India-Bhutan Power Cooperation: Between Policy Overtures and Local Debates



Medha Bisht

Dr Medha Bisht is a Associate Fellow Associate Fellow at the Institute for Defence Studies and Analyses, New Delhi.

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Summary

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Will this second phase be as rewarding as the first one? With hydel cooperation emerging as an important pillar in India-Bhutan relationship, this Issue Brief examines the challenges and opportunities in this sector in the years to come. By highlighting the issue of hydel dams, this brief argues that development assistance and its impact on the local environment could become an important variable in shaping local perceptions towards India-Bhutan diplomatic engagement.

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Will this second phase be as rewarding as the first one? With hydel cooperation emerging as an important pillar in India-Bhutan relationship, this Issue Brief examines the challenges and opportunities in this sector in the years to come. By highlighting the issue of hydel dams, this brief argues that development assistance and its impact on the local environment could become an important variable in shaping local perceptions towards India-Bhutan diplomatic engagement.

Bhutan's Power Sector

Electricity was introduced in Bhutan only in the 1960s, when diesel generating sets were installed in some major towns. In 1967, Bhutan started importing electricity through the Jaldhaka hydropower plant, located in West Bengal, India. The turning point in power cooperation came with the commissioning of the 336 MW Chukha hydel project in 1989, which was a significant test case in many ways and set the pace for future cooperation. With 75 per cent of the total generation capacity from Chukha being exported to India, Bhutan realised the potential of hydro-power projects as a means to earn more revenues. Given the benefits from bilateral cooperation in the power sector, India and Bhutan signed a Memorandum of Understanding in December 2009, whereby India committed to buy 10,000 MW from Bhutan by the year 2020 (See Table 1). At present, various projects are under discussion and the Detailed Project Reports (DPRs) are being prepared.

The first phase was significant as it witnessed the successful commissioning of three hydel plants (Chukha, Kurichhu and Tala) between 1987 and 2007. In all the three projects, India has provided total investment on turnkey basis i.e. 60 per cent as grant and 40 per cent as loan. Bhutan on its part provided free land, timber and firewood for the projects and waived taxes on construction material. Since 2003, there has been a spike of revenues generated from export of power; from Nu 2.3 billion to Nu 10 billion in 2009, thereby substantively increasing revenues from Indian assisted projects.

Table 1: Projects to be Completed by 2020

S.No.	Name of the Project	Installed Capacity	Estimated Project Cost (Million-Nu)	Implementation Model (Loan- Grant Ratio)	Year of Commissioning Expected	
1	Punatsangchhu-I	1200	36,348	IG (60:40)	2015 (Under Construction)	
2	Punatsangchhu- II	1000	42,301	IG (70:30)	2017(Agreement Signed)	
3	Mangedechu	720	38,105	IG (70:30)	2017 (Agreement Signed)	
4	Kuri Gongri	1800	79,200	IG (70:30)	2020 (on hold)	
5	Bunakha	180	12,240	JV (70:30) (THDC)	2020	
6	Sankosh	4060	42,301	IG (70:30)	2020 (on hold)	
7	Wangchu	900	50,400	JV (70:30) (SJVNL)	2020	
8	Chamkarchhu-I	670	37,520	JV (70:30) (NHPC)	2018	
9	Amochhu	620	39,680	IG (70:30)	2017	
10	Kholongchu	650	25,272	JV (70.30) (SJVNL)	2018	
Total		11,636	500,263			

Source: Adapted with modifications from the Department of Energy, Ministry of Economic Affairs, Bhutan

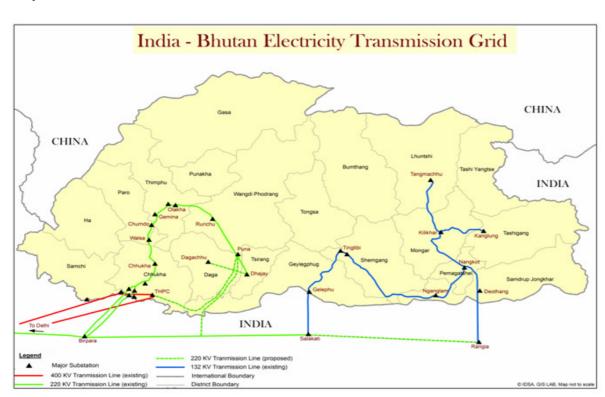
Phase One of Power Cooperation

Since power cooperation has proved beneficial for both countries, with power deficit India buying electricity from a power surplus Bhutan, it is important to revisit the unique strands of this cooperation. Some of the significant factors that have taken this relationship forward are: an integrated approach, minimal uncertainty, meaningful pay-off structures, various issue linkages and side payments.

