

## Minutes of Second Stakeholder Meeting in Damauli

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Time: 10.30

Date: December 1, 2006; Mangsir, 15, 2063

Venue: District Development Committee Meeting Hall, Damauli, Tanahu

Nepal Electricity Authority

Japan International Cooperation Agency

Master of Ceremony: Rishi Kanel, NEA

Chairperson: Mr. Bishnu Prasad Dhakal, Local Development Officer, Tanahu

Guest: Mr. Govinda Raj Joshi, Member of Parliament

Mr. Kashinath Marasini, Chief District Officer

Mr. Dil Bahadur Thapa, N.C., Tanahu

Mr. Kedar Sigdel, CPN(UML), Tanahu

Mr. Samudra Gulab N.C. Democratic, Tanahu

Mr. PushpaRaj Gairhe, UDF, Nepal, Tanahu

Mr. Keshar B. Thapa, Janamukti Party, Tanahu

Mr. HarshaMan Shrestha, JanaShakti Party, Tanahu

Mr. Pravin Aryal, Senior Division Engineer, Water Resource Ministry

Mr. Chatur Lal Shrestha, Nepal Electricity Department

Mr. Bhoj Raj Regmi, General Manager, Nepal Electricity Authority

Mr. Shiva Chandra Jha, Chief, Environment and Social Study Division

Mr. Bishnu B.Singh, Project Development Division

Mr. Yoshi Ishi, Team Leader, JICA Study Team

Mr. Masanori Kozuki, JICA Tokyo

Ms. Sayoko Tokuda, JICA Nepal Office

Close to 600 people participated in the meeting. More than 60 written concerns were filed by the people in the meeting.

The program was started with the welcome speech delivered by **Mr. Bhoj Raj Regmi, General Manager, Engineering Services** of Nepal Electricity Authority. Mr. Regmi highlighted the importance of the project from national perspective. He announced that the proposed project is a priority project of NEA. In the context of increasing demand of electricity during late hours especially in winter season there is no alternative other than Kulekhani for peak electricity generation. Proposed reservoir project could be a lifeline to the consumers in this context. Based upon the past experiences we realize that only the Run-of-River projects can't get rid of the increasing demand of electricity in

winter season. Thus reservoir project of an optimum scale is a must in the present scenario. In this context, Upper Seti reservoir project is an ideal project to initiate. The upgrading feasibility initiated after June 2006, and the findings to date have shown that the proposed 122 MW capacity could be increased 132 MW simply after adding a tunnel without increasing the dam height. This suggestion will be duly incorporated in the report before finalization of the project upgrading feasibility. It will have various direct and indirect benefits to the district dwellers. Since, it is a hydroelectric project, some impacts upon the natural environment might happen. It is also clear that it is difficult to fulfill all the aspirations of the district population. All the concerns of the participating individuals in this stakeholders meeting will be given due consideration. The valuable suggestions will be incorporated in the EIA report. The aspirations could not be fulfilled by the project will be reported to concerned agencies for adequate attention.

**Bishnu Bahadur Singh**, Chief of the Project Development Division of NEA stated that NEA had made the EIA study in the initial stage. This is the upgrading feasibility study conducted by the JICA study team. As per the JICA guidelines public hearing need to be done thrice during the study period and the present hearing is the second one. However, information has been disseminated about the project through different publication media. It is my pleasure to share the salient features of Upper Seti Storage Hydroelectric Project. It includes a tunnel structure in the previous design to add 20 meter of head worth additional 10 MW electricity generations. Out of the five different alternatives of the design stage alternative 3(b) where tunnel is proposed after the dam with underground powerhouse construction is the best alternative. Major construction structures are 140 m high dam and 220 kV transmission line. Initial Environmental Examination of 220 kV transmission line has already completed by JICA study team and NEA is conducting the EIA study of the transmission line. The proposed reservoir will inundate areas of seven VDCs namely Bhimad, Chhang, Jamune, Rhising Ranipokhari, Kot Durbar, Majhkot, and Kahun Shivapur and onr Byas municipality. Mr. Singh requested the stakeholders to show active participation and contribute their suggestion in both written and oral form.

