नेपालमा आदिवासी अधिकार
नीतिगत अवस्था, चुनौती र अवसरहरू

सम्पादन सल्लाहकार
शान्ति कुमारी राई
दिनेश कुमार घले
शंकर लिम्बु
भिम राई
अमृत योन्जन-तामाङ

सम्पादक
टहल थामी
गोबिन्द छन्न्याल
Indigenous Peoples Rights in Nepal: Policy Status, Challenges and Opportunities

Edited by Tahal Thami/Gobinda Chhantyal
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आजुराप्र   आदिवासी जनजाति उत्थान राष्ट्रिय प्रतिष्ठान
आ.व.   आर्थिक वर्ष
ऐ.ऐ.   ऐजन ऐजन
गाविस   गाउँ विकास समिति
जिविस   जिल्ला विकास समिति
नपा   नगरपालिका
नि.नि.   निर्णय नम्बर
नेकपा   नेपाल कम्युनिस्ट पार्टी
ने.का.प.   नेपाल कानून पत्रिका
न.   नम्बर
पृ.   पृष्ठ
बि.   बिरुद्ध
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          राष्ट्रसंघीय घोषणापत्र
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          सम्बन्धी विकल समूह
बि.सं.   विक्रम संवत्
सी.बी.आर.   समुदायमा आधारित पुनर्स्थापना
सं.   सम्पादक
## Abbreviation

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<th>Description</th>
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<tbody>
<tr>
<td>AD</td>
<td>Anno Domini</td>
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<tr>
<td>ADB</td>
<td>Asian Development Bank</td>
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<tr>
<td>AGRBS</td>
<td>Access to Genetic Resources and Benefit Sharing</td>
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<td>AIPP</td>
<td>Asia Indigenous Peoples Pact</td>
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<td>CA</td>
<td>Constituent Assembly</td>
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<td>CBD</td>
<td>Convention on Biological Diversity</td>
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<td>CBR</td>
<td>Community Based Rehabilitation</td>
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<td>CBS</td>
<td>Central Bureau of Statistics</td>
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<td>CEDAW</td>
<td>Convention on the Elimination of all Forms of Discrimination against Women</td>
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<tr>
<td>CERD</td>
<td>Convention on the Elimination of All Forms of Racial Discrimination</td>
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<tr>
<td>COP</td>
<td>Conference of the Parties</td>
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<td>CPN</td>
<td>Communist Party of Nepal</td>
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<tr>
<td>CRC</td>
<td>Convention on the Rights of the Child</td>
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<tr>
<td>CSR</td>
<td>Corporate Social Responsibility</td>
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<tr>
<td>CSRDSP</td>
<td>Committee for State Restructuring and Division of State Power</td>
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<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>DDC</td>
<td>District Development Committee</td>
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<td>DFID</td>
<td>Department for International Development</td>
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<td>EA</td>
<td>Electricity Act</td>
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<td>EIA</td>
<td>Environment Impact Assessment</td>
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<td>FPIC</td>
<td>Free, Prior and Informed consent</td>
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<td>GI</td>
<td>Governance Index</td>
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<td>GL</td>
<td>Generation License</td>
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<td>GoN</td>
<td>Government of Nepal</td>
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<td>GSI</td>
<td>Gender and Social Inclusion</td>
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<td>HDI</td>
<td>Human Development Index</td>
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<td>HLSRRC</td>
<td>High Level State Restructuring Committee</td>
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<tr>
<td>ICCPR</td>
<td>International Covenant on Civil and Political Rights</td>
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<td>ICESCR</td>
<td>International Covenant on Economic, Social and Cultural Rights</td>
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<td>ICIMOD</td>
<td>International Centre for Integrated Mountain Development</td>
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<td>IEE</td>
<td>Initial Environmental Examination</td>
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<td>IFAD</td>
<td>International Fund for Agricultural Development</td>
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<td>IFC</td>
<td>International Finance Corporation</td>
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<td>ILO</td>
<td>International Labour Organisation</td>
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<td>INC</td>
<td>Indigenous and Nationalities Commission</td>
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<td>IPPs</td>
<td>Independent Power Producers</td>
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<td>IPs</td>
<td>Indigenous Peoples</td>
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<td>IWGIA</td>
<td>International Work Group for Indigenous Affairs</td>
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<tr>
<td>LAHURNIP</td>
<td>Lawyers' Association for Human Rights of Nepalese Indigenous Peoples</td>
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<tr>
<td>LGBTI</td>
<td>Lesbian, Gay, Bisexual, Transgender &amp; Intersex</td>
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<tr>
<td>LTR</td>
<td>Lands, Territories and Resources</td>
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<tr>
<td>MAT</td>
<td>Mutually Agreed Terms</td>
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<tr>
<td>MoAD</td>
<td>Ministry of Agricultural Development</td>
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<tr>
<td>MoFSC</td>
<td>Ministry of Forest and Soil Conservation</td>
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<tr>
<td>MoFSC</td>
<td>Ministry of Forests and Soil Conservation</td>
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<tr>
<td>MoLJPA</td>
<td>Ministry of Law, Justice &amp; Parliamentary Affairs</td>
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</tbody>
</table>
MoPE  Ministry of Population and Environment
MW    Mega Watt
NBSAP National Biodiversity Strategy and Action Plan
NC    Nepali Congress
NEFIN Nepal Federation of Indigenous Nationalities
NESAC Nepal South Asia Centre
NFDIN National Foundation for Development of Indigenous Nationalities
NPC   National Planning Commission
NTFPs Non-Timber Forest Products
PES   Payment for Ecosystem Services
PI    Poverty Index
SL    Survey License
SOM/P Standard Operating Manual/Procedures
SRHLRC State Restructuring High Level Recommendation Commission
UCPN (Maoist) Unified Communist Party of Nepal (Maoist)
UML   Unified Marxist Leninist
UN    United Nations
UNCED United Nations Conference on Environment and Development
UNDP United Nations Development Programme
UNDRIP United Nations Declaration on the Rights of Indigenous Peoples
UNPFII United Nations Permanent Forum on Indigenous Affairs
VDC   Village Development Committee
WB    World Bank
WRA   Water Resource Act
WSSD World Summit on Sustainable Development
प्रकाशकीय

