

ADB AND HYDROPOWER PROJECT IN NEPAL

A CASE STUDY OF TANAHU HYDROPOWER PROJECT

**Rashmi K. Shrestha
Ratan Bhandari**

F e b r u a r y 2 0 1 4

ACRONYMS

ADB	Asian Development Bank
ADFD	Abu Dhabi Fund for Development
EIA	Environment Impact Assessment
EIB	European Investment Bank
EPR	Environment Protection Rules
FPIC	Free Prior Informed Consent
GON	Government of Nepal
GLOF	Glacial Lake Outburst Flood
IEE	Initial Environment examination
IFIs	International Financial Institutions
IPPF	Indigenous Peoples Planning Framework
IUCN	International Union for Conservation of Nature
JICA	Japan International Cooperation Agency
KM	Kilometer
KM2	Kilometer Square
kV	Kilo volt
MW	Mega Watt
NACEUN	National Association of Community Electricity Users, Nepal
NEA	Nepal Electricity Authority
ODA	Official Development Assistance
PCP	Public communication Policy
RIPP	Resettlement and Indigenous People's Plan
SPS	Safeguard Policy Statement
SMEC	Snowy Mountains Engineering Corporation
THP	Tanahu Seti Hydroelectric Project
THL	Tanahu Hydropower Limited
UNDP	United Nations Development Programme
VDCs	Village Development Committees
WCD	World Commission on Dams
WECS	Water and Energy Commission Secretariat
WWF	World Wildlife Fund

CONTENTS

- 1. BACKGROUND**
 - 1.1 Introduction
 - 1.2 Rivers, Dam and Power Crisis in Nepal
- 2. ADB AND HYDROPOWER PROJECTS IN NEPAL**
- 3. A CASE STUDY OF TANAHU HYDROPOWER PROJECT**
 - 3.1 Tanahu Hydropower Project
 - 3.2 Rationale of the study
 - 3.3 Data Collection method
 - 3.4 Data Analysis
 - 3.5 Limitation of the study
- 4. FINDINGS OF THE STUDY**
 - 4.1 Impact of the Project
 - 4.1.1 Land acquisition
 - 4.1.2 Public Resources and Infrastructure
 - 4.1.3 Involuntary Resettlement
 - 4.1.4 Environment
 - 4.1.5 Livelihood
 - 4.1.6 Gender
 - 4.1.7 Culture
 - 4.2 **ADB POLICY VS IMPLEMENTATION**
 - 4.1.1 Access to information/Prior notification/Participation/Consultation
 - 4.1.2 Safeguards
 - 4.1.3 Gender mainstreaming
 - 4.1.4 Livelihood Development
- 5. CONCLUSION AND RECOMMENDATION**
 - 5.1 Conclusion
 - 5.2 Recommendation

BACKGROUND

1.1 INTRODUCTION

Nepal is a landlocked country with an area of 147108 km² sandwiched between two developing giants India and China. Nepal suffered from decade-long Maoist insurgent leaving the country in more fragile condition. Every sector suffered a lot and still suffering due to civil war and political instability. Nepal is in transition and constitution making process and newly elected Constituent Assembly II has promised to promulgate a new constitution, which will shape country's future. Nepalese people are eagerly waiting for the new constitution, which would pretty much shape, their future as well.

Nepal, although challenged by its landlocked nature, is naturally a beautiful country. This country is rich with natural resources, cultural and biodiversity, Indigenous knowledge, world heritage and genetically diverse flora and fauna. However, Nepal ranked 157th among 187 countries in UNDP's Human Development Index (UNDP, 2013). The rate of economic development is only 3.56 % (EcoSurvey, 2011). The average annual income of Nepalese people is \$658 (EcoSurvey, 2011). With this dire economic context, one of the economic development means seen by Government of Nepal (GON), International Financial Institutions (IFIs), bilateral donor agencies and multination companies is hydropower development. IFIs are proposing Nepal to harness its water resources flowing from the vast Himalayas.

1.2 RIVERS, DAM AND POWER CRISIS IN NEPAL

Nepal's major river basins make over 6000 rivers and rivulets where every year 220 billion cubic meter water flows when there is an average 1530mm precipitation (Pokhrel, 2005)

Rivers of Nepal originate in the Himalayas and some of them from China's autonomous region Tibet. Most of the major river basins (Koshi, Gandak, Karnali and Mahakali) in Nepal are of a transboundary type. Nepal basically shares with China and India with larger share with India. Nepal and India already signed in Koshi, Gandak and

Mahakali river treaties for the purpose of flood control, irrigation and power generation. India has been successful to divert these rivers for irrigation of her northern states Uttar Pradesh and Bihar. However, all above mentioned treaties are regarded as being unequal and unjust in terms of their joint management and benefit sharing. Now, most of the Indian companies secured hydropower project's license for power generation. 900 MW Upper Karnali, 900 MW Arun III, and 600 MW Upper Marshyandhi II are the fresh examples.

There is still debate going on in Nepal about pros and cons of big dams. Generally, dam building has many socio-environmental costs. For an economically poor country like Nepal, dam building and power generation for domestic consumption and export seem boon for economic growth. However, for a country like Nepal, this has its own cost. Nepal has huge water resources stored in the Himalayas but the Himalayas of Nepal are continuously moving and seismically active (Dixit, 2002). This induces continuous rock falling, erosion, and landslides. Therefore rivers carry all the sediments and there are many cases of rivers changing course resulting floods. The Himalayas itself is very new, young and fragile mountain as well as high seismic zone, therefore building mega dam projects in the Himalayan rivers is a risky business. Earth quick, Glacial Lake Outburst Flood (GLOF), Cloud Burst Flood, Sedimentation, Landslide is another natural challenge in Nepal. Though, Nepal cannot say 'no' for dam as argued by Dipak Gyawali, renowned water resource expert of Nepal in the environmental conference stated in (Dixit, 2007). According to Mr. Gyawali, environmental activists can debate for no "bad dam" in Nepal. In a country like Nepal where all the precipitation comes in three-four months of the year and with severe energy crisis, it is difficult to say no to dams.

Nepal has theoretical potential of generating 83,000 MW electricity of which 43,000 MW is at present economically viable (WECS, 2002). However, Nepal experiences 12-18 hours of 'power cut' in the dry season and power cut all year around. According to

Dilli Ghimire, Chairperson of National Association of Community Electricity Users-Nepal (NACEUN), only 40% people have an electricity access and rest of the 60% does not have electricity (Ghimire, 2011). However, Nepal Living Standard Survey, 2011 claims that average, 70% of households have access to electricity (Nepal Living Standard Survey, 2011), Nepal's total installed power generation is 706 MW, the majority of which is owned and operated by Nepal Electricity Authority (NEA) while the private sector owns and run 158 MW (ADB, 2013). This capacity Shrinks to 250-300 MW during the dry season, which also happens to be the time when demand is at its highest (over 1,000 MW) (ADB, 2013). It's because Nepal has only one storage dam project called Kulekhani. All the other hydropower projects are the basis on run of the river. Even in monsoon when there is abundant water in the rivers, there is a power cut in Nepal.