**Team Leader of the JICA Study team, Mr Ishi** explained the progress and status of the study. He stated the study progress in three different stages viz.

Mr. Ishi observed that the reservoir type project is to supplement the requirement of Hydro electric power during dry/winter season. In the present scenario power demand is increasing by 8% every year and is forecasted to be so till 2015 A.D. Peak demand growth could be met by storage type projects only, especially during 18.00 – 23.00. Reservoir type project is very beneficial and have a comparative advantage in the context of meeting peaking demand of electricity in winter season.

**Govinda Raj Joshi**, Member of Parliament from Tanahu district and former Water Resource

**Minister**, started his deliberation acknowledging JICA study team and NEA for bringing the project at this stage. He thanked the participants in participating in the meeting and requested them to contribute to the project that is going to be constructed. He wished let the construction duration be shortened and accelerated. Lower Seti after confluence of Modi and Seti and Kaligandaki could be constructed at the scale of 400 to 500 MW. At the present stage storage project are needed most and are more useful. There are additional sites to be developed into Hydropower Projects in Tanahu district. Concerned issues if raised by the locals in time are easy to complete in time. Concerns could be raised by the local people without hesitation and would be supplemented by the MP as the representative. Optimization of the Development Plan, Natural Environmental Impacts and Mitigation Measures, Social and socio-economic environmental Impacts and Mitigation Measures of the proposed project was presented by **Dr. Toran Sharma, Managing Director of Nepal Environmental and Scientific Services** on behalf of the JICA Study team.

**Pravin Aryal, Senior Divisional Engineer of Ministry of Water Resources** stated that NEA had conducted the EIA of the proposed project on 2000/2001 and presently upgrading feasibility is being done by JICA. Its TOR had been passed in 2000, presently the design and EIA review is envisaged. It will facilitate in suggesting mitigation measures and minimizing the adverse impacts. Public hearing was held already during the EIA study period by NEA. Ministry of Water Resources is concerned with the minimization of the negative impacts on the physical, biological and socio-economic and cultural environments. Government has a policy to allocate 12% of the revenue generated by the specific project to the concerned DDC and 38% to the neighboring VDCs. While constructing similar projects lesson need to be learnt from the Middle Marsyangdi Hydro Electric Project. It will be better to collect enough information regarding the project development and not face disturbance during construction.

Various party representatives expressed their concerns on the public hearing meeting.

**Mrs. Chandrakala Baral, Central Committee Member of the All Nepal Peasants Association** reminded to be alert enough from the Middle Marsyangdi Hydro Electric Project (MMHEP). Let the Government facilitate in executing the project pragmatically. It will generate a number of employment opportunities. Thus let not oppose the noble cause without any reason. Let us sit and discuss together, anything that need to be opposed be lodged to the concerning agency in written form.

**Mr Harsha Man Shrestha of Rastriya Janashakti Party** expressed his view on sharing every one's effort to push the project ahead, including JICA. **Mr. Keshar Bahadur Thapa of Rastriya JanMukti Party** stated his party's principle to generate electricity from the running water and light the hill and mountains. He invited every body to participate in the noble effort and demanded proper compensation. He assured his party is willing to contribute on all aspect for the success of the project.

collected. They were in major 6/7 groups such as compensation, resettlement, infrastructure development, forestry and vegetation loss, conservation of ethnic population, and environmental management plan.

**Mr. Yam Bahadur Ale of Pokhari Bhanjyang** thanked JICA for adding the 10MW generation capacity of the project. He suggested in the renaming of the project depending upon the location of the hard rock in the dam site which is called as “nhung” means hard rock in local Magar language. He suggested ‘Upper Seti (Nhung) Storage Hydro Electric Project, by replacing “Damauli”. He urged the community to maintain transparency. He expressed his concern on discrimination of the Pokhari Bhanjyang area of the downstream of the project site. He asked clarification on defining the site as devoid of human settlement, expected the technology of cutting and filling of the rock, Japanese standard of sedimentation, whether fishing is possible in the reservoir, asked proper definition of the priority order of employment of local people. Finally he requested for a proper homework before start of the project.

