalization. Environmental concerns further complicate the issue, with critics highlighting the fragility of ecosystems and the risks of displacement. Moreover, the lack of strong legal and financial frameworks—especially transboundary governance mechanisms—limits the effectiveness and sustainability of such cooperation. Addressing these challenges requires a comprehensive approach grounded in transparency, inclusive dialogue, institutional reforms, and active engagement of all stakeholders to build trust and ensure equitable benefits.

Case Studies of India-Nepal Hydropower Cooperation

Project Name	Capacity (MW)	Type	Country Investment	Key Features	Status
Arun III	900	Run-of-River	India (SJVN Ltd.)	80% power exported to India, Indian financing, local employment	Under construction
Budhi Gandaki	1200	Storage	Nepal	Potential flood control, water regulation, regional benefit sharing	Awaiting funding
Upper Tamakoshi	456	Run-of-River	Nepal	100% domestic project, supports seasonal energy banking with India	Operational
Upper Karnali	900	Run-of-River	India (GMR Group)	Export-oriented project with 500 MW to India	MOUs signed; pending development
Trishuli 3A/B	~90 each	Run-of-River	Nepal & China	Seasonal supply stabilizer	Operational/near-complete

Hydropower Projects and Reduction of Border Tensions

Hydropower projects near border areas (e.g., in Koshi and Gandaki basins) help to anchor peace by embedding cooperation in regions vulnerable to dispute. **The economic interlinkages** reduce strategic hostility, as both countries benefit materially from continued peace.

Infrastructural integration such as shared substations, transmission lines, and monitoring posts further promotes joint governance, enhancing security and stabilizing sensitive zones.

Managing Cross-border Resource Sharing to Foster Trust

The sustainability of hydro-cooperation relies heavily on robust institutional frameworks, such as joint river commissions, shared hydrological data platforms, and treaty-based conflict resolution mechanisms. Transparency and real-time communication reduce ambiguity, creating room for long-term cooperative behavior. Such structures not only mitigate ecological concerns but also provide structured engagement platforms even during political tension, thereby contributing to predictable and peaceful border management.

Hydropower Potential and Cooperation

Nepal has a hydropower potential of over 80,000 MW, of which only a fraction is currently tapped. India, with its increasing energy needs, views Nepal's water resources as vital for regional energy security. Several bilateral projects have been initiated, including:

- **Upper Karnali Hydroelectric Project**
- **Arun III Hydroelectric Project**
- **Mahatma Gandhi Setu's maintenance cooperation**
- **Power Trade Agreement (PTA), 2014**

These projects not only support Nepal's economy but also strengthen energy interdependence, making the relationship more stable and future-oriented.

Hydropower as a Confidence-Building Measure

Hydropower cooperation plays multiple roles in building trust and easing border management:

- **Economic Interdependence:** Energy trade fosters mutual economic gains, encouraging peaceful coexistence.
- **People-to-People Contact:** Project development and cross-border employment opportunities increase social engagement and reduce hostility.
- **Infrastructure Development in Border Areas:** Improved connectivity, roads, and electricity in remote regions support both economic growth and state presence.
- **Shared Governance Models:** Joint ventures such as the India-Nepal Power Trade Agreement establish platforms for dialogue and conflict resolution.
- **Environmental Diplomacy:** Collaboration over river systems creates common ground in addressing climate change and disaster risks.

Strategic Implications for Regional Stability

Hydropower diplomacy has a cascading effect on South Asian geopolitics. It aligns with India's "Neighbourhood First" policy and provides a counter-narrative to growing Chinese influence in the region. For Nepal, it represents a path to energy self-sufficiency, infrastructure modernization, and sovereign development, while keeping India engaged as a partner rather than a competitor.

Case Study: Arun III Hydroelectric Project

Arun III Hydroelectric Project stands as one of Nepal's most significant and emblematic hydropower ventures, representing a key site of bilateral interaction and collaboration between India and Nepal. The project's history is illustrative of the complex interplay between energy diplomacy, political fluctuations, and economic cooperation. Initially conceptualized decades ago, Arun III's development witnessed interruptions due to political instability, disputes at the border, economic blockades, and shifting government policies. Indian involvement, primarily through the state-owned corporation SJVN, anchors the project with nearly 80% of the generated electricity allocated to India, a fact that has generated considerable discussion and contention. Lessons from Arun III underscore the need for consistent political will, clear frameworks for dispute resolution, and mechanisms that address local expectations to prevent delays and ensure the realization of project benefits as a catalyst for enhanced bilateral ties. Its trajectory exemplifies how bilateral relations shape infrastructure development in South Asia.