An Integrated Approach

India-Bhutan power cooperation is an interest driven cooperation with a win-win provision for both countries. An important aspect of this cooperation is the integrated approach, which has been successful in strengthening institutions to a great extent, thus leading to optimal end results for both countries. While an integrated approach has played an important role in reforming Bhutan's domestic power sector, at the bilateral level it has strengthened the process of information exchange and dialogue.

Reforms in Bhutan's power sector were introduced at the beginning of the 21st century with the passing of the Electricity Act in 2001. In 2002, the department of power was restructured into two wings: the Department of Power (DoP) and the Bhutan Power Corporation (BPC). After this bifurcation, the department of energy became the policy and planning agency while the Bhutan Power Corporation was made responsible for transmission, distribution and supply of electricity within the country. BPC will gain further importance in the near future as it will have the responsibility for laying transmission lines connecting the eastern and western domestic grid. (See Map 1)



Map 1: Domestic Transmission Grid in Bhutan

Another development for streamlining the power sector was the formation of the Druk Green Power Corporation (DGPC) in 2008. The DGPC is the biggest contributor to government revenues in the form of dividends and taxes. It earned a pre-tax profit of Nu 6.5 billion in 2009 out of a total revenue of Nu 10 billion, of which Nu. 9.9 billion alone accrued from exports to India.²

Meanwhile at the bilateral level an Empowered Joint Group of Ministers (EJGoM) has been established. Its mandate is to discuss issues relating to human resource up-gradation, signing of joint venture agreements, examination of the reservoir projects, participation

² Royal Government of Bhutan, Druk Holding and Investment, *Annual Report* 2009, April 2010, p. 24, at http://www.dhi.bt/forms/annualreport_2009.pdf.

of Bhutanese companies, etc.³ Strong institutional mechanisms for joint flood management are also in place. A joint technical team pertaining to common rivers was constituted in September 2010. The team assesses issues related to sediment load, causes of landslides and flooding, stability assessments and recommends remedial measures.

Minimising Uncertainties

A high level of confidence in bilateral negotiations often increases the prospects of cooperation between states. Royalty energy, i.e. power provided to domestic consumers at subsidised rates, has helped in reducing domestic anxieties and uncertainties over sustained energy supply. It needs to be noted that in Bhutan subsidies at the domestic level are intricately related to royalties which in turn are dependent on power exports. For instance, of the total generated electricity, 15 per cent of the energy output is provided to BPC, which sells it to domestic consumers at a subsidised rate. However, BPC also offers targeted subsidies for domestic consumers (50 per cent for those using low voltage and 32 per cent for large industries using high voltage). The revision of tariff rates on a periodic basis⁴ (3-5 years) has also reduced uncertainty on both sides. Repeated tariff revisions in the late 1990s helped in accelerating economic growth, with GDP rising above 6.5 per cent per year for 1995-2003.⁵ (See Table 2)

Table 2: Export Earnings from Hydro Power (in Millions, Nu)

Year	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Export RevenueTotal (Million)	2,363.7	2,804.3	2,584.8	3,509.7	6,903.8	10,123.1	10,434.9	9,953.2
Chuka and Kurichu	2,363.7	2,804.3	2,584.8	3,509.7	4,232.7	4,042.9	3,969.0	3,974.0
As % of GDP	9.1	9.9	8.3	9.7	10.4	8.2	7.3	6.5
Tala Share in % to total	ı	-	ı	-	38.7	60.1	62.0	60.1
As % of GDP	ı	-	-	-	6.6	12.3	11.8	9.8
Export revenues as % of GDP	9.1	9.9	8.3	9.7	17.0	20.5	19.1	16.3

Source: Royal Government of Bhutan, Royal Monetary Authority of Bhutan, *Annual Report-* 2009-2010, January 2011.