**Mr. Shivalal Thapa of Kahu, Shivapur** urged the project to concentrate on affected human population rather than the lizards and toads. He urged let the affected 122 households be defined with proper delineation of the 32 proof less residents and include those who missed the opportunity to register themselves, during the inventory period. His concern was on the priority of the employment opportunity to those at least who fulfill the eligibility criteria for semi-skilled workers.

**Mr. Bhakhta B. Gairhe of Rhising Ranipokhari** proposed to include the affected population in the coordination committee to fix and distribute the compensation. The lost road stretches need to be connected.

**Mr. Ram Nath Subedi of Rhising Ranipokhari** made clear that there is no debate on the coming of the hydroelectric project. Local people are not aware about the 420 m FSL, thus the feasibility team is requested to acquaint the local people about the water level. Preference need to be given to the locals in order from village to district level. Stakeholder level meeting is needed to organize at the village level not in Damauli.

**Mr. Krishna Kumar Shrestha of Bhimad** expressed happiness on the project to be constructed in the local area. Bhimad at presently being affected by bank cutting by the Seti River requested proper delineation of the inundation area due to the reservoir construction. General information disseminated through the local magazines is not enough to disseminate to the local level, thus requested for mass level stakeholders meeting at VDC level.

**Mr. Laxman Adhikari of Jamune VDC** expressed his dissatisfaction for not being exposed the

**Mr. Pushpa Raj Gairhe Vice Chairman of United Democratic Front** Tanahu district expressed his hope that the recent resolution of conflict will bring a number of development projects and will be implemented successfully. It is pathetic to be dependent on kerosene oil just for lighting purpose for the residents of a country that is rich in water resources. He was hopeful to the rescue of people from sufferings as indicated by the survey. He was very much positive with the proper compensation, tracks and trails construction and other facilities to be availed. He assured UDF is very much supportive for the construction and expressed hope of horticulture development through irrigation facility as a part of the project benefit, setting up of industries, so that the youths could be retained from out migration. Reviews of the previous treaties are equally important in using the water rights.

**Mr. Samudra Gulab of NC (Democratic)** stated that the electrification is the key to modern development. It becomes our duty to help the study team and learning lesson from MMHEP is equally important. Thirty meter sedimentation in 100 years duration is not clear, thus needs clarification. Impacts on natural environment need to be looked after. Issues such as package dealing to the ethnic communities, livelihood concerns, ecotourism, and employment to the local population are equally important, thus hoped to move ahead faster.

**Mr. Kedar Sigdel, Joint Secretary CPN (UML),** Tanahu believed that the development issue is above political debate. Realizing the importance of electrification, he urged each individual to come jointly. He reminded to learn lesson from MMHEP. Only the minute observation upon the issue of the local residents could solve the issue, rather the homework done at Kathmandu excluding the local can't solve the problem. In the changed context of democratic republic no one is interested to stop the development process. He suggested formulating a long term mechanism to assign 75% of the royalty to the Tanahu DDC. Similarly, employments to Tanahu citizens need to be ensured to 50% of the total employees on competitive basis. He expressed his heartfelt thanks to JICA and NEA. He ensured his party is positive and cooperative.

**Mr. Dil Bahadur Thapa, Vice President NC,** Tanahu felt that there is a mechanism of give and take in any business. We will be losing irrigation canals, forest and arable land, still electricity is must for development. He ensured the party supportive in the process. In the changed context of peace building every body need to participate. He demanded a just compensation mechanism and requested the fellow citizens to shift to industry from livestock rising. In Manedanda area, where people devote an hour for fetching a pitcher of drinking water need to be looked after through the project. A free water distribution system using the generated electricity from the proposed project will improve the quality of life. Suspension bridges inundating through the reservoir construction will be reconstructed in the proper area. Locals need to be given priority in terms of employment and other facilities.

In the second session of the public hearing almost 40 numbers of written recommendations were

major issue till now. The 10 km inundated area lying in Ranipokhari, Chhang and Jamune need to be properly considered. He demanded for the bridge construction that links the road between Rhising, Kot Darbar, Ramjakot, Jamune.