संविधानसभामार्फत संविधान निर्माणलाई लोकतन्त्रको उत्कृष्ट नमूना मानिन्छ। इतिहासमा यस्ता अवसर विरलै आउँछ। नेपालको सन्दर्भमा पनि नेपाली जनताको लामो सघर्षपर्दछ यो अवसार जुरेको हो। तर जसरी संविधानसभाले आम जनता तथा समुदायहरूको अधिकारका आवाजहरूको सम्बोधन गर्नुपर्याय, यसै हुन सकेन। संविधानसभावाट वनेको संविधानमार्फत आदिवासीलगायतका समुदायहरूको अधिकार सुनिश्चित हुन नसक्दा अस्तन्तिटिहरू भने बढेका छन्। त्यसको समाधान वेलैमा निकाल्न नसके देश भरकर दुर्घटनामा पनि सक्छ।

त्यसरी संविधानिक अधिकारवाट विन्यत एक समूह हो आदिवासी। ती समूहहरूको अधिकारका सम्बन्धमा संविधानमा भएका व्यवस्था र उनीहरूले चाहेको अधिकारका सम्बन्धमा गत पुण २२-२३, २०५३ (६-७ जनवरी २०१७)मा काठमाडौंमा बृहत्त सम्मेलनमा छलफल भएको थियो। सो कार्यक्रमको आयोजना गर्न पाउँदा लाहुरिनिप गर्न महसूस गरेको छ।