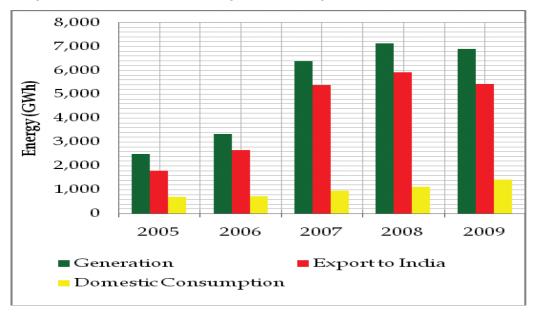
Sonam Tenzin, "Talking hydropower projects," *Bhutan Today*, June 10, 2011, at http://bhutantoday.bt/index.php?option=com_content&view=article&id=159:talking-hydropower-projects-by-sonam-tenzin-

In 2011 tariff rates are Nu 2 per unit for Chukha; Nu 1.75 for Kurichhu and Nu 1.8 for Tala. See Table 2 for export earnings from hydro power.

N.C. Kojo, *Bhutan: Power Exports and Dutch Disease*, Centre for Bhutan Studies, 2005, p. 5, at http://archiv.ub.uni-heidelberg.de/savifadok/volltexte/2009/306/pdf/DutchDisease.pdf, p. 7.

Pay-Off Structures

Another factor that explains the cooperation between India and Bhutan is the pay-off structure. The pay-off structures are often influenced by events that take place in areas beyond state control. For example, the geographic location and steep terrain of Bhutan with its vast hydro-electric potential complements the growing demand for electricity in eastern and northern India. Also, while Bhutan neither has the financial resources to build projects nor the infrastructure to tap hydro-power, India has the political will, economic resources, technology and an expanding energy hungry market, and also prefers tapping the hydro-potential for its eastern and northern grid. The northern grid in India is particularly important for Bhutan, as the northern region consumes one-fifth of the total energy supply in India. Meanwhile, given the increasing consumption in eastern India, the eastern grid has also utilised power imports from Bhutan in the last few decades. The increasing consumption rates in India and the growing market for power exports are reflected in Graph 1.



Graph 1: Generation, Consumption and Exports

Source: Druk Green Power Cooperation, Annual Report 2009, 2010

Side Payments and Issue Linkages

When zones of agreement expand, connections and correlations between issues can often make a deal more attractive. Apart from the actual benefits derived from hydro projects, the side payments (ancillary benefits) associated with Indo-Bhutan cooperation are industrial development, poverty alleviation, self reliance and skill based training.

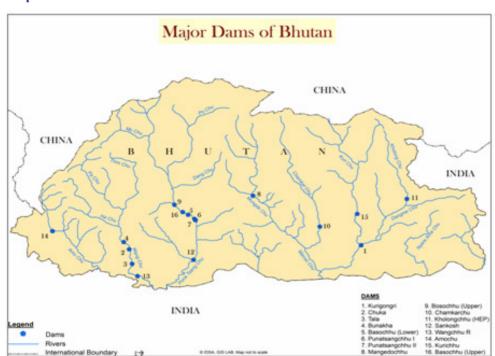
During the 1980s and 1990s, several energy intensive industries were set up in Bhutan because of the cheap subsidised electricity available in the domestic market. In the 1980s these industries consumed about 80 per cent of Bhutan's total available electricity. According to the latest available estimates, the number of industrial licences increased

from 1389 in 2008 to 1565 in 2009. Private sector participation is one of the core goals for Bhutan as per its Economic Development Policy 2010. the low cost of electricity in Bhutan is perceived as a gateway to attract raw material for getting goods manufactured in Bhutan.

Socio-economic uplift of its people is Bhutan's central goal as per its Tenth Five Year plan. Electricity for All by 2013 has been an important objective for alleviating poverty. Projects related to rural electrification are commissioned by donor countries such as Austria, Japan, Australia and Norway. According to the latest estimates, the number of villages electrified increased from 1934 in 2007-08 to 1981 villages in 2008-09. This has been possible because of the Indian assistance for mega and medium hydel projects. Meanwhile income from power exports is expected to increase the revenue base and thus enable the allocation of more resources for health, education and rural electrification.