**Mr. Bijaya Prakash Sharma, Rhising Ranipokhari** expressed that only the Buduwaphat of Majhkot is going to be inundated. Arable land need to be saved from inundation. Public hearing need to be held at VDC level. Inundation area, and compensation need to be exactly defined. Education concern of the project need to be strictly defined and the affected land of the school need to be delineated.

**Mr. Upendra Ghimire of Jamune** demanded for the construction of 2.5 km motorable road. Local natural resource to be exported needs to be identified and estimated. Alternatives need to be looked after for the inundating suspension bridges. Ecotourism potential area needs to be identified and developed. Community forestry, grazing lands, need to be delineated. School need to be assigned 300 ropani of land, drinking water scheme, water source conservation, employment as per the skill, electrification, and compensation committee from the local level and the stakeholders meeting being held in Kathmandu need to be represented from the locals.

**Mr. Ramesh Paudel, Kahu Shivapuri**, expressed his view that Nepal is also dragged in the power (fuel) politics. He proposed the project to be constructed through the local (national) source rather from the donation or foreign support.

**Mr. Kajiman Shrestha, former VDC Chairman of Bhimad** wished for the successful completion of the project and warned let the local people not face sufferings. He urged the compensation need to be properly defined. A trip of outsiders in air conditioned vehicles doesn't support local people neither represent their voice, let the visitors be open minded to the local population.

**Mr. Padma Raj Subedi, Bhimad**, also had the similar concerns. Loss of vegetation and wildlife is not significant compared to the project that benefits human life. Project must come, but with proper compensation of the lost land. Possible inundation area needs to be delineated right now. The land occupied by Wangtang khola presently is under School's ownership and the land needs to be owned by the School itself. Employment need to be availed based on capacity, qualification and preference to the locals.

**Mr. Biru Thapa**, raised his concerns about the name (Nhung) of the project as proposed by Mr. Yam Bahadur Ale. Drinking water need to be accessed to the water scarce area. Preference should be given to the locals for employment.

**Mr. Balkrishna Gaihre, Majhkot** requested the team to clarify about the 420 FSL and extend the

public hearing program to the local level. Rudra Bahadur Ale of Kot Darbar also raised issues about the employment to the locals based upon skill and capacity. A networking coordination committee is essential for smooth running of the project and public hearing needs to be extended to local level.

**Dr. Toran Sharma of NESS** on behalf of the JICA Study team responded to the queries raised by the stakeholders apologizing for the inconvenience of the dissemination to the Pokhari Bhanjyang community. He emphasized that the compensation prediction is done as per the Local Development Act 2034.

**Mr. Shiva Chandra Jha, Chief of the Environment and Social Study Division of NEA** gave the vote of thanks to all the stakeholders making the program successful in Damauli.

**Mr. Bishnu Prasad Dhakal**, Local Development Officer concluded the session from the as a chairman of the programme. He assured that the concerns of the stakeholders will be addressed in different stages of the project. Human resource will be assigned from the local level so far available especially in the unskilled and semi-skilled sector. Information has been flown to the optimum level. He suggested for necessary correction to be made to the human habitant area that has been delineated as non human habitant area. Annual royalty of 10 – 20 Million NRs generated from the project will be spent for the betterment of the local area. Site specific public hearing program will be organized and stakeholders committee will be formulated before launching of the project. He expected that NEA will give due consideration for public participation.