सो कार्यक्रम आयोजनामा विभिन्न व्यक्ति, व्यक्तित्व तथा संघसंघातहरूको अभूम्य सहयोग लाहुरिनिपलाई मिलेको थियो। यसरी सहयोग तथा सलाह सुभाष दिनुभुन्दा डा. कृष्ण भट्टचार्य र डा. नवीन राईप्रति हामी आभारी छौँ। त्यसैगरी United Nations Permanent Forum on Indigenous Issues (UNPFII) का उपाध्यक्ष Mr. Raja Devasish Roy, सोही निकायको सचिवालयबाट पालु भएकी Ms. Julia Raavad, र International Work Group for Indigenous Affairs (IWGIA) वाट कार्यक्रममा सहभागी बनन आउँछ भएका Mr. Christian Ernप्रति लाहुरिनिप आभारी छ। त्यसै कार्यक्रमलाई सफल पारिदिन सहयोग गर्नुहुने अमृत योजन तामाड, योजनकाली भट्टचार्य, डम्सार लोहोर्दु, डम्सार तेम्दे र नारायण निङ्गलेखप्रति पनि प्रत्य्येक व्यक्ति गरिन्छ।
United Nations Permanent Forum on Indigenous Issues (UNPFII), International Work Group for Indigenous Affairs (IWGIA), International Fund for Agricultural Development (IFAD), United Nations Development Programme (UNDP) लाई पनि धन्यबाद ट्रस्टवाइन्स्। साथै कार्यक्रम उपस्थित भई कार्यक्रमको शोभा बढाइ दिनु भएकोमा राष्ट्रिय मानवअधिकार आयोगका अध्यक्ष माननीय अनुपराज शर्मा, आदिवासी जनजाति उत्त्वाम राष्ट्रिय प्रतिष्ठानका उपाध्यक्ष चन्द्रबहादुर गुरुङ र सदस्यसंघबंध गोबिन्द माकिप्रति लाहुरिंप कृतज्ञ छ। त्यसै गरी नेपाल आदिवासी जनजाति महासंघ, राष्ट्रिय आदिवासी जनजाति महिला महसंघलाई पनि धन्यबाद साथै सो कार्यक्रममा गरिन्छ।

यस पुस्तकमा सो कार्यक्रममा प्रस्तुत कार्यप्रयोग समाबेश गरिएका छन्। कार्यक्रममा कार्यपत्र प्रस्तुत गरिदिनुहुने विभिन्न मन्त्रालयका प्रतिनिधित्व-कर्मचारीहरू तथा बुद्धिजीवीहरू पनि लाहुरिंप आभारी छ। साथै यस पुस्तक प्रकाशनमा प्रत्यक्ष तथा परोक्ष रूपमा योगदान गरेको सवैप्रति हामी आभार व्यक्त गर्दछौ।

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अध्यक्ष
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Community Engagement in Hydropower Development: Issues and Challenges

Padmendra Shrestha

Hydropower projects provide commensurate benefits to the society at large by generating clean energy in the form of electricity required for a modern day-society, but it comes at a cost of adverse impacts on the people and the environment around such projects. This reflects a major challenge to national governments, especially the developing nations, where, on the one hand, necessary to address the issues of economic growth through production of energy and on the other hand, in contrast, due consideration have to be given in protection of rights and livelihood of local affected
citizens.

If the negative social and environmental impacts persist, what are the efforts carried out to minimise such impacts?, and if people beyond the affected communities derive the benefits of hydropower development, what can be done to ensure that such benefits are shared with local communities affected by hydropower projects? The answers to these questions also reverberate with some of the current trends in sustainable hydropower development in World Commission of Dams (2000) and Hydropower Sustainability Assessment Protocol.

This paper elucidates the current practices of citizen engagement in hydropower projects in Nepal to a draw issues and challenges for sustainable hydropower development. It is based on analysis of relationships between power producers, the government and local citizens in hydropower projects across the country. This paper has been drawn from experiences and visits to different hydropower projects in Nepal. Yet, as far as possible, tries to draw lessons from the hydropower projects without going much into details of the individual hydropower projects.

The framework for the paper is based on three major ideas. I) It looks at engagement of local communities in hydropower projects in the development a process. It looks are role of communities in different phases of development before the construction,
during construction and after the construction of hydropower projects. II) Then it tries to look at impact of hydropower on local communities and how compensation and mitigation measures are applied in Nepal. III) Then it provides a list of community benefits that are being practiced in Nepal and issues and challenges associated with it.

Process of hydropower development

Lack of national strategy for utilizing water resources

The lack of national strategy to for utilizing water resources in the country has created ambiguity among stakeholders on how the water resources in Nepal will be utilized optimally for its citizens. The government has set priorities for different usage of water resources in its water resources act, but lack of proper planning has given rise to random allocation of hydropower projects along the river basins without properly assessing the potential impacts that it may have on the social and environmental ecology. In fact, most of the hydropower projects are awarded by the government simply on the basis of application for license put by the power developers, including both the government and the private sector. Because of the current government process of awarding license to power developers, the local citizens would know about the hydropower projects in their area only after it has been awarded, generally, without having much say for the citizens on how the water resources are to be utilized. This generally creates a friction
between hydropower projects and local affected citizens, sometimes leading to conflicts on how the water resource is to be utilized for multiple purposes, including, irrigation, fishing, recreational purposes, etc. The government of Nepal through Water and Energy Commission Secretariat is currently preparing national strategy for water resources, and hopefully it would devise plans and policies for equitable use of water resources among different usage of water both for local citizens whose livelihood depend upon water resources and also for the broader economic growth of the country.