Thus, the Government of Nepal has declared "power crisis" in 2008 and announced to investors to invest in the hydropower sector. So the government, development partners have shown their interest in hydropower development projects to reduce Nepal's power crisis. However, hydropower development has its own challenges and opportunities.

2. ADB AND HYDROPOWER PROJECTS IN NEPAL

The IFIs and bilateral donor agencies have been playing very crucial and dominant role in the hydropower development sector in Nepal. Asian Development Bank (ADB), World Bank (WB), European Investment Bank (EIB) and Japan International Cooperation Agency (JICA) are major multilateral/bilateral donor agencies who are engaging in Nepal's hydropower sector. Among them, ADB's role is more active and influential. ADB has already invested a huge amount of money in Nepal's education, transportation, agriculture, tourism, infrastructure development, drinking water supply and sanitation as well as the energy sector. ADB's involvement in Nepal's energy sector is quite old. ADB has been providing loan and grant assistant for rural electrification and hydropower generation with lending conditionality's. It has been providing all financial and technical loan and assistant through government. Therefore, local community's role in project designing, implementation and evaluation is completely excluded in ADB funded projects in Nepal.

Table 1 : ADB's loan in Nepal's Energy Sector

S.NO	LOAN NO.	YEAR	PROJECT NAME	LOAN AMOUNT IN US\$
1	250	1975	Second Electrification	24,47,966
2	447	1980	Third Electrification	1,48,96,395
3	512	1981	Mini Hydro	83,00,000
4	533	1982	Forth Electrification	11,24,234
5	670	1983	Fifth Electrification	1,77,25,876
6	708	1986	Sixth Electrification	2,74,67,406
7	1011	1990	Seventh Electrification	3,87,47,021
8	1452	1996	Kali Gandaki 'A'	10,56,32,130

Source: Ghimire: 2011

In the past, ADB was supposed to fund US\$ 127.6 million in 201 MW Arun III Hydroelectric project together with World Bank. However, World Bank pulled out from Arun III in 1995 and project could not go ahead. As a result, ADB provided the same amount as a loan to implement 144 MW Kali Gandaki 'A' hydroelectric projects (Gyawali, 2003). ADB was one of the leading donor agencies in Kali Gandaki 'A' project and that project were completed in March 2002. There were/are lots of controversies like corruption, compensation, and

rehabilitation of displaced Bote people, and low quality of dam construction and so on within Kali Gandaki 'A' project.

After Kali Gandaki 'A', ADB considered providing loan (\$50 million to Private Sector, \$68.5million for Political Risk Guarantee and \$ 40.8million as Equity Investment and \$45million to the Government of Nepal) to West Seti project. (SMEC, 2007). However, ADB pulled out from the West Seti because of local resistance and finally the project was canceled in 2011. Then, ADB agreed to provide loan for Tanahu Seti Project. Recently ADB has provided a loan to prepare Detailed Project Report (DPR) for the 536 MW Sunkoshi III hydropower project in Kavrepalanchwok district.

3. A CASE STUDY OF TANAHU HYDROPOWER PROJECT (THP)

3.1 Tanahu Hydropower Project

The 140 MW Tanahu Seti Hydroelectric Project (THP) is located in the Tanahu District of the Western Development Region of Nepal. This project would be second reservoir project in Nepal after Kulekhani. Initially, this project was known as Upper Seti Storage Hydroelectric Project, but it has created confusion because there is also another Seti river known as West Seti in Far West Nepal. So project name was changed to the Tanahu Seti Hydropower in 2012.

The project will affect seven Village Development Committees (VDCs) and one Municipality. The project will contribute to loss 660 metric ton crop which will raise the issue of food security. According to Environment Impact Assessment (EIA) Addendum, 2012, total 758 households will be affected. Among them, 86 households will be completely displaced from their ancestral land. The features of the reservoir and dam are as follows.

Table 2: Summary of the main features of the reservoir, dam and transmission line

S.N	PARTICULARS	UNITS
1	Area of the reservoir	7.26 km ²
2	Length of reservoir	27 km
3	Dam height	420m from sea level
4	Dam height and length	140m and 170m respectively
5	Transmission line	37 km, 220 Kv
6	Access road to dam site	3 km

Source: NEA: project summary 2011(Pamphlet Nepali Version)

Table 3: Affected VDCs and Municipality

S.NO.	NAME OF THE AFFECTED VDCS AND MUNICIPALITY	VILLAGES IN THE AFFECTED VDCS AND MUNICIPALITY
1	Vyas Municipality	Beteni, Huksetar, Patan, Bisghare
2	Kahun Shivpur	Thati, Patighar, Dharapani, Samidanda, Malinge, Banchare, Lokma, Syanlun and Gyajha
3	Pokhari Bhanjyang	Simalswara, Belbase and Simalchaure
4	Rising Ranipokhari	Tuttwa, Badarkuna, Jalbire, Jaruwapani, Risingpatan and Geruwater
5	Kot Durbar	Bajhogara, Hukadi, Chap, Chilekama, Machadanda, Kortan
6	Majhkot	Chorepatan, Saune and Dumsadi
7	Bhimad	Khanaltar, Baghtar, Malebagar, Bhimad bazaar and Geruwapani
8	Chhang	Thandiphant, Chanpatan, Tallotar, Jhakkas, Chimkhan and Pipale
9	Pokhari Bhanjyang	Downstream impact

Source: THP, EIA, 2009

The total cost of THP is estimated at around 505 million dollars (ADB, 2013). Along with ADB, there are other partners in THP who have financial investments in this project. One of the major funding partners is JICA and the remaining partners are EIB and Abu Dabi Fund for Development Fund (ADFD). All the loans are approved except ADFD. ADFD is already promised however the official work remains. The following table shows the investments of different financiers of this project.