**Reply to Comments and Issue Raised by Stakeholders  
at Second Stakeholder Meeting in Damauli**

**Reply to Comments and Issues Raised by Stakeholders at Second Stakeholder Meeting in Damauli**

S. N	Issue raised	Suggestions, Feedback and Comments from the Participants	Comments and Responses from Nepal Electricity Authority (NEA)
1	Needs for the Project	<p>1) The Project is requisite and essential in terms of development in the country as well as in Tanahun District.</p> <p>2) The development of this Project is very crucial to meet ever increasing demand for electricity and to utilize adequate water resources available in this region.</p> <p>3) The Project should be implemented smoothly without any disturbances or any delay, which has been observed in other projects such as Middle Marsyangdi Hydro Electric Project (HEP).</p>	<p>1)-2) Following the first Local Stakeholder Meeting, the participation of the local people in 2<sup>nd</sup> Local Stakeholder Meeting and their response has been overwhelming. The suggestions and comments made by the local people will assist in formulating environmental mitigation programs during the Upgrading Feasibility Study supported by JICA.</p> <p>3) The lessons learned and experiences from similar HEPs will be incorporated into the Draft Final Report under the Upgrading Feasibility Study.</p>
2	Information dissemination and public consultation	<p>1) Consultation meetings should be carried out in each affected VDCs and Vyas municipality to consult with the local people including the affected people more effectively.</p> <p>2) More specific and detailed information on the inundated areas, the exact location at Full Supply Level and the procedures for compensation should be disseminated to the affected people.</p> <p>3) Not only impacts on the</p>	<p>1) Focus Group Discussion was held during the EIA survey conducted by NEA and supplemental EIA supported by JICA to consult with the local people in several affected communities. VDC level consultation program for community support will be carried out during the project formulation and implementation phase.</p> <p>2) Since the NEA and the JICA Study Team have been still</p>

		<p>environment and the society but also environmental mitigation measures should be provided to participants in the 3<sup>rd</sup> Stakeholder Meeting.</p>	<p>investigating the feasibility of the Project from various aspects, the information available on the basis of the current Study can be provided to the public during the Stakeholder Meeting. The potential affected or inundated areas will be visualized in the forthcoming Stakeholder Meeting in order to enable the local people to understand such information easily. The detailed procedures for compensation will be provided only during the detailed design phase.</p> <p>3) Environmental mitigation measures will be proposed in the forthcoming Stakeholder Meeting.</p>
3	Maximum benefit of the Project given to local people	<p>1) Since the project site is located in Tanahun District, the first priority should be given to local people in Tanahun.</p> <p>2) Some portion from NEA royalty should be handed over to the local organizations for implementation of the community or VDC development activities.</p>	<p>1) Various types of Social Action Programs are being considered to rehabilitate and enhance the affected communities. Affected Community's Initiative Support Program will be carried out, in which some development funds will be allocated to each of the affected VDCs and utilized by the affected people and communities based on their own needs or priorities for small-or middle scale development activities.</p> <p>2) The hydropower policy requires that the licensee of a hydropower project pays royalty to the Government of Nepal through Ministry of Water Resources, 90</p>

			<p>percent of which is deposited in the government's revenue account while the remaining 10 percent is made available to the respective districts. This budget can be used for development programs in the affected district.</p>
4	Compensation and Resettlement	<p>1) Adequate and timely compensation for affected household should be given to the affected people.</p> <p>2) The detailed compensation policies and provision need to be well informed to the affected people and communities.</p> <p>3) The compensation cost should be fixed on the market price rather than on government price.</p> <p>4) Land without legal holding paper should also be compensated.</p> <p>5) The representative from the affected people needs to be member of Compensation Fixation Committee.</p> <p>6) Before starting the project, compensation should be given to the affected people.</p>	<p>1) The framework of Resettlement Plan (RP) will be formulated under the Upgrading Feasibility Study. When formulating the framework of RP, the appropriate method of compensation will be considered in accordance with the JICA Guidelines, the prevailing government laws and regulation, and lessons learned and experiences from similar HEPs.</p> <p>2) The outline of the framework of RP will be provided in the forthcoming Stakeholder Meeting. The detailed procedures on compensation and rehabilitation will be disseminated only during the detailed design phase.</p> <p>3) The compensation cost will be decided by Compensation Fixation Committee (CFC) as per Nepal's legal provision considering the market price to ensure improvement of the standard of living among the affected people, or at least restoring them to pre-project levels.</p>