**Challenges of implementing environmental assessment reports**

All hydropower projects of over 1MW, based on existing environmental protection laws, have to prepare environmental assessment (EA) reports – Initial Environmental Examination (IEE) for projects below 50 MW capacity and Environmental Impact Assessment (EIA) for projects having capacity of over 50 MW. However, it is used by most of the hydropower projects simply to fulfill the government’s legal requirements rather than for information dissemination to the public. These practices clearly undermine public participation both during the EA preparation phase and also in the information dissemination stage, making EA process highly ineffective.

This EA report is a major tool for citizen engagement in hydropower and infrastructure projects, and
sometimes the only formal mechanism for citizens to engage with the power producers at different stages of hydropower development process – before construction, during construction and after construction. It is also important as it specifies the potential impacts of hydropower on the environment and the society, the mitigation measures to be adopted by the project developer and the benefits that affected citizens would receive. Failure of proper citizen engagement and lack of information sharing with the affected citizens can raise animosity among the affected citizens and can have severe adverse impacts on the hydropower projects.

One of the major reasons for the ineffectiveness of the EA process is the limited participation of stakeholders. Hydropower projects fulfill their legal requirement if it holds a single public hearing. It may be enough for a small project that covers a few villages, but for projects that extend to larger geographic areas, sometimes in more than one district, single public hearing may not get participants from diverse geographic areas as travel times can go beyond a single day to reach the public hearing site.

Other reason is the inaccessibility of EA reports to general public. It has been only a couple of years that some EIA reports are available in selected public libraries in Kathmandu valley, but again these are inaccessible to citizens residing around project areas. Even for those who have access to these reports have
limited technical capacity and language skills to understand the sophisticated EA documents.

Other major challenge in implementation of EA reports is the absence of monitoring mechanisms to see whether the social and environmental mitigation strategies mentioned in the approved reports are actually implemented. In absence of environmental inspectors to monitor the implementation of EA reports, it is up to the power developer to decide what is to be implemented unless there is strong citizen demand to implement it.

Hence, for effective EA reports, it is necessary to have extensive citizen engagement, proper sharing of information, accessible and understandable EA reports and designated monitoring mechanism to ensure proper implementation of EA reports. If EA process can be effectively conducted, it can also be a mechanism, as required by the ILO convention 169, for providing Free, Prior and Informed Consent (FPIC) to the local affected citizens.

**Moratorium on development**
One of the severe concerns for human rights due to government decisions is the moratorium on all development activities in the project-affected areas of the hydropower projects, especially the large storage projects. In simple words, it is a ban on construction of any physical infrastructure in project-affected villages by stopping all types of funding, including the government budget. It does not have immediate
impact if the proposed hydropower project undergoes construction within a few months of enforcing a moratorium and provide proper compensation and resettlement packages, but if it goes on for extended period of several years, like for about 20 years in West Seti hydropower project, it will severely impact the human development index of the area. In absence of proper shelter and associated infrastructures such as electricity and water supply during the moratorium phase, there is high probability that it pushes many vulnerable populations to extreme poverty.

While moratorium on development activities can be a push factor for moving the affected citizens out of the project area, it can have adverse impact if prolonged for many years. Therefor moratorium on development should always be accompanied by compensation and resettlement activities to ensure that people can continue their livelihood and move out of poverty without having to wait for longer periods of time.

**Project-citizen interface**

In absence of elected local governments, there are multiple claims of representation from the local citizens to negotiate various development benefits with the hydropower projects. In most of the cases it is manifested as a “concerned committee” or “struggle committee”, mirroring the practices of ad hoc local governance mechanism, also popularly known as ‘all party mechanism’. Sometimes this committee can be highly favorable for power producers in engaging
with local citizens, while in other instances, it can be a major local hurdle for hydropower development. As there are no set rules for formation of such committees, it is mostly the political elite that claim to represent the local citizens, without any clear mandate, like through election. In order to ensure that these committees are not captured by limited political elites for their personal benefits, it is necessary to devise a mechanism for inclusive and accountable concerned committee, possibly through election from among the affected households.