Table 4: Financing Plan

S.N	SOURCE	AMOUNT (\$ MILLIONS)	SHARE OF TOTAL (%)
1	JICA	184	36
2	ADB (regular term loan 120m+hard-term loan 30m=150m)	150	30
3	EIB	70	14
4	GON/NEA	71	14
5	ADFD	30	6
Total		505	100

Source: (ADB, 2013)

The scheduled period of this project is seven years. The project has started in June 2013 and is expected to complete on October 2020(ADB, 2013). The executing agencies are Nepal Electricity Authority (NEA) and Tanahu Hydropower Limited (THL). As described in the project manual of ADB, THL will be the executing agency for the hydropower plant and all associated works whereas NEA will be the executing agency for the transmission lines and the rural electrification program. According to the

report and recommendation of the president to the board of directors of ADB, it is said that ADB will facilitate throughout the procurement process including bid evaluation, contract negotiations and contract payment. In addition and along with ADFD and EIB will fund on civil works whereas JICA will fund all the powerhouse facilities. Furthermore, the same report says ADB will fund on its own or in conjugation with the government, the transmission lines, the community development, rural electrification programs and

portion of the land acquisition and settlement costs.

ADB is an active player in this project. Supervision, procurement and assigning of experts will be taken care by ADB. ADB has expected that the impact will be expanded access to sustainable energy in Nepal where the outcome will be increased efficiency and supply of reliable hydropower energy. The project outputs mentioned in the report are as follows:

- A 140 MW hydropower plant and related transmission system 37 km, 220 Kv
- Rural electrification covering 17,636 households
- Community development program in the project area
- NEA restructuring
- Other sector reforms
- Equity sale scheme for hydropower development
- Technical assistance for achieving project outputs

The special feature mentioned for THP is that all the policies of ADB along with the other funding partners will be applied in the execution of this project.

3.2 RATIONALE OF THE STUDY

Hydropower is a sustainable energy however the development of this type of energy has its own cost. THP is not a run of river power generation. It is a reservoir dam project, which has its own pros and cons. Nepal has only one storage dam till date. This dam and project as mentioned before will submerge lands, forests, settlements, physical structures, and cultural sites. In the project manual report of THP prepared by ADB, it is mentioned that the project is classified as complex and sensitive and rated as category 'A' for involuntary resettlement, indigenous peoples, and the environment. The project has to resettle affected communities. The report says that the preparation process (assessments, consultations, and information) followed ADB's policies and procedures.

The report further says that the project will help in community development, gender mainstreaming, and livelihoods development. ADB has said that they will take special care in land acquisition and be a part in the whole process so as to be sure about the implementation of their policies. However, it is often found of violating such promises and policies as described in different projects around Asia and the Pacific described in the book published by NGO Forum on ADB, 2013. We do not have to go that far. They do not have good track record of implementing their own policies in Kali Gandaki 'A' Hydroelectric Project and Melamchi Water Supply Project (inter-basin water transfer) in Nepal.

In this case, there was already news of confusion on compensation disbursement in THP. Field visit done by one of the author (Ratan Bhandari) of this report in the year 2011 had found that there was no communication done about the preliminary study and assessment of the project. The communication and consultation were lacking. As the project has gone to the implementation phase, this case study will review the impact of the project and the actual implementation of ADB policies on this project.

3.3 DATA COLLECTION METHOD

Following data collection methods were used to prepare this case study.

- Field visit: Field visit was made to the project site (reservoir area and dam site) and to the affected communities.
- Questionnaire survey: questions were prepared and distributed in the affected communities. Questionnaires were filled up using random sampling method.
- Interviews: structured and non-structured interviews were conducted on the project site with different stakeholders and project staff.
- Focus group discussion: focus group discussion was carried out in the affected communities (among women, indigenous peoples, Dalit, landless group, community forestry users group, fisherman, local concern group and community school) of the project site.

- Literature review: Literature on the act, policies and strategies of Nepal on water resources, land acquisition/compensation, the right to information, information act and rule, environment act, and regulation were reviewed. Similarly, policies of ADB-related to water, environment, gender, indigenous peoples, energy safeguard, communication and project reports were reviewed. Likewise, EIA, 2007 report prepared by JICA and NEA, EIA, 2009, EIA addendum 2012, Initial Environment examination (IEE), 2012 were referred. In addition, relevant books and reports were studied and referred in preparing this case study.

3.4 DATA ANALYSIS

The data is mainly quantitative in nature. They are analyzed in reference to the existing acts, policies and safeguards of ADB, JICA, EIB and also Government of Nepal particularly focusing on ADB policies.

3.5 LIMITATION OF THE STUDY

The major limitation of this study was the time provided for this case study. In short time, study and analysis could not be done in detail. This study mainly targeted socio impact considering the environment to some extent. Engineering and physical dimension of the project structure are beyond the scope of this study. This study mainly analyses relevant policies of ADB on THP and their implementation.

FINDINGS OF THE STUDY

4.1 IMPACT OF THE PROJECT

As already mentioned before this project is a storage dam project and the reservoir will submerge land, forest, communities, public structures and cremation sites. It will also regulate the river flow downstream. Thus, it is seen that the project will have following main impacts. This study has mainly focused on environmental and social impacts.

4.1.1 LAND ACQUISITION

According to the EIA addendum, 2012 prepared by NEA and THL, the total land required by the project is 828ha. Out of this, project implementation will have to acquire 112 hectares and leasing of 19 hectares of private land (THL and NEA, 2012). In total eight Village Development Committees (VDCs) (Bhimad, Chhang, Majhkot, Rising Ranipokhari, Kot Darbar, Jamune and Kahun Shivapur) and one Municipality (Vyas) will be direct and Pokhari Bhanjyang VDC located in downstream will be indirectly affected by the project. VDC is the lowest tier of the local government in Nepal. There is no mentioning of landless people who are living there from many generations without land certificates. During field visits, it is found that lands in Vyas Municipality and Kahun Shivapur have already been acquired by giving compensation in cash. Compensation in other seven villages is yet to be provided so that people from these villages are confused and worried whether or not they should build new structures such as houses, cowshed, toilets etc. There are people and community school (Dipak Community Secondary School has occupied 216 ropani lands without land-certificate) who are living there from many generations however they do not have land certificates. According to Land act of Nepal, they are not entitled to get compensation.

As one of the locals said in Damauli, their land (Darai: marginalized community) was taken for establishing District headquarter and was paid cash compensation as well. But Darai community had no idea to manage those cash and did not have the wisdom to buy lands for survival. Finally, they spend all money and they are now landless around Damauli.

4.1.2 PUBLIC RESOURCES AND INFRASTRUCTURE

According to EIA addendum, 2012 prepared by NEA and THL, it is found that suspension bridges, the source of drinking water, access roads, foot trails, temples, and cremation sites will be

completely destroyed by the project. In addition, it is found from the EIA 2012, this project will have pressure on public resources due to the relocation of the affected households. It is already seen that due to tunneling work, the water supply is halted. The tunneling has disturbed the groundwater flow. Now they just have few hours' access of water instead of 24-hours/7 days supply. It is already pointed in the EIA 2012 that the project will have major impacts on environment and livelihood of the project sites.