			<p>4) Land without legal holdings will be compensated as per the prevailing practices.</p> <p>5) As per the Land Acquisition Act, a Compensation Fixation Committee (CFC) will be formed. Although this Act does not consider the representative of affected people as a member of CFC, NEA will recommend that they should be included in CFC in accordance with the previous practices.</p> <p>6) The compensation will be provided to the affected people before the commencement of the Project.</p>
5	Employment Opportunities	<p>1) Local people should be employed by the Project as skilled labors and unskilled labors.</p> <p>2) If skilled labors are not available in the areas, the training should be provided by the Project.</p> <p>3) The detailed information of employment opportunities should be provided in the Stakeholder Meeting.</p>	<p>1) Wherever possible local people will be employed on the basis of skill and qualification during the construction period.</p> <p>2) Skill Enhancement and Employment Program will be carried out for local interested and eligible people from affected families and communities. Training will be provided to them focusing on enhancement of skills required for the project employment.</p> <p>3) In the Stakeholder Meeting, the above Skill Enhancement and Employment Program will be proposed. However, the detailed</p>

			information of employment opportunities will be provided to the local people during the detailed design phase.
6	Roads Construction	<p>1) The inundated road stretch needs be rerouted.</p> <p>2) Motorable roads should be built from Bhimad, Rising Patan to dam site, and Damauli.</p>	<p>1) Alternative transport facilities including foot trails and stretches of the roads will be rerouted and constructed during the construction phase of the Project.</p> <p>2) With regard to the upgrading of affected stretches of road, further examination will be undertaken from technical and financial aspects in coordination with District Development Committee and the concerned VDCs during the detailed design phase. In the project facility sites, the access road will be constructed and upgraded. Except for them, the construction of new roads outside the affected areas is out of the scope of the Project.</p>
7	Suspension Bridges	1) For inundated suspension bridges, the alternatives need to be seriously considered.	1) Submerged suspension bridges will be rerouted and replaced under the Social Action Plan.

8	Erosion and landslide	<p>1) The mitigation measures to protect Bhimad Bazaar from erosion should be seriously considered and undertaken.</p> <p>2) The information about whether gabion walls will be constructed in the possible hazardous areas during the project construction should be provided to the local people.</p>	<p>1) Special protection measures against erosion will be taken for the cliff of Bhimad Bazaar.</p> <p>2) Wherever needed, the mitigation measures such as Community-based Watershed Management and plantation along the buffer zones of reservoir areas will be carried out to protect the potential risk areas from erosion or land slides. These mitigation measures will be explained in the forthcoming Stakeholder Meeting.</p>
9	Forest	<p>1) The affected community forest and grazing lands need to be delineated.</p> <p>2) The information about whether the proper compensation will be provided to the affected Forest User Groups should be informed.</p> <p>3) Mitigation measures should be considered seriously.</p>	<p>1) In the forthcoming Stakeholder Meeting, the affected community forest and grazing lands will be delineated on the map.</p> <p>2) Regarding the compensation for loss of forest, NEA has discussed with the JICA Study Team. Appropriate measures will be considered in accordance with the prevailing government laws and regulations in consultation with Department of Forest.</p> <p>3) The mitigation measures will be considered seriously and proposed in the forthcoming Stakeholder Meeting.</p>
10	Electrification	<p>1) Electricity facility should be given to affected people and local people in Tanahun District at subsidized rate or cheaper rate.</p>	<p>1) The provision of rural electrification and appropriate extensions will be considered as part of Project's Social Action Plan</p>

			for unconnected part of the affected VDCs.
11	Fisheries	1) Mitigation measures for fisheries should be addressed. Fisheries development activities should be carried out in reservoir areas.	1) Fish hatchery development and/or expansion of existing facilities and stocking of fingerlings in the upstream and downstream zones will be proposed as mitigation measures. Experimental stocking of fish in the reservoir area will be considered.
12	Various Development Needs	<p>1) Water springs and sources of drinking water will be submerged. Thus, drinking water supply particularly in Jamune VDC through the use of electricity should be provided.</p> <p>2) For the affected schools, support for improving school infrastructure needs to be provided.</p>	1)-2) Affected Community's Initiative Support Program will be carried out in the Social Action Plan. This program is designed to allocate some amount of fund to each affected VDC. The affected communities can decide to utilize such fund for drinking water supply program and or renovation of school infrastructure by themselves. In the forthcoming Stakeholder Meeting, these social programs will be proposed to the local people.