Budhi Gandaki Storage Project

The Budhi Gandaki Storage Project offers a case highlighting the potential of hydropower projects as channels for downstream benefit sharing and bilateral trust-building. This storage project provides an infrastructural basis for regulating water flows purposefully to create multiple benefits, including hydroelectric generation and flood control, which can benefit both Nepal upstream and India downstream. Proponents argue that revised treaties and benefit-sharing agreements based on international water law principles could improve cooperation and resolve longstanding water disputes. The project has attracted attention for its potential to operationalize equitable sharing mechanisms, boosting confidence by ensuring Nepal's water resources are developed in partnership while addressing India's downstream interests. However, the project also faces challenges from financing constraints, regulatory approvals, and stakeholder concerns about environmental and social impacts. The success of Budhi Gandaki hinges on innovative institutional arrangements and robust diplomatic engagement.

Upper Tamakoshi and Other Smaller Hydropower Initiatives

Smaller initiatives like the Upper Tamakoshi project, with an installed capacity of 456 MW, play a vital role in addressing Nepal's seasonal energy surplus and deficit cycles, particularly by enabling energy banking with India. These projects illustrate the scope for expanding cross-border energy trade through the export of wet-season electricity and import of energy during dry seasons, which could mitigate Nepal's seasonal power shortage and optimize resource utilization. Moreover, smaller hydropower plants contribute to broad-based economic growth and energy security, enhancing Nepal's position within regional power grids. However, uncertainties in electricity spot markets and competition with cheaper fossil-based power in India pose financial risks to these projects. Introducing electricity derivative markets and other financial instruments may help mitigate price risks and incentivize investment in hydropower expansion by providing revenue assurances. Collectively, these projects underline the intertwined economic and diplomatic potential of distributed hydropower resources.

Hydropower Projects and Reduction of Border Tensions

Hydropower projects provide a pragmatic platform for linking economic cooperation to border security, actively contributing to tension reduction between India and Nepal. By fostering mutual economic dependence through joint resource utilization and benefit sharing, hydropower development creates practical incentives for maintaining peaceful and stable borders. Such interdependencies diminish the likelihood of conflict escalation by aligning national interests toward shared prosperity rather than adversarial competition. Moreover, hydropower projects serve as confidence-building mechanisms by embedding institutionalized cooperation in sensitive zones, allowing governments to focus on constructive engagement rather than confrontation. Border management benefits from these dynamics by coupling infrastructure development with governance frameworks that address security concerns jointly, thereby mitigating traditional border conflicts while enhancing regional stability.

Managing Cross-border Resource Sharing to Foster Trust

Effective management of transboundary water resources through bilateral water-sharing agreements and institutional mechanisms is fundamental to building trust between India and Nepal. Transparent arrangements involving equitable water allocation, data sharing, and joint monitoring reduce the scope for misunderstandings and conflicts. Such frameworks encourage cooperation by providing structured channels for dialogue, dispute resolution, and collaborative planning. International water law principles underpin these arrangements, emphasizing benefit-sharing, sustainable use, and mutual respect. Involving stakeholders from both countries in decision-making processes enhances legitimacy and reinforces political commitment to cooperative management. The critical role of data exchange and technological sharing in fostering trust is well established, as it provides objective evidence essential for monitoring compliance. These factors collectively contribute to creating durable institutional support for cross-border hydropower cooperation.

Challenges Posed by Disputes and Disruptions

Notwithstanding the potential benefits, disputes involving ethnic, political, and constitutional dimensions often disrupt hydropower cooperation and border stability. Domestic tensions spill over into bilateral relations, as seen in protests related to the Madheshi community's constitutional status in Nepal, which resulted in border blockades affecting Nepal's economy and bilateral engagements. Such issues exacerbate mistrust and complicate the operationalization of water-sharing treaties and hydropower projects. Furthermore, perceptions of political interference, sovereignty infringements, and

uneven benefit distribution fuel opposition in both countries. These socio-political challenges, coupled with irregular political leadership changes and fragile institutional frameworks, frequently cause delays and discontinuities in hydropower collaborations. Addressing these challenges requires sustained diplomatic efforts, inclusive policymaking, and meticulous management of public opinion on both sides.