Phase Two of Power Cooperation

Given the broad contours of India-Bhutan power cooperation, it would be pertinent to assess the sustainability of this cooperation in the second phase. The transition to the next phase is reflected by the change in investment partnerships, as the upcoming projects will be planned on a 70 per cent loan and 30 per cent grant basis (except for Punatsangchu hydel project which is 60 per cent loan and 40 per cent grant). Further, the nature of projects will change, as mega projects with reservoirs will be constructed. This could entail huge financial costs, amounting to a notional Rs./Nu 500 billion. Given that hydel projects have huge gestation periods, financial costs are expected to rise over time. Map 2 presents the existing and future projects to be constructed by 2020. The existing and completed projects are Chukha (no. 2), Kurichhu (no.15) and Tala (no.3).



Map 2: Dams Planned for 2020

The transition in the nature of investments (Rs. 50,000 crore) is indicative of Indian concerns about the sustainability of power projects. In fact, in 2009, the Indian power secretary H. Brahma in 2009 raked up the issue of sustained Indian investments in Bhutan and was cited in the Indian media as saying that it could "adversely impact Indian budgetary provisions." A technical feasibility study of some projects is also under way. According to some reports, the Joint Empowered Group of Ministers Meeting in June 11, 2011 delayed further action on Sankosh and Kurigongri due to some technical and financial issues. Sankosh HEP has been questioned by the Government of India on grounds of financial viability, even suggesting the closure of the project. Sankosh is a 4060 MW project that is expected to make up 40 per cent of the 10,000 MW of total targeted generation. Reasons for the delay are the staggering costs of the project (the cost of power generation is expected to be Nu 5 (or more) per unit, more than double the present export tariff rates slated at Nu 2 a unit). In view of the magnitude of investments, some of the problems which could impede the sustainability of the projects are discussed below.

Sediment Load

One of the biggest problems related to hydel projects is the sedimentation of reservoirs. The sediment can have an adverse effect on turbines, reducing their efficiency, thus adversely impacting electricity generation. Himalayan rivers are known to be sediment rich and due to the steep topography in Bhutan soil erosion has significant influence on the sediment load in rivers.⁸ Other contributory factors to sedimentation of rivers are landslides and flash floods. According to one study, the value of sediment concentration increased in the Punatsangchu river because of the glacial lake outburst floods that occurred in 1994.⁹ In 2010, India's former environment and forest minister, Jairam Ramesh, raised the ante against the downstream impact of these projects.

Climate Change

Climate change is a concern for Bhutan and natural disasters like glacial lake outburst floods (GLOF) could be aggravated by it. Northern Bhutan abounds in glaciers and glacial lakes. According to some estimates, there are 677 glaciers and 2,674 glacial lakes in Bhutan. Of these, 25 glacial lakes have been identified as potentially dangerous (See Map 2). These

[&]quot;Power ministry jittery on Bhutan investments," Times of India, November 12, 2009, at http://timesofindia.indiatimes.com/biz/india-business/Power-ministry-jittery-on-Bhutan-investments/articleshow/5221152.cms

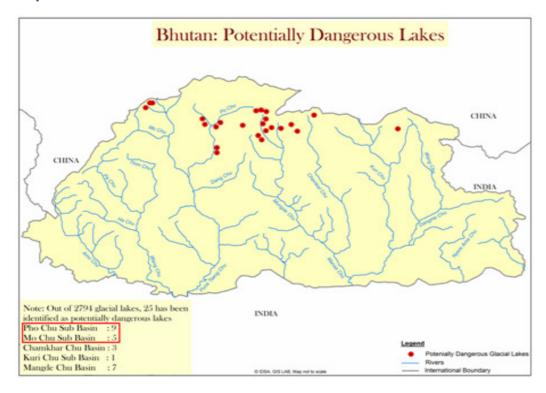
Phuntsho Wangdi, :Indian Government to decide the course of Sunkosh in three-month's time," Druk Green, June 18, 2011, at http://www.drukgreen.bt/Content2.aspx?c=121; Tashi Namgyal, "A Power Packed Resolve to Light Up Bhutan," Department of Technology and Telecom, July 5, 2011, Thimpu, at http://www.dit.gov.bt/aggregator/sources/2?page=1.