4.1.3 INVOLUNTARY RESETTLEMENT

According to the resettlement framework prepared by NEA and THL, about 758 households will be affected by this project. The framework further says that out of 758 households, 86 households will be physically displaced and relocated to their current village. The report further says that the affected households are rated as indigenous and vulnerable. In addition EIB' report also confirms that the majority of affected people belongs to indigenous groups whose social and cultural ways of life may be compromised. According to the field visit, it is found that 19 families in Wantang Khola of Rishing Ranpokhari VDC, 7 families in Chhang VDC as well as in Beltar of Kahun Shivapur, Bhimad, and Jamune VDCs.

4.1.4 ENVIRONMENT

According to EIA addendum 2012, the project will have impacts on the aquatic ecosystem, terrestrial ecosystem and the habitat of fauna and flora. It further says 400.3 hector forests will be lost which contains 162,000 trees, 18.7 ha of shrub land and

94.3 hector grassland. Mainly there is a concern of barrier on fish migration. There are altogether 36 species of fish, out of which six species came from long distance migration, six other came from short distance migration and the rest are the species found in the Seti River. The project will hamper the free migration of fish and loss of population. According to IUCN there is endangered and nearly threatened species. The barrier may threaten diversity and fish population. The EIA addendum 2012 further says that International Union for Conservation of Nature (IUCN) and World Wildlife Fund (WWF) has not seen this project particularly threatening however they advised following international norms and condition to maintain aquatic and terrestrial species.

The flash flood of 5th May 2012, which came all of sudden in non-monsoon period, had taken 72 lives, more than two-dozen houses and a dozen suspension bridges were damaged. Kharapani Bazaar, Sardikhola VDC of Kaski district completely washed. This has warned us the unpredictability of natural calamities in this basin. The reason of such calamities was published on the website of NASA earth observatory on 24th January 2014 by Dr. Kargel of Arizona University, USA. According to Dr. Kargel, mountains of Himalayas are moving upward and there are continuous rock falling and erosion in the Himalayas. Furthermore, Dr.Kargel says continuous rock falling and erosion in Mt. Annapurna IV had accumulated millions of cubic meter of water in Tanahu Seti gorge, which finally burst as a flash flood in May 2012.



Suspension bridge after Seti flood in 5 May 2012, Photo credit: Kantipur daily



The origin of the Seti River Basin Source: NASA Earth Observatory image (acquired Dec 22 2013)

According to EIB's report, there will be shoreline erosion at vulnerable locations around the reservoir. There is an enormous problem of erosion, landslides, sinkhole and sand mining in upstream of the dam site. The surface of geology Bhimad Bazaar, Wantang Khola and Chorepatan in reservoir area seems very fragile and poor and reveal typical vertical bank erosion. So erosion, landslide, and sedimentation seem a big problem in the reservoir area.



Erosion and landslides in Basin (Source: DP Upadhyay, January, 2014)

4.1.1 LIVELIHOOD

This project will have a major impact on the livelihoods of affected people. The means of livelihoods affected by the project is agriculture, fishing, fuel wood and fodder collection. Majhi, Bote, Danuwar and Darai are known as fishermen who are indigenous and marginalized, a vulnerable group in Nepal. Fishermen depend entirely on rivers for their livelihoods. So the river is their lifeline. They cannot survive without the river and most of them are landless. Fishing is their ancestral profession. Fodder, Cattle rearing, manure production and agriculture are interlinked. If one is affected the entire cycle is affected. Women and the forest are so interlinked and community forest program in Nepal has a positive impact on women empowerment.

Likewise, it is seen that the project will make an impact on rafting as well. According to the environment addendum 2012, the river flow will be regulated downstream from the tailrace of the dam which will diminish the flow in the Seti river and finally in the Trishuli river. Thus it will shorten the rafting period. The report further says around 75 tour companies operate rafting trips across Nepal, variously headquartered in Kathmandu, Pokhara, and at other locations. The number of rafting companies that use the Seti river is not known, but an estimated minimum of 200 persons raft the Seti river each day during the rafting season, with this number expected to increase over time. Rafters are charged US\$60-75 per person per day (NARA, pers. comm.)”.



Photo: Ratan Bhandari (field visit, 2011)

4.1.2 GENDER AND VULNERABLE

According to the Environment Addendum 2012, the census survey was done in 2011/12, which pointed out, that there are female-headed households. In addition the IEE, 2012 says that men's share in agriculture is less against women. In addition, elderly people, children, and socially excluded group are found in the project area. So the project will have an impact on this as well.

4.1.3 CULTURE AND RELIGION

Most of the people are Hindus by religion; however, there is another religion such as Buddhist and Islam as well. The cremation sites and the temples, which will be destroyed by the project, would have an impact on the people. The intervention by the project will bring a new culture to the project sites and affected area, which may affect the original culture practiced over there.

A. ADB'S POLICIES VS IMPLEMENTATION

Analyzing feasibility study and Environment Impact Assessment 2004, upgraded feasibility study 2007, EIA 2009 and EIA addendum 2012, it is clear that the impact is enormous. Thus extensive relevant policy review of ADB, JICA,

Japan ODA (Official Development Assistance) loan and EIB were done and field visits in affected villages were conducted for this case study. In addition, different stakeholders were interviewed for preparing this case study.

Lenders of this project such as ADB, JICA and EIB have specific policies related to THP project. Their policies complement each other and there is no major difference in the meaning. There are many policies, strategies and guidelines which secure access to information, participation, safeguards of affected people's rights, sustainable environment management, gender mainstreaming and livelihood development of the affected villages and project sites. Policies, strategies, and guidelines sound so nice and all directed to the benefit of the local people, environment, community, and nation. It was expected the same from the field visits and from the interviews with the people. It has already been more than a decade that the project was conceptualized and incepted. The project has already gone to implementation phase from June 2013, few policies implementation could be expected from the project. In this case study following issues and shortcoming were identified.

i. ACCESS TO INFORMATION/PRIOR NOTIFICATION/ PARTICIPATION/ CONSULTATION

Access to information is a human right in Nepal. ADB’s Public Communication Policy (PCP), 2011, also recognizes the freedom of information as a fundamental human right as set forth in the covenant on the civil and political right. PCP, 2011 further recognizes the right of people to seek receives and imparts information about ADB operations. It supports knowledge sharing and enables participatory development or two-way communications with affected people. Para 47 of PCP, 2011 further says, "the borrower or client should facilitate dialogue on project outcome and impacts to the affected people and other interested stakeholders, including women, the poor and other vulnerable groups." It further says "the information should be provided in a manner, form, and languages understandable to them in an accessible place."

