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Capitalizing Rapid Hydropower Development in Nepal

Mobilizing reform constituencies to address the constraints

Energy is an essential commodity in today's market. It powers large industries that cater to global market and small scale farmers that sell locally. It powers homes to hospitals, shops to schools, communications to transportation, to name just a few. It is in essence the lifeblood of a modern economy. Access to reliable and inexpensive energy can, therefore, be considered a primary driver for economic growth of every country. However, Nepal's inability to provide such access has curtailed its ability to produce an economy neither able to compete in the global market nor efficiently provide for its domestic consumers.

Nepal has potential to generate significant amounts of hydropower resulting from its natural topography, but has been able to tap just a mere fraction ever since the first power plant was built over a hundred years ago. Over the years, numerous consultations and plans have been drafted and assessed by donors and government administrations alike; yet, hydropower remains under-generated.

Niti Foundation, with support from The Asia Foundation, has been engaged in the hydropower sector since 2010. Its engagement in this sector is premised on an understanding that reform rarely happens in an apolitical vacuum and has conducted several political economy analyses of the sector to challenge the technocratic and formulaic way in which past reform attempts have been traditionally managed. Such an approach provides insights into the underlying interests and incentives and ensures political settlements of stakeholders, which can then be challenged by working politically on targeted reforms.

Niti's approach

In Nepal, the formulation of hydropower policies—as in most other sectors—has remained within the purview of few political actors, select bureaucrats, and hand-picked experts (albeit to a limited extent). Other relevant stakeholders, including consumers, producers, and investors, among many others, have traditionally been sidelined during the policymaking process. This failure to maintain an inclusive policy process has resulted in a monopoly by a handful of powerful actors whose personal interests and capacities determine factors in framing the policies and not the broader social goals such as equity, efficiency, and practicality of the policy itself.

Niti's approach in this sector, therefore, has been in bringing together the concerned stakeholders from across the political spectrum into the deliberative process of policy formulation. This has allowed for contestation of ideas and incentives of the reform constituencies and to identify an area of common minimum understanding upon which policy reform could be pursued. Reform constituencies ranged from government institutions (e.g., Legislature Parliament, Ministry of Energy) semi-government agencies e.g., Nepal Electricity Authority-NEA, Electricity Tariff Fixation Commission - ETFC), private sector (represented by Independent Power Producers Association Nepal - IPPAN) and civil society organizations (e.g., National Association of Community Electricity Users - NACEUN in Nepal, Nepal Hydropower Association - NHA, and Labor Unions).

Understanding the constraints

Through a series of consultative meetings and policy roundtables with representatives from a range of reform constituencies, Niti produced a study report, 'Catalyzing Rapid Hydropower Development in Nepal: Understanding Underlying Constraints and Engaging Reform Constituencies' that identifies the following binding constraints in hydropower development in Nepal:

• Legal framework

The large number of amendments proposed against the Electricity Act 2066 tabled at the erstwhile parliament by political representatives from across the political spectrum indicates the need to rethink the actual needs, and the necessary legal framework, to ensure energy security for Nepal.

pays its power producers and the consumer tariff rate that NEA charges its consumers, in a way that private entrepreneurs are incentivized to invest in new hydropower projects while keeping NEA financially sound.

• Institutional restructuring

Unbundling of NEA remains a critical issue for full liberalization and growth of the Nepali power sector. Establishment of new institutional structures in the form of separate regulatory authorities for transmission and distribution functions remain a viable solution in promoting new avenues for investments in the sector.

• Community and consumer involvement

Effective mechanism for managing local community expectations and their involvement in generation, distribution, and transmission of electricity must also be explored in order to ensure local acceptance and ownership and an investment friendly climate in the sector.



• Investment capital

There is potential to attract significant amounts of foreign direct investment into the hydropower sector in Nepal. But it is also important to identify ways for Nepalis to mobilize existing capital to increase domestic investment in the hydropower sector.

• Investment in infrastructure

While the role of government can be reduced in certain areas (such as run-of-river generation and distribution of electricity), there is an increasing need for government investment in larger infrastructures (such as storage projects and transmission lines) and in areas of political nature (such as resettlement and land acquisition) where private sector is not positioned to be effective.

• Restructuring tariff

Controversy over tariff restructuring arises from differences in opinions among stakeholders on a mechanism to restructure the two rates, i.e., the power purchase agreement - PPA rate that NEA

Niti's engagements

From the outset, Niti has engaged in mobilizing reform constituencies in four of the six binding constraints it identified.

Legal framework

The Electricity Act (2065) was drafted to unify some of the laws relating to hydropower, as well as to replace the prevailing legislation, but has been languishing since it was tabled in 2007. A primary reason behind the delay had to do with the sheer volume of amendments—142 in total—that had been filed against the draft legislation and the surrounding controversies.

To break this impasse, Niti partnered with IPPAN and NACEUN to conduct a comprehensive examination of major amendments that related to investment, land acquisition, compensation,

resettlement, and the Electricity Regulatory Commission, among others. Niti also hosted a series of consultative meetings with an extensive set of reform constituencies, including representatives from the legislative committee, political parties, civil society organizations, policy actors, and hydropower developers to eliminate some of the avoidable amendments, establish consensus on critical issues, and prepare an Umbrella Electricity Bill.

Dissolution of the Constituent Assembly in May 2012 came as a major setback to successfully see this effort through. However, Niti is keen to engage further in developing necessary legal framework that supports rapid development of hydropower in Nepal in the forthcoming legislature.

To build consensus and align these opposing interests towards the revision of tariff rates, Niti partnered with NHA to convene a series of consultative forums among the reform constituencies. Finally, on 23 March 2011, the government made public the Energy Emergency Action Plan 2011, which among other things declared the next four-and-half-years as a period of “energy emergency”, dissolved ETFC, and increased PPA rate by 20 percent.

