

नेपालमा आदिवासी अधिकार

नीतिगत अवस्था, चुनौती र अवसरहरू

सम्पादन सल्लाहकार

शान्ति कुमारी राई दिनेश कुमार घले

शंकर लिम्बू भिम राई

अमृत योन्जन-तामाङ

सम्पादक

टहल थामी

गोबिन्द छन्त्याल

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इमेल: lahurnip.nepal@gmail.com

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Indigenous Peoples Rights in Nepal: Policy Status, Challenges and Opportunities

Editorial Advisors: Shanti Kumari Rai, Dinesh Kumar Ghale,
Shankar Limbu, Bhim Rai, and Amrit Yonjan-Tamang.

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Abbreviation

AD	Anno Domini
ADB	Asian Development Bank
AGRBS Sharing	Access to Genetic Resources and Benefit
AIPP	Asia Indigenous Peoples Pact
CA	Constituent Assembly
CBD	Convention on Biological Diversity
CBR	Community Based Rehabilitation
CBS	Central Bureau of Statistics
CEDAW	Convention on the Elimination of all Forms of Discrimination against Women
CERD	Convention on the Elimination of All Forms of Racial Discrimination
COP	Conference of the Parties
CPN	Communist Party of Nepal
CRC	Convention on the Rights of the Child
CSR	Corporate Social Responsibility
CSRDSP	Committee for State Restructuring and Division of State Power

DDC	District Development Committee
DFID	Department for International Development
EA	Electricity Act
EIA	Environment Impact Assessment
FPIC	Free, Prior and Informed consent
GI	Governance Index
GL	Generation License
GoN	Government of Nepal
GSi	Gender and Social Inclusion
HDI	Human Development Index
HLSRRC	High Level State Restructuring Committee
ICCPR	International Covenant on Civil and Political Rights
ICESCR	International Covenant on Economic, Social and Cultural Rights
ICIMOD	International Centre for Integrated Mountain Development
IEE	Initial Environmental Examination
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
ILO	International Labour Organisation
INC	Indigenous and Nationalities Commission
IPPs	Independent Power Producers
IPs	Indigenous Peoples
IWGIA	International Work Group for Indigenous Affairs
LAHURNIP	Lawyers' Association for Human Rights of Nepalese Indigenous Peoples
LGBTI	Lesbian, Gay, Bisexual, Transgender & Intersex
LTR	Lands, Territories and Resources
MAT	Mutually Agreed Terms
MoAD	Ministry of Agricultural Development
MoFSC	Ministry of Forest and Soil Conservation
MoFSC	Ministry of Forests and Soil Conservation
MoLJPA	Ministry of Law, Justice & Parliamentary Affairs

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 संघर्षपछि यो अवसर जुरेको हो। तर जसरी संविधानसभाले आम जनता तथा समुदायहरूको अधिकारका आवाजहरूको सम्बोधन गर्नुपर्थ्यो, त्यो हुन सकेन। संविधानसभाबाट बनेको संविधानमासमेत आदिवासीलगायतका समुदायहरूको अधिकार सुनिश्चित हुन नसक्दा असन्तुष्टिहरू भन बढेका छन्। त्यसको समाधान बेलैमा निकाल्न नसके देश भयंकर दुर्घटनामा पर्न सक्छ। त्यसरी संवैधानिक अधिकारबाट वन्चित एक समूह हो आदिवासी। ती समूहहरूको अधिकारका सम्बन्धमा संविधानमा भएका व्यवस्था र उनीहरूले चाहेको अधिकारका सम्बन्धमा गत पुष २२-२३, २०७३ (6-7 Januray 2017)मा काठमाडौँमा बृहत् सम्मेलनमा छलफल भएको थियो। सो कार्यक्रमको आयोजना गर्न पाउँदा लाहुरिप गर्व महशूस गर्दछ।

सो कार्यक्रम आयोजनामा विभिन्न व्यक्ति, व्यक्तित्व तथा संघसंस्थाहरूको अमूल्य सहयोग लाहुरिपलाई मिलेको थियो। यसरी सहयोग तथा सल्लाह सुझाव दिनुहुने डा. कृष्ण भट्टचन र डा. नवीन राईप्रति हामी आभारी छौं। त्यसैगरी United Nations Permanent Forum on Indigenous Issues (UNPFII) का उपाध्यक्ष Mr. Raja Devasish Roy, सोही निकायकी सचिवालयबाट पाल्नु भएकी Ms. Julia Raavad, र International Work Group for Indigenous Affairs (IWGIA) बाट कार्यक्रममा सहभागी बन्न आउनु भएका Mr. Christian Erniप्रति लाहुरिप आभारी छ। त्यस्तै कार्यक्रमलाई सफल पारिदिन सहयोग गर्नुहुने अमृत योन्जन तामाङ, यशोकान्ती भट्टचन, डम्बर लोहोरुङ, डम्बर तेम्बे र नारायण निडलेखुप्रति पनि धन्यवाद व्यक्त गरिन्छ।

सो कार्यक्रम सफलतापूर्वक सम्पन्न गर्नका लागि महत्वपूर्ण सहयोगका 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 धन्यवाद टक्रयाइन्छ । साथै कार्यक्रमा उपस्थित भई कार्यक्रमको शोभा बढाई दिनु भएकोमा राष्ट्रिय मानवअधिकार आयोगका अध्यक्ष माननीय अनुपराज शर्मा, आदिवासी जनजाति उत्थान राष्ट्रिय प्रतिष्ठानका उपाध्यक्ष चन्द्रबहादुर गुरुङ र सदस्यसचिव गोविन्द माझीप्रति लाहूर्निप कृतज्ञ छ । त्यसै गरी नेपाल आदिवासी जनजाति महासंघ, राष्ट्रिय आदिवासी जनजाति महिला महासंघलाई पनि धन्यवाद साथै सो कार्यक्रममा गरिमामय उपस्थितिका लागि माननीय सांसदहरू, विभिन्न संघसंस्थाका प्रतिनिधिहरू, बुद्धिजीविहरू, राजनीतिक दलका प्रतिनिधिहरू, विभिन्न राजदूतावासका प्रतिनिधिहरू, व्यापारिक क्षेत्रका प्रतिनिधिहरू, सरकारी निकायका प्रतिनिधिहरू, संयुक्त राष्ट्रसंघलगायत अन्तर्राष्ट्रिय निकायका प्रतिनिधिहरू र सामाजिक अभियन्ताहरूप्रति हार्दिक धन्यवाद ज्ञापन गरिन्छ ।

यस पुस्तकमा सो कार्यक्रममा प्रस्तुत कार्यपत्रहरू समावेश गरिएका छन् । कार्यक्रममा कार्यपत्र प्रस्तुत गरिदिनुहुने विभिन्न मन्त्रालयका प्रतिनिधि-कर्मचारीहरू तथा बुद्धिजीविहरूप्रति पनि लाहूर्निप आभारी छ । साथै यस पुस्तक प्रकाशनमा प्रत्यक्ष तथा परोक्ष रूपमा योगदान गर्ने सबैप्रति हामी आभार व्यक्त गर्दछौं ।

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विषय सूची/Content

संक्षेपीकरण / Abbreviation

प्रकाशकीय

लैंगिक समानता, संस्कृति र भाषा

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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

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 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 if 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, where as 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, where as 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, whereas 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

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

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 lawas, 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.

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