It further says "ADB shall work closely with borrower or client to ensure that such information is provided and feedback on the proposed project design is sought and that a project focal point is designated for regular contact with affected people and other interested stakeholders. This process will start early in the project preparation phase, allowing their views to be adequately considered in the project design, and continue at each stage of project or program preparation, processing, and implementation. ADB shall ensure that the project or program design allows for stakeholder feedback during implementation. ADB shall ensure that relevant information about

major changes to project scope and likely impacts is also shared with affected people and other interested stakeholders." What an excellent policy?

Similarly, the government of Nepal has Environment Protection Rules (EPR), 1997 which mandates to inform people before EIA process and should conduct one public hearing should in one of the affected communities.

In addition, JICA also mandates to have three stakeholder meetings in process of EIA. This should include affected people. Likewise, EIB also recognizes this project as category 'A', it mandates for extensive public participation and consultation. All lenders ADB, JICA, and EIB recognized this project as category 'A' with social and environment impacts, it demands extensive public participation, consultation in the affected areas.

In addition, World Commission on Dams (WCD) formulated a new framework in 2000 called "Dams and Development: A New Framework for Decision-making." One of the main principles of this framework is participatory decision making.

13 years have already been passed since the first EIA study process that was held in 2001. Consultation and different stakeholders meetings conducted by the project were structured and analyzed. According to EIA 2009, EIA addendum 2012, Upgraded Feasibility Study 2007 and Resettlement and Indigenous People’s Plan (RIPP), the following table shows the information disclosure and public interaction since 2001.

Table: 5 Public Consultations

S.N	DATE	VENUE	NO. OF PARTICIPANTS	REMARKS
1	1 February 2001	Damauli (District headquarter)		NEA
2	25 January 2004	Damauli		NEA, Public hearing
3	2 June 2006 7 June 2006	Damauli Kathmandu	450 56	1 st stakeholder meeting (JICA and NEA)
4	1 December 2006	Damauli	600	2 nd stakeholder

	6 December 2006	Kathmandu	74	meeting (JICA and NEA)
5	4 May 2007	Beltar	350	3 rd stakeholder meeting (JICA and NEA)
	5 May 2007	Rishing Patan	400	
	6 May 2007	Damauli	600	
	10 May 2007	Kathmandu	56	
6	8 June 2011	Damauli	111	NEA
	9 June 2011	Bhimad Bazaar	100	NEA
7	October 2011 to February 2012	Various at 12 different location		NEA for RIPP preparation

Source: Environment Addendum 2012, EIA 2009, Upgraded Feasibility Study 2007, RIPP 2012

Meetings, consultations, public hearing and stakeholders meetings were conducted although only the proceeding of 8th and 9th June 2011 were found in detail. Field visits and interviews with the affected people show that there are many issues about information and prior notification. They were not informed that somebody was coming to measure their lands. The affected people do not know what they would lose in terms of environment and in terms of livelihood. They have not heard about EIA even to date. They complain that all villagers and every household were not invited for meetings and public hearing. The one who attended the meeting said that the language of the presentation was of technical and local people did not understand the technical terms. The vulnerable and socially excluded groups (daily) feel they are totally excluded. They have not participated for any consultation. If the project has an adverse impact then those impacts were not disseminated for all affected communities. Meetings were done in Damauli, the district headquarter which is far from affected villages. They complain that people come and go and they do not understand why they are there and what they will do. They said they do not know whether they should build new structure and toilets. If they will be displaced or relocated then there is no point of building these structures, which are essential. They are confused.

Then the meeting dates, proceeding, presentation and participation lists were analyzed. First of all, it has been nearly 13 years that the first EIA was done. Although there was meeting in Damauli in February 2001, it can be assumed as there is no data of participants that there was very less representation from the affected communities. Again the public hearing in January 2004, which has no participants list, was held in Damauli. Again people from affected communities were missed.

Similar things happened in consecutive meetings. Why were those meetings and hearings not done in the affected communities? The meetings proceeding of 8th June and 9th June 2011, which was attached in, EIA addendum 2012 was analyzed. The participant lists were analyzed and the presentation delivered to the audience was analyzed. The brochure of four page was also analyzed which was distributed in the meeting. Participant list shows very less representation of affected communities and also there was no women participation from affected communities in Damauli meeting. The report says some farmer participants walk five hours from affected community to attain the meeting. The presentation attached was in English and it was very brief. The meeting in Bhimad bazaar, one of the affected communities had more participants from the affected communities. Meetings and consultations in district headquarter and Kathmandu is out of access of affected poor, marginalized and backward communities. As they said our communities, houses, land, resource are here so even we if we invite why should we go district headquarter and Kathmandu? Meaningful and participatory meetings and consultations should be held in our village, every VDC not in district headquarter and Kathmandu.

So where is the ADB policies applied here? The place of consultation should be accessible; the language should be in understandable form, there should be continuous consultation and communication with the

affected communities. There is a huge gap in communication from 2001 until now with the community people who are the most affected by the project. There is ADB office in Nepal. Participants list of Damauli meeting does not have single representation from ADB.

ii. INFORMATION DISCLOSURE

Resettlement and Indigenous Peoples Plan (Dec 2012), Indigenous Peoples Planning Framework (Dec 2012), Resettlement Framework (Oct 2012), Environmental Assessment and Measures for Rural Electrification of the Village Development Committees (Aug 2012), Environmental Assessment and Measures for Upper Seti (Damauli)-Bharatpur 220 kV Transmission Line Project (Jun 2010), Project EIA (Aug 2009) finalized and approved however local people have not seen the above documents yet. These documents never disclosed to the project affected communities in the project area.

Local affected people, local concern groups, stakeholders, and community schools, community forestry users group are demanding project EIA report (Bhanjyang Daily, 2014). EIA hard copies are even not provided and disclosed to the affected VDCs. Documents like Project data sheet and summary of EIA, 2009 are translated into the Nepali language which can be downloaded on ADB's website. None of the other project related documents are in the local language so there is no point that the affected communities would understand the beautiful provision written in the policies for the safeguards of their rights. Whatever information and documents are available regarding this project are uploaded in ADB, JICA and EIB's website which is not accessible to local people because of lack of computer and computer literacy, lack of electricity, knowledge, technology and language.

iii. SAFEGUARDS

ADB, JICA, and EIB have categorized this project as category , 'A' which means this project has adverse social and environment impact. Thus ADB has a high safeguard policies framework. But data, EIA and other reports are not updated according to the new census. As the project has not gone into full implementation, it is not yet ready to review safeguard policy implementation. However, we can analyze some issues regarding safeguard policies in the project site. According to Safeguard Policy Statement (SPS), 2009, ADB's safeguard policy framework consists of three operational policies on the environment, Indigenous Peoples, and Involuntary resettlements.