Sonam Choden, *Sediment Transport Studies in the Punatsangchu Basin*, Lund University, Sweden, 2009, p. 44 at http://lup.lub.lu.se/luur/download?func=downloadFile&recordOId=1415878&fileOId=1415879.

⁹ ibid.

lakes can damage agricultural fields, lives and livelihood and critical infrastructure including hydel plants. Thorthomi glacier poses a risk to the valleys of Central Bhutan particularly Punakha and Wangdiphodrang. The Basochhu hydropower project and upcoming Punachangchu hydroprojects are located in the Punakha-Wangdiphodrang Valley.

Map 3



Meeting Water Shortages During the Lean Season

Bhutan's hydro generation capacity is seasonal and is down to one sixth of its total capacity during the lean season, which means that Bhutan has to import power from India during the winter months to meet domestic demand - especially in eastern Bhutan. ¹⁰ In 2009, the Chukha hydel project imported 59.738 million units of energy (at a cost of Nu 122.463 million); Kurichhu hydel project imported 1.249 million units (cost Nu. 2.31 million); and Tala hydel project imported 0.359 million units (cost 0.664 million). ¹¹ The total money spent on electricity imports was Nu 127.25 million. ¹² In 2003-2004, the total cost of electricity imports from India was Nu 40 million. ¹³

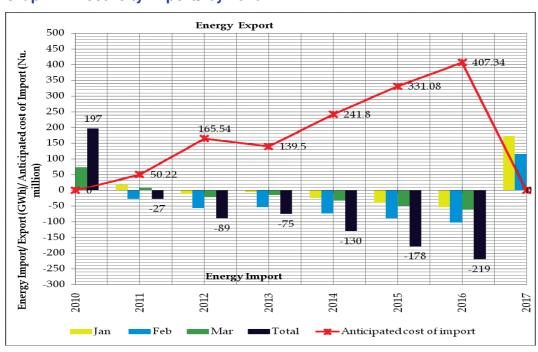
Phuntsho Wangdi, "Electricity rich Bhutan imports power from India," *Business Bhutan*, June 18, 2011, at http://www.businessbhutan.bt/?p=6344.

¹¹ The projects indicate the tariff rates at which power was imported to East Bhutan,

Department of Revenue and Customs, *Bhutan Trade and Statistics Year* 2009, Ministry of Finance Royal Government of Bhutan, April 2010, at:: http://www.mof.gov.bt/downloads/bhutantradestatistic2009.pdf

Bhutan Electricity Authority, Power Tariff: Presentation to BCCI, November 9, 2005, Department of Energy, at: http://www.bea.gov.bt/download/present2.pdf

However, imports have now become a concern for Bhutan because domestic demand is increasing.¹⁴ While the reason for imports is low seasonal flows, the problem is further complicated by the lack of an intra-regional grid connection in Bhutan, the growing demand from the construction industries related to hydro projects, the upcoming medium voltage industries and increased demand from power intensive heavy industries such as Druk Iron and Steel, etc.¹⁵ As per some estimates, the domestic winter demand has reached 237 MW and is expected to rise further to 308 MW by 2011. According to the Royal Government of Bhutan's projection, the import of electricity could cost Nu 407.3 million by 2016.¹⁶ (See Graph 2 for projected figures).



Graph 2: Electricity Imports by 2016

Source: Druk Green Power Cooperation, Annual Report 2009, (2010)

In the Eastern Regional Power Committee Meeting held on June 20, 2011, Bhutan proposed to supply peaking power from its existing hydro power plants to coincide with India's peaking hours and import power in the off peak period. Along with this Bhutan has also proposed that such an arrangement should have no financial transaction involved for the net energy imported by Bhutan to meet its shortages. For proposal details see: 18th TCC Meeting, Annexure XII of Eastern Regional Power Committee Meeting, Ranchi, June 2011, at: http://eastrpc.org/18TCCAGENDA.pdf. Some other alternative proposals are (a) the netting off module, under which power would be imported at the same tariff as that which it is exported, (b) diversions of streams in Bhutan to Chukha and Tala, with an added addition of 30-40 MW, (c) power banking, where power can be exported tariff free in summer to an energy bank for use in winter, (d) construction of thermal plants based on gas and coal in Eastern Bhutan.