**Impacts of hydropower development**

*Compensation of physical asset only*

Hydropower projects will have some impact on the environment and people living around the project. Some people may have to give away their land and property for construction of hydropower projects. By the laws of Nepal, the government can acquire any land for public purposes by giving compensation of the property to be acquired. However, the compensation is only given for the physical assets, e.g. land, house, crops, plants, etc. and not for other cultural, social and economic values associated with it. This may highly disrupt the social and cultural fabric of the society impacted by the projects.

For small private power producers compensating beyond physical assets may make their project unfeasible, but considering the loss of the affected
family it may have severe impacts on the culture, livelihood and income. Again, even it there are no specific rules of practices, questions like, how should the affected be compensated – land for land, or money for land, and how long should the projects give to the affected families to leave their land after providing compensation should be well thought of to ensure that the affected citizens have options to choose from and enough time to adjust to the new environment.

**Differences in the “fair value” of property**

In many hydropower cases, for the purpose of compensation, there still remains a difference in what the “fair value” of land should be between government, hydropower projects and local affected citizens. In practice, there is a difference between the private hydropower projects and public (primarily owned by government/NEA) hydropower projects in how land is acquired.

The private projects deal with landowners individually, as if they are purchasing the land from the landowner, without going through the general government process of land acquisition, based on the Land Acquisition Act. In this process as each individual landowner can sit with the project and negotiate the land rates, all landowners can negotiate on what they consider it to be a fair value. But the problem with this method is that those landowners who have good bargaining skills can get more money and those who do not have bargaining skill will settle for less amount, even if the market rate for both the properties are same. So, those
who do not know about land prices and do not have bargaining skills will be at great disadvantage in this process.

In the government projects, as mentioned in the Land Acquisition Act, private land is acquired at the land rate decided by the land acquisition committee, formed under the chairmanship of the Chief District Officer. Generally, citizens do not have influence over the land rates fixed by the committee. After the rates are announced, citizens can file their dissatisfaction, but the final decision lies with the committee itself. In this process land rates are same for the land with similar characteristics, generally based on agricultural productivity. So people know at what rates are other landowners are getting for their land. Since there are differences in perception of what the fair value of land is most of the times the citizens feel that the rates fixed by the committee is generally low, sometimes even lower than the market rate. Therefore a scientific way of deciding the land rate values has to be adopted and applied uniformly across the country to ensure that there is no difference in compensation for the citizens and the rates should at least be equivalent to the market rate of the property.

Compensation may not prevent impoverishment
There have been several evidences from around the world and also from Nepal’s past projects that compensation only may not be able to prevent impoverishment. In Kulekhani storage project constructed in the 1980s, the government of Nepal
had provided compensation to the families whose land was acquired. Some smart people were able to utilize their compensation amount through judicious investments in land and other productive sectors, while many people made unproductive investment in radio batteries, alcohol, etc. and ended up living in poverties. Hence, authors like Michael Cernea (2008) argue that compensation alone cannot prevent the impoverishment of resettlers and cannot in itself restore and improve their livelihoods. He argues that additional financing is needed for direct investments in resettlement with development, including the benefit sharing mechanisms in hydropower project.

**Resettlement and Rehabilitation Policy**

As the government of Nepal envisions some large storage based hydropower projects for future, involuntary displacement to be induced by these projects will also be large in numbers. To address some of the major problems associated with compensation, the government of Nepal has introduced Resettlement and Rehabilitation Policy in 2015 to ensure that those who are severely impacted by the hydropower projects are resettled and rehabilitated. However, this policy is still not supported by acts and other legal documents to ensure that it implementable. As the government currently envisions in its Electricity Decade and Energy Crisis Mitigation Plan 2073 to build 10,000MW in 10 years, with more than 50% of the energy coming from storage projects, it is very high time that a fair and inclusive resettlement and rehabilitation laws are in place to ensure smooth
implementation of hydropower projects.