SPS, 2009 says safeguard policy implementation requires that the affected people and the information are disclosed in the form, manner, and language accessible to them. Three operational policies require following points to be included in project preparation and implementation.

iv. ENVIRONMENT

According to the SPS, 2009, the objective of the safeguard on the environment is to ensure the environmental soundness and sustainability of projects and to support the integration of environmental consideration in the project decision-making process. Furthermore, it says environmental safeguards are triggered if a project is likely to have potential environmental risks and impacts.

EIA studies at several stages show that there is an adverse environmental impact on fisheries, aquatic ecosystem, wildlife, terrestrial ecosystem, and climate. There is more threat of erosion and landslides. Furthermore the study of Dr. Kargel of Arizona State University, USA, it is seen that the basin is very seismically active and sudden flash floods like the one in 5th May 2011 could occur all of sudden without any warning. During the field visit, it is found that affected people do not know about EIA results. They are worried about landslides/and erosion in the proposed reservoir area. They are concerned about the submergence of their settlements after the reservoir would be built. After project would to full operation, it

must be scrutinized how safeguard policies on environment and environment management plans are executed.

v. INVOLUNTARY DISPLACEMENT

According to SPS, 2009, the objective of Involuntary Displacement safeguard is to avoid involuntary resettlement wherever possible, to minimize involuntary resettlement by exploring project and design alternatives; to enhance, or at least restore, the livelihoods of all displaced persons in real terms relative to pre-project levels; and to improve the standards of living of the displaced poor and other vulnerable groups.

From table 3, it is clear that the projects had had 12 consultations from October 2011 to February 2012 in a different venue to prepare RIPP covering all affected village. However, during a recent field visit in the third week of January 2014, affected communities are very confused about land acquisition and compensation. In Vyas Municipality and Kahun Shivapur, compensation has been disbursed however the other majorly affected villages where settlements would be displaced and affected do not know when and how compensation was distributed and how they will be compensated. They are scared that they will not be provided at all.

Other affected people who do not have land entitlements and living there for many generations, the vulnerable and marginalized groups (Majhi, Bote, Darai and Kumal) and socially excluded (daily) groups are very worried about their future. One of the interviewees from the affected community said they will lose fertile land forever where they can grow food. Now if they have to lose it, then the cost should be good and sustainable. Otherwise, they are not going to leave it.

vi. COMPENSATION

NEA already distributed cash compensation in dam site (Kahun Shivapur VDC) but not in reservoir site. According to the EIA, while distributing compensation there should be an independent committee which would be full authorization to compensate those who will lose their property including (lands, houses, cattle, plants, crops and community infrastructure). But local people from submerge area are totally unhappy with this compensation mechanism. They are demanding their own community people's meaningful participation in compensation committee.

They are questioning why compensation was distributed in cash rather than proper rehabilitation package. Why some people are already compensated in dam site but not in reservoir site? Their demand is that compensation should be equal in dam site and reservoir site. But as project staff told us during the field visit that there is a price gap in reservoir site and dam site because dam site lies just near District Headquarter so land price near district headquarters must be higher than reservoir site, which lies furthered from the district, headquarter. That's why land price and compensation will be different in dam site and reservoir site. But affected people are not agreeing whatever project staff said. They are demanding equal compensation basis on land quality.

So there is a clear lack of regular communication and assurance to the project led displaced people. They lack information and do not know any plans regarding involuntary displacement. They do not know where they will be relocated and what will happen to their livelihoods and how they will be restored.

vii. INDIGENOUS PEOPLE

According to SPS, 2009, the objectives of Indigenous People safeguards is to design and implement projects in a way that fosters full respect for indigenous people identity, dignity, human rights, livelihood systems and cultural uniqueness as defined by the indigenous people themselves so that they i) receive culturally appropriate social and economic benefits, ii) do not suffer adverse impacts as a result of projects and iii) can participate actively in projects that affect them.

Most of the people (75%) in the project area are indigenous people as classified by Government of Nepal. They have their own language, culture and livelihood systems. During the field visits, affected indigenous people want their rights to be exercised during the project implementation and also need Free Prior and

Informed Consent (FPIC). It is found that their whole problem born with the lack of information, communication, and meaningful consultation during the preparation and planning phase. ADB's policy sounds very nice however they are not found implemented by the borrower/client. ADB said that it will monitor or make client accountable in executing their policies. However, it is actually missing.

viii. GENDER MAINSTREAMING

According to the EIA addendum and EIA 2009, there are women headed households, which will be affected by the project. There are more women in agriculture than men. This project has prepared "Gender equality and social Inclusion Action plan" which supposed to ensure the empowerment of women, legal entitlements, and rights of girls/women. It further says grievance from women and socially excluded person are to be collected and recorded separately by women mobilizers.

The implementations of such plans need supervision and scrutiny. However, women are already excluded in preparation and planning phase. There was no good representation of women in consultation and meetings.

ix. LIVELIHOOD DEVELOPMENT

Reports like EIA addendum 2012, EIA, 2009, RIPP, 2012, and Indigenous Peoples Planning Framework (IPPF), 2012 assure on livelihood restoration. The major livelihood means is agriculture. The project will acquire such lands. The project has a plan for compensation and facilitating access to local jobs. This project will provide jobs as per qualification in the projects. Vocation and other life and financial training will be provided for the project affected people.

During the field visit for preparing this case study, the affected people will not leave without good compensation and agreed on livelihood restoration plan. They said they will lose their fertile land where they could grow food for themselves and their families for a lifetime.

During the field visit, it was found that compensation was provided in Vyas Municipality and Kahun Shivapur. The money, which was provided, was used to buy an expensive motorcycle, luxury goods and divided among family members. This is not sustainable at all. Once the compensation money will be finished they will be bankrupt and come into the street. So what kind of community development we want. Has ADB who says it is accountable for project planning and implementation has ever thought about this? Lots of money was provided, so what? Who is getting the money and how to manage that money for the sustainable livelihood?