Bhutan Electricity Authority, Tariff Review Report, Bhutan Power Corporation Lmt, September 2010, p. 16, at: http://www.bea.gov.bt/download/BPC%20Tariff%20Review%20Report%202010.pdf

Royal Monetary Authority of Bhutan, Annual Report 2009-2010, Annex V, Royal Government of Bhutan, January 2011, at: http://www.rma.org.bt/RMA%20Publication/Annual%20Report/annual%20report%202008-2009.pdf

Recently some concerns have been voiced in Bhutan regarding the revision of Chukha electricity tariff rates. The last tariff hike was in 2005, while the next revision is not slated to occur till 2014. Sources state that this could affect Bhutan's domestic revenue projections and finances until 2014, as Chukha in contrast to the other projects (Tala and Kurichhu) had become debt free in 2007.¹⁷

Private Sector Participation

Though tax holidays, royalty power and capital subsidies have been introduced to encourage private sector participation, the response from the private sector in Bhutan has been discouraging. The primary reason for this is the uncertainty of power trade, or lack of independent power purchasers. The Clean Development Mechanism (CDM) project (Dagachhu) has attracted some private investment primarily because of a guaranteed power purchasing agreement from Tata Power Company. In 2008, the DGPC entered into a Joint Venture (JV) with Tata Power Company. With TPC as the guaranteed buyer of electricity, the JV is expected to neutralise the high construction and financial cost. But sceptics contend that the financial structure of the project would leave Bhutan exposed to foreign exchange risks, as the government would borrow in US dollars and Eurodominated loans while the revenues would be governed by the Indian rupee. A way out has been to develop them as cross border projects for export during the peak season and meeting domestic requirements during the lean season. CDMs are also seen as projects that enable Bhutan to earn carbon credits, which will be used for social upliftment.

Domestic Perceptions and Market Interaction

The Bhutanese media is concerned about the domination of the Bhutanese market by Indian construction companies. Most of the construction companies also get cheap immigrant labour, which is being perceived negatively in Bhutan.²⁰ There are also very few Bhutanese contractors, public or private, who benefit from joint agreements on hydel power development.²¹ Demands are made for greater Bhutanese participation in hydro projects and construction and management activities. The Construction Association of Bhutan has even proposed the formation of a consortium to take up mega projects.

Tenzing Lamsang, "Chukha tariff revision overdue since 2009," *Business Bhutan*, August 6, 2011, at http://www.businessbhutan.bt/?p=6980.

Asian Development Bank, "Bhutan: Energy Sector," Evaluation Study, Manila, 2010, p. 23, at http://www.adb.org/Documents/Reports/SAPE/BHU/SAP-BHU-2010-21/SAP-BHU-2010-21.pdf, p. 28.

[&]quot;Bhutan Hydropower Wins UN Cross-Border Approval for Emissions Cuts," Environmental News Service, April 10, 2010, http://www.ens-newswire.com/ens/apr2010/2010-04-12-01.html.

Sanjeev Mehta, "Why rising unemployment?", *Bhutan Times*, April 12, 2008, at http://www.bhutantimes.bt/index.php?option=com_content&task=view&id=1301&Itemid=79.

Tsering Tobgay, "Unemployment growth in Bhutan," December 9, 2007, Ministry of Labour and Human Resources, at http://www.molhr.gov.bt/index.php?option=com_content&view=article&id=309: unemployment-growth-in-bhutan&catid=1:latest-news&Itemid=67.

Technical and quality problems associated with Indian projects are also emerging as areas of concern. Recently, the Tala hydel project had some technical problems with four runners worth Nu 280 million showing cracks. Also, a 500 MW High Voltage cable worth Nu 40 million failed after being installed in the Tala power house. In addition, there are also questions about the quality of construction, increased sedimentation and design flaws. ²² In comparison to the other hydel projects, Tala was also the worst hit by the floods caused by cyclone Aila in 2009.

Need for Policy Revision?