**Differences in national and international policies**

As of current national laws, compensation is enough to acquire private land for hydropower projects, whereas internationally funded projects though multilateral agencies like, World Bank, IFC, Asian Development Bank have their own social and environmental safeguard policies that require hydropower projects to carry out extensive work going beyond compensation to ensuring livelihood of affected local citizens. This difference in national and international safeguard policies create an inequitable regime where people affected by international projects feel that they are well taken care of their various requirements, whereas people affected by nationally funded projects feel that they are neglected by the developers. Because of the non-uniform policies, many local citizens are in dilemma as to what to expect from the developers. After observing projects like Middle Marshyangdi funded by KfW and ADB people in hydropower projects people’s expectations rise as the project has spent significant amounts in resettlement and neighborhood development programs, among others. The people in hydropower projects in close vicinity of Middle Marsyangdi expect similar treatment, even if there are no national policies that require such resettlement or neighborhood programs. The national power producers do not have similar fund and capacity as its international counterparts thus creating a mismatch between expectation and reality the local citizens have to face.
Hydropower projects create some impacts that cannot be reverted back to its original status. These impacts can only be mitigated, i.e. it can only be reduced or minimized. There are several challenges in mitigating impacts by hydropower projects on local communities, some of which are given below:

*No clear standards*
The lack of standards in Nepal for some of the mitigation measures in hydropower projects both in terms of process, timing and the desired outcomes create differences in understanding between the local communities and hydropower projects. E.g. there is no standard as to when the explosives can be used for tunneling. If it is carried out in the afternoon it disturbs the schools and offices, where as if it is carried out at nights it affects the sleep of people. Other example is: if there is dust on the road, how to decide whether it is time to water the roads to reduce the dust. Since there are no standards, it depends upon the interpretation of the developer and the local citizens. If both have same interpretation, both the parties are satisfied and projects can run smoothly, but if there are differences in interpretation, it is highly likely that conflicts would arise. Hence, a good practice would be to have discussions and dialogues between the parties before the interventions are made to develop common understanding between the project and local communities.
**Difficulties of compliance**
Where there are standards for mitigation measures, it is difficult for making hydropower projects comply with such standards. One of the major reasons for this is the lack of monitoring by the government officials. Despite the legal provision of environmental inspectors for monitoring activities mentioned in the EA reports, no government body goes to the hydropower projects to monitor it. Therefore in many hydropower projects, it is uncertain whether the hydropower projects comply with standards like, leaving 10% of water discharge (e-flow) in the river, plantation of number of trees as mentioned in the EA reports, etc. Only if there are proper monitoring mechanisms hydropower projects can be held accountable to comply with the mitigation measures proposed by the projects in their EA reports.

**Difficulties in assessing non-tangible impacts**
While tangible impacts can be easily measured and standards can be set, intangible impacts are one of the most difficult ones to deal with, e.g. the cremation *ghats* on the riverbank. Only the water in the river can be measured, but the social, cultural religious and emotional values associated with the cremation process and its association with the river water cannot be measured. Hydropower projects, even if it releases 10% of the e-flow, it may not give the desired ambience for the cremation process. Hence some hydropower projects may have to halt their projects by allowing full flow of water in the river to address the needs of local communities to satisfactorily carry
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out the rituals of the cremation process.

Other example of intangible impacts can be on fishing. There is always a challenge to rehabilitate indigenous fishing communities affected by hydropower power. Hydropower projects, like Middle Marshyangdi has rehabilitated indigenous Bote, a fishing community by creating ponds for fishing. Though fishing is common whether it is running river or pond, but for someone who has been fishing on running river water, fishing in a pond is totally different experience.

**Sharing Community Benefits**
As briefly discussed earlier, to address the adverse impacts that hydropower projects generates, compensation and mitigation measures may not be enough to ensure sustainable livelihood of local affected communities. In addition to the compensation and mitigation, hydropower projects have to design a commensurate benefit sharing mechanism so that those who are directly affected by the project gets equitable benefits for impacts that they suffer. Below are some of the benefit sharing mechanisms (Shrestha et al., 2016) practiced in Nepal and the issues and challenges associated with it.

**The royalty mechanism**
The royalty mechanism is one of the formal mechanisms of distributing revenue from hydropower projects back to the districts where hydropower projects are located. Based on the hydropower royalty guidelines, the government collects two types
of royalty–based on installed capacity and based on energy produced–from hydropower plants. It keeps 50% of the collected amount for national treasury and distributes rest of the 50%-12% to the district in which hydropower is located and 38% to the districts of the development region where the hydropower is located. The royalty money that goes to the district has to be prioritized for electrification purposes within the district. This mechanism is lauded by many and has been exemplary for other counties as well. The only issue that this mechanism has is that the money goes up to the district level, but does not go the village where the hydropower project is located.