Admittedly, the move to dissolve ETFC was unexpected. Niti was apprehensive that the dissolution would further delay an increase in the consumer tariff rates. Niti believed that it was absolutely necessary to increase the consumer rates in order to ensure the financial stability of NEA, and that the government’s decision to subsidize NEA’s losses was an act of shirking their political responsibilities by those in power. The hesitancy these actors have shown towards consumer tariff increase stemmed



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Electricity tariff

As part of its initiative towards eliminating the energy crisis, the government, among other things, was determined to incent Nepali power producers to invest in the hydropower sector. However, the private sector was reluctant to do so until and unless NEA increased their PPA rates that had remained fairly stagnant for most Nepali Independent Power Producers - IPPs for over a decade. NEA, on the other hand, expressed its willingness to do so only if it would be guaranteed a subsequent hike in consumer tariff, which also had remained stagnant since 2001 and fell under the jurisdiction of the ETFC. The primary concern for ETFC to oppose the hike, while agreeing in principle to raise consumer tariff, was that NEA should first improve its operational performance, including eliminating all political interference and administrative and financial irregularities, rather than treat the increase in consumer tariff as a panacea to the deteriorating health of NEA or the sluggish growth of hydropower sector in Nepal.

from the fear of losing popular legitimacy and consent from the citizens. Despite the setback in increasing consumer tariff, Niti and NHA continued its engagement with relevant policy actors for tariff restructuring. With the United Communist Party Nepal Maoist - UCPN(M) government reconstituting ETFC, Niti redoubled its efforts to underscore the importance of increasing the consumer tariff. This time around, Niti strategically focused on the new ETFC members, including those who were part of earlier dialogues initiated by Niti. Niti and NHA reinvigorated past commitments of policy actors for consumer tariff hike and maintained contact with ETFC for building a favorable environment for reform.

On June 28, 2012, the government announced a 20% hike in the consumer electricity tariff after 11 years of unchanged rates. Consumers on the bottom rung of consumption (households that use maximum 20 units of electricity per month) remained untouched by the price hike; answering consumer groups’ major concerns on tariff equity.

Community involvement

To understand the issues of community involvement in hydropower development, Niti worked with IPPAN to collate the experiences of various power producers in supporting local development; identify issues and difficulties in managing expectations of local communities; and developing common strategy to address those difficulties. Meetings conducted with IPPs identified some major areas in dealing with the expectations of local communities such as demands for social welfare programs for their locality, provision of certain percentage share in the project, provision of compensation to the affected people, employment opportunities for the locals and the demands for donations and other financial benefits.

Additionally, Niti conducted a scoping study of community involvement in rural electrification to understand their role in distribution of electricity. The study showed that local communities are well capable of managing the distribution of electricity; at the same time ensure lower transaction costs for managing electricity distribution function with higher customer satisfaction. In addition to simply providing electricity to households, community based rural electrification provides other positive social benefits, i.e., ensuring social justice, generating social capital and stimulating opportunities for economic and entrepreneurial engagement – all of which are necessary for a thriving community.

Institutional restructuring of Nepal Electricity Authority

NEA, up until recently, was the primary institution mandated with generating, transmitting, and distributing adequate, reliable, and inexpensive electricity in Nepal. The government-owned profit-oriented utility company was in charge of planning, constructing, operating, and maintaining generation, transmission, and distribution facilities in Nepal's power system. This monopoly ended due to two conditions: first, the Hydropower Development Policy enacted in 1992 which enabled a liberalized market framework for hydropower development allowing for private sector developers to enter and participate in electricity generation; and second, the Community Electricity Distribution By-Law of 2003, which facilitated the entry of third parties, particularly in the form of communal utility enterprises—as rural electricity cooperatives and other community associations—in the retail electricity distribution. However, NEA maintains sole authority in the transmission of electricity across and into Nepal.

As an outcome of the discussion conducted with current and former MDs of NEA, as well as other stakeholders within the hydropower sector it was recommended to the Chairman of NEA to establish Nepal Power Transmission Authority (NPTA) or Nepal Power Grid Corporation (NEPGRID) through a separate Act. The new organization should be entitled to plan, execute, and operate the transmission network. The new Transmission Authority would also be a main advising body to the government and hence, would conduct electricity demand surveys, forecast long term and short term power demand as well as segregate national demand into regional demand based on the river basins.

Way Forward

There are key lessons from Niti's engagement in catalyzing rapid hydropower development in Nepal. Foremost, Niti's involvement in the policy reform process reveals how important it is to understand the complexity of the policy regime within a broader political context that is unstable and rapidly changing; how formal and informal deployment of politics by actors, ideologies, and institutions affects the field of policymaking. In other words, policymaking does not happen in a vacuum; rather it exists in a contested field of information and interest claims of the state, of competing constituents within the state, and of non-state bodies such as civil societies, private sector, and community groups. In this regards, for any constructive intervention of a non-state institution to be effective, it is necessary for institutional actors to be policy intelligent, i.e., have the ability to comprehensively analyze the political economy of the policy problem, identify relevant policy reform champions, and be critically conscious about the opportune timing for reform. These can lead to particular breakthrough moments that which must be utilized appropriately to translate intelligence into effective action. Finally, intervention for policy reform should be geared toward creating conditions for building coalitions of divergent interests, largely through a process of formal and informal networking designed to exploit the moment and add to the momentum. Niti's experience strongly suggests that any future engagement to address deficits in the policy regime should be informed by a political economy framework that relies on a fluid methodology that is neither rigid nor linear, but is rather open-minded and open-ended enough to seize on the uncertainty of the politics of policymaking to produce good policy outcomes.