There is a thus a growing shift in perception and the Bhutanese media in particular is debating these in various public forums. However, Bhutan's policy establishment remains hopeful, the reasons for which are recent initiatives such as the establishment of a new power training institute and upgradation of existing vocational skill building institutes in Bhutan. ²³ The objective of these institutes is to strengthen the national workforce and build up their operational and management capabilities. Also 34 construction companies have come together to form a hydro power consortium. This Construction Development Consortium Ltd. will be a public company and it will create an equipment bank to provide major machinery either as a shareholder or independent owner of the machinery. ²⁴ A contract worth Nu 2.83 billion for work on Punatsangchu-I was given to local contractors in March 2011. Similar work packages regarding Mangdechu and Punatsangchu-II are also being allotted indicating a trend and inclination towards involving Bhutanese citizens/contractors. ²⁵

Important as these measures are, the needs, interests, capacity and preferences of the extended stakeholders in India (Assam) and Bhutan are also important. A potential way out is to take a balanced view on issues and stakeholders that is not inimical to the Indian diplomatic presence in Bhutan. While Indian companies should be mindful of not squeezing domestic stakeholders in Bhutan, technological upgradation should also be kept in mind as they invest in and build hydropower capacity. ²⁶ Contracts given to Indian construction companies should be transparent, which is an issue of domestic concern in

Lamsang Tenzin, "Expensive Equipment from India failed at Tala project," *Business Bhutan*, March 19, 2011, at http://www.businessbhutan.bt/?p=5121.

²³ "Reinventing Bhutanese workforce," *Bhutan Observer*, June 10, 2011, at http://www.bhutanobserver.bt/reinventing-bhutanese-workforce/.

Karma Tenzin, "Dawn of new hope," *Bhutan Times*, June 12, 2011, at http://www.bhutantimes.bt/index.php?option=com_content&task=view&id=2611&Itemid=1.

Phuntsho Wangdi, "Small Contractors get billions from Hydro project pie," *Business Bhutan*, July 2, 2011, at http://www.businessbhutan.bt/?p=65.

I am grateful to Ambassador A.N. Ram for this observation.

Bhutan. This is important as it could have a long term perceptual impact on India-Bhutan diplomatic relations. While Bhutan needs hydro-power to sustain its national economic growth, some policy aspects need to be taken into account.

- * A combined impact assessment of hydel dams and potential possibilities of glacial lake outburst floods (GLOF) and landslide dam outburst floods (LDOF) should be undertaken by the Indo-Bhutan Joint Technical Team. Sensitive issues need to be addressed in a detailed report and made available for public scrutiny.
- * At present there is an absence of basin wide studies to assess the cumulative impact of hydro power projects along the same river basin. This can be particularly alarming given the intensive hydro-power development in the next 20 years. In order to fill this gap, a basin wide study, which includes the socio-environmental impact on Bhutan's extended neighbourhood, needs to be undertaken. The National Environmental Commission in Bhutan, which has the primary responsibility of monitoring and enforcing mitigation measures to manage the adverse environmental impact of hydel projects, lacks institutional capacity.²⁷ Institutional capacity building on this front could be a prospective area of cooperation between India and Bhutan.
- * The ongoing cooperation between India and Bhutan entails the generation of 10,000 MW of power by 2020. While this pertains to the bilateral engagement, India should not take a positional stand on the remaining potential (roughly 11,000 MW) and should agree to give transit for energy facilitating trade between Bhutan and Bangladesh. India's consent on transit would provide a fillip for joint venture projects between Bhutan and Bangladesh, an issue which would facilitate regional cooperation and trans-border connectivity.

Economic relations can strongly influence diplomatic relations. The nature of investment and its impact on domestic constituencies creates local perceptions often leading to political inclinations in foreign policy engagement. This is particularly true when it comes to a neighbour sharing common boundaries. Bhutan is on the threshold of opening up—both economically and politically. Significantly, the process of democratisation in Bhutan will largely be determined by the issue of good governance. As development partnership is an important area in Indo-Bhutan relations, India's role and impact as a development facilitator would take centre stage in the years to come.

Asian Development Bank, "Bhutan: Energy Sector," Evaluation Study, Manila, 2010, p. 23, at http://www.adb.org/Documents/Reports/SAPE/BHU/SAP-BHU-2010-21/SAP-BHU-2010-21.pdf.