As Nepal moves into new federal structure, the geographic units used for distributing royalty will change. Along with changes are needed in this mechanism so that some amount of royalty goes directly to affected villages. Only then the affected communities will feel that the revenues from the hydropower project are benefitting those who are directly affected by the project.

**Equity investment**
Equity investment in hydropower project is fairly complex mechanism that represents i) a financial strategy to raise the equity from local communities and ii) social strategy - to obtain social license to operate hydropower projects, to provide partial ownership to local communities, and to share benefits of the project. This mechanism is very unique to Nepal and is in transformative stage in understanding risks and
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benefits associated with the shares being offered to local citizens. If the hydropower project is managed properly, it will provide benefits to the locals who buy shares, but at the same time it can be risky if the project does not operate efficiently as designed.

Given the recent craze for hydropower shares, there is general assumption that hydropower is a profitable endeavor. Hence, even the poor people are taking loan to buy hydropower shares. However, this type of practice can be risky if the projects are not operated properly or in case it encounters a disaster. If the project fails, it will affect poor and vulnerable families from financial risks. If hydropower shares are to be used as a social strategy for local participation, the government may have to devise ways to protect the most vulnerable from the financial risks of shares.

Employment and training
Hydropower projects prefer local skilled and non-skilled people for employment during construction phase of the project and at the same time there is high demand for jobs from the locals. Because of the mis-match of available jobs and the applicants, Hydropower projects have difficulty finding skilled manpower from among the locals and have to employ most of the locals as labors.

Despite a great opportunity to engage local citizens in job trainings and employment, there are issues of fairness in selection of candidates, where the probability of getting a job may be related to the
relationship with the project officials. Sometimes it is the low wage that discourages local citizens from getting jobs in hydropower projects. In some instances, those who get the jobs do not work properly and only demand wages, giving problems to hydropower projects.

Developing proper rules and regulations of how the employment and training opportunities will be administered in hydropower projects is necessary for defining how the engagement of local communities will be in the projects.

**Community development and local infrastructure**

Generally referred to as Corporate Social Responsibility (CSR) by many of the hydropower projects, the community development and local infrastructure building activities are slightly confusing in many projects as to whether it is part of the social mitigation plan or the benefit of the project. Yet, it provides affected rural communities with much needed social and physical infrastructures, like roads, health post, schools, etc. In addition to the provisions in EA reports, the government’s recent Energy Crisis Mitigation Plan specifies 0.75% of the total hydropower cost for less than 100MW size projects and 0.5% of the total hydropower cost for more than 100MW size projects to be allocated for community development activities. Overall the idea of community development in itself is a great concept. However, the challenges exist in terms of engaging local communities, like, how to
create prioritized list for the infrastructure projects, how to ensure representation of local communities in decision-making, etc.

**Environmental enhancements**
Based on existing laws, it is unclear on how the benefits of environmental enhancements will reach to the local communities in hydropower projects. The government in previous year had Payment for Ecosystem Services (PES) revenue panned, but with the recent removal of PES the by the Government of Nepal, the budget for local environmental protection will be derived from the royalty amount. Hence, local communities will have to seek additional support beyond hydropower projects to engage on environmental protection and enhancement issues.

**Way forward: Sustainable Development**
As Nepal plans to graduate from and underdeveloped country to a developing county in next few years, energy is a basic pre-requisite. In a country full of water resources, Nepal has to tap into its potential of hydropower to produce energy to fulfill it demands. However in an effort to maximize economic benefits, it may have to compromise on some of the social and environmental benefits. As we have discussed earlier, hydropower projects can have adverse impacts on environment and local communities and yet at the same time it can also provide local community benefits. As Nepal build’s hydropower plants, the questions for all of us to think are:

- How can negative impacts of hydropower
development be addressed to ensure that their livelihoods are sustained?

- How can benefits derived from hydropower projects be shared with affected communities in a fair and equitable manner?

For sustainable development of hydropower projects, a constant dialogue between all stakeholders is a must. Within these dialogues, there is a need to figure out how to derive benefits from hydropower projects properly by addressing the adverse impacts that it may have on local communities. As we move ahead with the development, no one should feel that they are left behind in attaining overall social, economic and environmental goals.

References