CONCLUSION & RECOMMENDATION

CONCLUSION

There is severe power crisis in Nepal, which has halted, in economic growth of the nation. Nepal cannot just say no to dams however it can avoid having bad dams. People have not opposed this project. However, they want adequate information, timely notification, inclusive and meaningful consultation, dialogue and interaction. They need of whole project documents including the full volume of EIA, IPPF, Resettlement Plan as well as ADB, EIB and JICA's guidelines and safeguards in the local language in local level not in the website. They also want their meaningful role in decision-making process of the project. They need Free Prior Informed Consent regarding this project. They want guaranty of their livelihood and best cost for their lands and schemes to restore their livelihoods. They want less impact on the environment and do not want project-induced disaster. They want electricity, employment in the project, regular income generation sources in the future to continue their livelihood. Local demand also the certain percent of share in the project.

ADB, JICA, and EIB have policies and safeguards and their policies complement each other. They advocate reducing poverty and saving the environment. Mainly this case study analyzes ADB policies and their implementation. It says all good things for people, environment, and society. It says it is accountable or it will make borrower/client accountable to all its policy implementation. However, it is not found like that. Although the project has just gone to the implementation phase, it can be concluded that in planning and preparation phase, many ADB's policies have been violated regarding communication, consultation, participation and prior notification.

If the project is expected to bring economic boon or solve power crisis in Nepal, it should not forget the people there. If they are happy and prosperous then there is a future for the project otherwise it will be like one more ADB funded Melamchi Water Supply project.

RECOMMENDATIONS

This project needs to scrutinize from external bodies so as to make sure the affected people, environment, and the society get what they should get. This project needs to be reviewed continuously throughout the implementation phase. The application of all ADB, JICA and EIB policies, plans needs to be monitored. ADB, JICA, and EIB should be more accountable and participatory in implementing its own policies and strategies.

REFERENCE

- ADB (2013). *Report and Recommendation of the President to the Board of Directors on Proposed Loans and Administration of Technical Assistance Grant, Nepal: Tanahu Hydropower Project* (Project No: 43281). (Retrieved on December 1 from <http://www.adb.org/sites/default/files/projdocs/2013/43281-013-nep-rrp.pdf>)
- ADB (2011). *Public Communications Policy 2011*. Asian Development Bank. Philippines. (Retrieved on Jan 15 from <http://www.adb.org/sites/default/files/pcp-2011.pdf>)
- ADB (2009). *Safeguard Policy Statement*. Asian Development Bank. (Retrieved on Jan 15 from <http://www.adb.org/sites/default/files/pub/2009/Safeguard-Policy-Statement-June2009.pdf>)
- ADB (2012). *Environment Assessment Report; Rural Electrification of the village Development Committees influenced by Tanahu Hydropower Project*. Nepal Electricity Authority and Tanahu Hydropower Limited. (Project no: RRP NEP 43281 retrieved on 26 Jan <http://www.adb.org/sites/default/files/projdocs/2013/43281-013-nep-iee.pdf>)
- Bhanjyang daily. (2014). *EIA Pratibedanko Nakkal Mag (Demand of EIA copy)* (February 4)
- Dixit, A., (2002). Floods and Vulnerability: Need to Rethink Food Management. *Natural Hazards*, **28**, 155-179.
- Dixit, A., (2007). *Continuing Reasoned Public Debate on Dams and Development: A summary of National Dialogue on Dams and Development in Nepal*. Nepal Water Conservation Foundation and IUCN Nepal, + 22pp.
- EIB (2013). *Environmental and Social Data Sheet*, Luxembourg, 14/03/2013. (www.europa.org on Jan 27)
- Gyawali, D., (2003). *Rivers, Technology and Society, Learning the lesson of water management in Nepal*. Himal Books and Panos South Asia with Nepal Water Conservation Foundation, 244-255pp
- Ghimire, D., (2011). *Gramin VidhyutikaranmaSamudayik Sahabhagita (Community Participation on Rural Electrification)*. National Association of Community Electricity Users- Nepal, 37-38 pp.
- Japan ODA Loan (2012). Ex-Ante Evaluation (for Japanese ODA loan).
- NGO Forum on ADB (2013). Integrated Water Resource Management and the People of Asia
- NEA (2011). Upper Seti Hydropower Project: Summary
- CENTRAL BUREAU OF STATISTICS, National Planning Commission Secretariat. (2011). *NEPAL LIVING STANDARDS SURVEY 2010/11: STATISTICAL REPORT (Vol.1)*
- CENTRAL BUREAU OF STATISTICS, National Planning Commission Secretariat. (2011). *NEPAL LIVING STANDARDS SURVEY 2010/11: STATISTICAL REPORT (Vol.2)*

Ministry of Finance. Government of Nepal (2013). *Economic Survey Fiscal Year 2012/13*. (Jan 26)

NEA and THL (2012). *Indigenous Peoples Planning Framework: Tanahu Hydropower Project*. Nepal. Nepal Electricity Authority and Tanahu Hydropower Limited. (retrieved on Jan 26 from <http://www.adb.org/sites/default/files/projdocs/2012/43281-013-nep-ippf.pdf>)

NEA and THL (2012). *Resettlement Framework: Tanahu Hydropower Project*. Nepal. Nepal Electricity Authority and Tanahu Hydropower Limited. (retrieved on Jan 26 from <http://www.adb.org/sites/default/files/projdocs/2012/43281-013-nep-rf.pdf>) NEP: TANAHU HYDROPOWER PROJECT Prepared by Nepal Electricity Authority and Tanahu Hydropower Limited of the Government of Nepal

Nepal Electricity Authority (2007). *UPGRADING FEASIBILITY STUDY ON UPPER SETI (DAMAULI) STORAGE HYDROELECTRIC PROJECT IN NEPAL*. JAPAN INTERNATIONAL COOPERATION AGENCY ELECTRIC POWER DEVELOPMENT CO., LTD. NIPPON KOEI CO., LTD. (28 Jan)

Nepal Electricity Authority (2009). *Environment Impact Assessment of Upper Seti Storage Hydropower Project*. (Jan 26)

Nepal Electricity Authority and Tanahu Hydropower Limited (2012). *Environmental Addendum 2012: Tanahu Upper Seti Hydropower Project* (Final report prepared for ADB and retrieve on Jan 29 from <http://www.adb.org/sites/default/files/projdocs/2012/43281-013-nep-eia-addendum.pdf>)

Pokharel, J.C., (2005). *Comprehensive Option Assessment for Electricity Sector in Nepal: Dialogue on Dams and Development in Nepal* IUCN Nepal and Winrock International; vii + 32pp.

SMEC West Seti Hydro Ltd. (2007). *Press release*. (May 14)

UNDP Nepal. (2012). *Annual Report*. (Jan 25)

UNDP (2013). *Human Development Report 2013*. (Jan 25)

World Commission on Dams. (2000). *Dams and Development: A New Framework for Decision making*.