Table: Overview of Hydropower Cooperation between India and Nepal

Section	Sub-section	Key Points	Implications
6. Economic Benefits Linking Hydropower Cooperation and Regional Integration	Mutual Economic Gains	- Boosts GDP, employment, and energy security in both countries- Nepal transforms landlocked status into energy exporter- India gains clean, diversified energy	Strengthens regional economic integration and mutual interdependence
	Electricity Trade as Trust Mechanism	- Structured power trade builds trust- Nepal exports surplus power to India- Requires enabling policies and infrastructure	Acts as a confidence-building measure through economic collaboration
	Long-term Socio-economic Stability	- Energy access improves health, education, and poverty levels- Supports SDGs and resilience- Reduces potential for conflict	Links energy development to peace, stability, and inclusive growth
Environmental and Technical Considerations	Environmental Impact	- Risks to ecosystems, biodiversity, and communities- Climate change affects water flow- Needs EIA and local stakeholder input	Sustainability demands balanced ecological and development goals
	Technical Risk Management	- Risks: cost overruns, currency issues, political instability- Requires risk-sharing, finance protocols, and institutional transparency	Predictability and capacity-building essential for investor confidence
	Infrastructure and Grid Integration	- Modern grids and harmonized standards needed- Investment in Nepal's infrastructure crucial- Enhances seasonal balancing and market efficiency	Technical integration is foundational for regional energy security
Political Dimensions and Challenges	Sovereignty and Perceptions	- Nepal wary of India's dominance- India seeks strategic energy access- Requires mutual respect and equitable benefit-sharing	Diplomacy needed to overcome asymmetry and foster lasting trust
	Domestic Politics and Ethnic Factors	- Leadership shifts and ethnic protests affect project continuity- Local legitimacy and stakeholder engagement vital	Inclusive governance minimizes disruption and enhances stability
	External Geopolitical Influence	- China's growing role affects India-Nepal dynamics- Nepal balances ties with both powers- Hydropower central to water geopolitics	Regional competition introduces both opportunities and strategic risks

Lessons from Other South Asian Confidence-Building Measures

The experience of Confidence-Building Measures (CBMs) in South Asia, particularly between India and Pakistan, offers instructive insights for India-Nepal hydropower cooperation. Although Indo-Pak CBMs have yielded limited success due to deep-rooted political tensions, they underscore the significance of sustained dialogue, institutional commitment, and the strategic inclusion of economic and resource-sharing initiatives in mitigating conflicts. Water and energy cooperation in broader regional groupings, such as the BBIN (Bangladesh, Bhutan, India, Nepal) initiative, illustrates how transboundary resource management can serve as a catalyst for peace and shared prosperity. These cooperative frameworks demonstrate that hydropower

collaboration—when embedded in structured, policy-backed institutions—can transcend bilateralism and contribute to regional integration. Crucially, robust treaties, joint commissions, and mechanisms for transparency and dispute resolution provide the necessary architecture to institutionalize CBMs, making cooperation more resilient to political fluctuations. Applying these lessons to the India-Nepal context suggests that long-term success in hydropower CBMs will depend not only on technical and economic feasibility but also on the strength of institutional frameworks that support mutual trust, accountability, and shared benefits

Conclusion

Hydropower holds substantial potential as a confidence-building measure in India-Nepal relations, offering a strategic avenue that blends economic interdependence, diplomatic engagement, and regional stability. By fostering cooperation over shared natural resources, hydropower transcends conventional geopolitical disputes and lays the foundation for sustained bilateral trust. Realizing this potential requires comprehensive policy measures, including the reinforcement of bilateral water-sharing frameworks, the creation of inclusive and transparent institutional mechanisms, and the equitable distribution of benefits. Attention to local participation and socio-political sensitivities is essential to enhance project legitimacy and avoid conflict. Moreover, hydropower diplomacy presents an emerging field for future research, particularly in examining its role in regional peacebuilding and Nepal's unique position within Himalayan water politics. As South Asia grapples with growing energy demands and climate-induced water stresses, inclusive and cooperative hydropower development could serve as a transformative model for regional integration and sustainable growth.

Deepening India-Nepal hydropower ties not only promotes technical and economic synergy but also contributes to long-term peace dividends. A stable and energy-secure Nepal aligns with India's strategic interests in a cooperative neighborhood. By institutionalizing these gains, both nations can build a resilient partnership rooted in mutual respect and shared prosperity. Ultimately, hydropower cooperation can evolve into a cornerstone of South Asia's collaborative future.

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