GLOSSARY

Dalit: marginalized and so called untouchable community

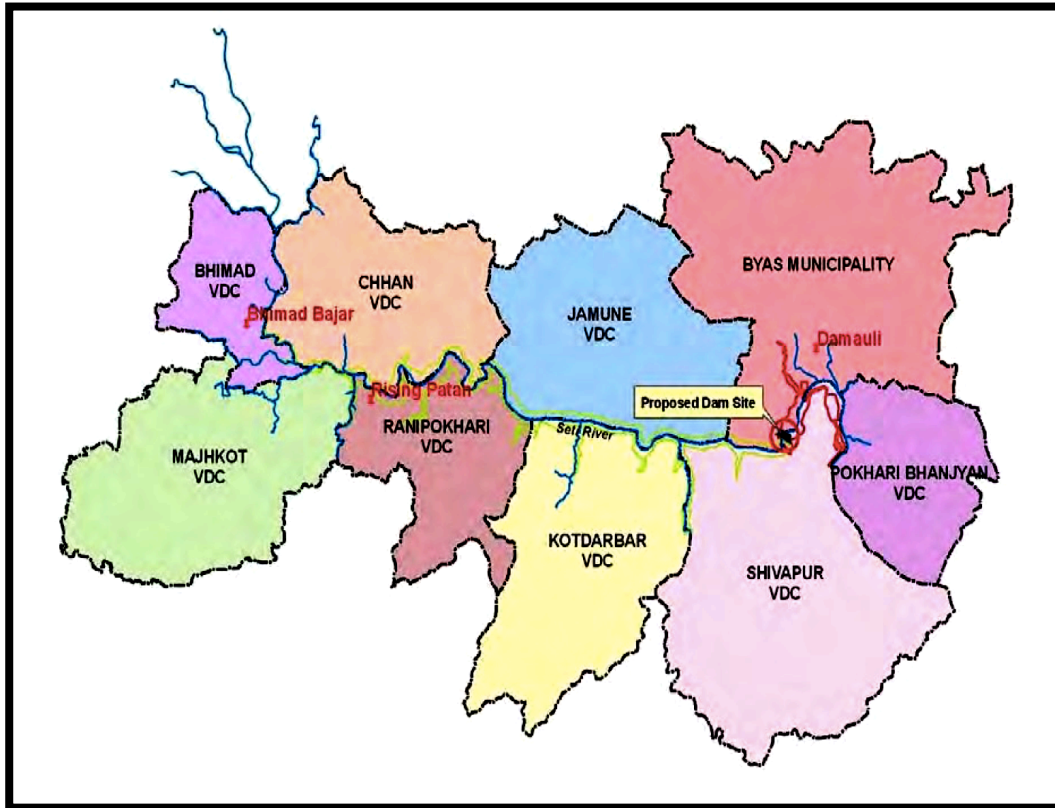
Majhi: Marginalised Fisherman ethnic group

Darai: Fisherman

Danuwar: Marginalised Fisherman ethnic group

Ropani: Calculation of land area in Nepal (1 ropani = 74 feet × 74 feet)

MAPS AND PHOTOGRAPHS



Tanahu Seti Hydropower project affected VDCs and Municipality, Map: NEA



Interview with local, Photo: DP Upadhyay



Group discussions with locals Photo: DP Upadhyay



Seti fury: collapse of hanging bridge after May 2012 flood, Photo credit: Kantipur daily



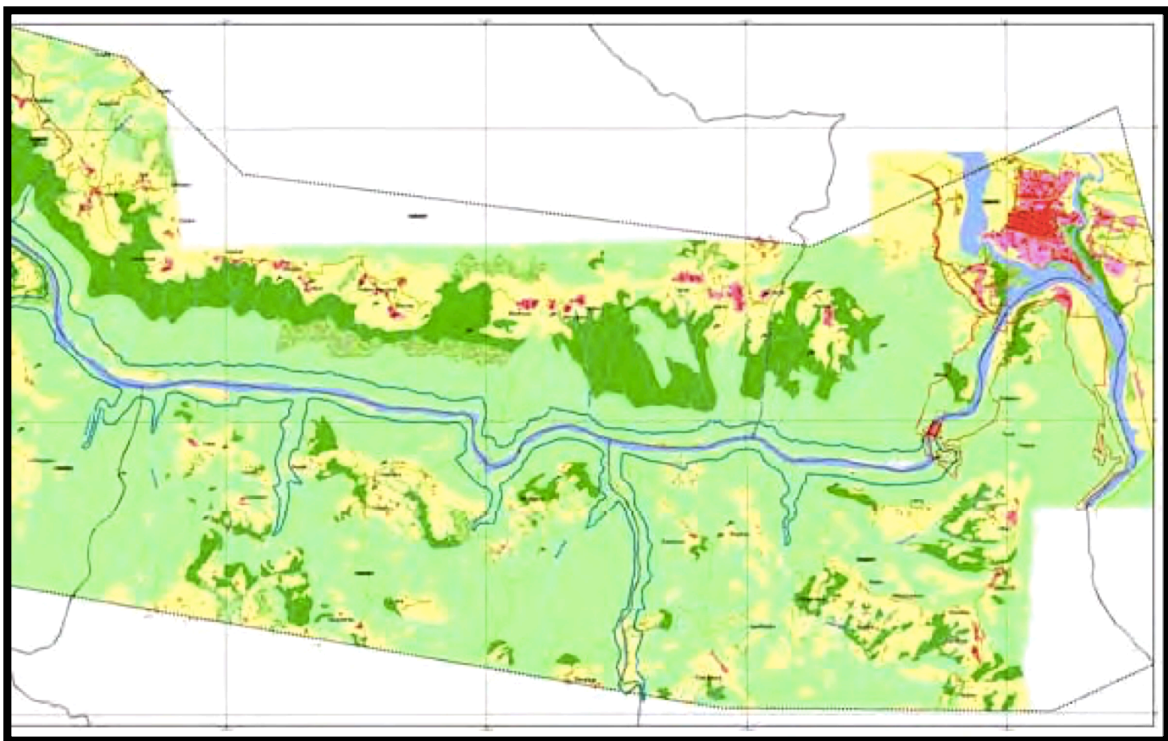
Bhimad Bazaar in upstream, Photo: DP Upadhyay, January 2014



Erosion in Wantang Khola, tributary of Seti river



Map of Tanju Seti hydroelectric project



Tanju Seti map dam site and reservoir; source: NEA