**List of Invited Institutions/Persons of Second Stakeholder Meeting  
in Kathmandu**

## List of Invited Institutions/Persons of Second Stakeholder Meeting in Kathmandu

<u>S.No.</u>	<u>Name</u>	<u>Address</u>	<u>Expect Number</u>
1	Ministry of Environment Science and Technology	Singa Durbar	1
2	Ministry of Water Resource	Singa Durbar	1
3	Department of Electricity Development	Singa Durbar	1
4	Ministry of Forest and Soil Conservation	Singa Durbar	1
5	Ministry of Agriculture	Singa Durbar	1
6	Ministry of Land Reform	Babarmahal	1
7	Fisheries Development Directorate	Balaju	1
8	IUCN	Bakhundol	1
9	Nepal Forum of Environmental Journalist	Thapathali	1
10	Embassy of Japan	Panipokhari	1
11	JICA	Pulchok, Lalitpur	2
12	JBIC	Mr. Krishna Manandhar Local Representative, JBIC, Kathmandu	1
13	ADB	Kamaladi, Kathmandu	1
14	The World Bank	Durbar Marga	1
15	Engineering Association of Nepal	Pulchok	1
16	EIA Association of Nepal	SchEMS	1
17	NGO Federation	Buddha Nagar	1
18	Local NGO Representative	Tanahu	1
19	Water Nepal ( Ajay Dixit)	Patan	1
20	RONAST	Sadhabato	1
21	Radio Sagarmatha	Sanepa, Lalitpur	1
22	The Kathmandu Post	Subidhanagr, Kathmandu	1
23	The Himalaya Times	Ananmnagar, Kathmandu	1
24	The Raising Nepal	Dharampath, Kathmandu	1
25	IMAGE Channel	Lazimpat, Kathmandu	1
26	Kantipur TV	Subidhanagr, Kathmandu	1
27	JICA Study Team		8
28	NESS Consult		5
29	NEA-ESSD, Project Development, Engineer, other departments		35
30	NORAD		1
31	KfW	Bakhundol, Lalitpur	1
32	ICIMODE	New Baneshwor	1
33	WWF	Maharjung, Kathmandu	1
34	Winrock International	Bakhundol, Lalitpur	1
35	National Planing Commission	Singa Durbar	1
36	Napal Toursim Board	Exhibition Road	1
37	Department of Gelogy	Lazimpat, Kathmandu	1
38	Federation of Indigenus People	Sanepa, Lalitpur	1
39	Nepal Communist Party (Maost)	Kupondloe, Lalitpur	1
40	Nepal Communist Party (UML)	Balkhu, Kathmandu	1
41	Nepali Congress	Sanepa, Lalitpur	1
42	Nepali Congress Democratic	Maharjung, Kathmandu	1
43	Sadhabana Party (Anandadevi)	Tripureshwor	1
44	Nepal Peasant Party	Bhaktapur	1
45	Joint Peoples Movement of Nepal		1
46	Left Movement of Nepal		1
47	Ministry of Women and Social Welfare	Singa Durbar	1
48	Dr. J.C Pokharel	Vicechairman, NPC	1
49	MP Tukraj Sigdel (CPN UML)	Area No.3 Tanahun	1
50	MP Ram Chandra Poudel	Area No.3 Tanahun	1
51	MP Govinda Raj Joshi	Area No.1 Tanahun	1
52	Former MP Amar Raj Kainy (N.C.Democratic)		1
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**Participants Registered in the Second Stakeholder Meeting**  
**at Kathmandu, December 6, 2006**

**Participants Registered in the Second Stakeholder Meeting at Kathmandu, December 6, 2006**

SN	Name	Cast	Address	Office/Organization	Occupation	Phone No.	Age	Sex
1	Keshav Nepal		United Left Front, CPN (ML)	CPN	Political activist	4443589	42	M
2	B.P Dhakal	Bhraman	Tanahu	DDC JV	LDO	065-560174	46	M
3	Resham Raj Dhital			Department of Fisheries	Director	4350662		M
4	Ram Pd. Adhikari		NEA	DHM	Administer	4264779	57	M
5	C.B Shrestha	Newar	Anamnagar	DoED	EG	4480425	39	M
6	Bhawani P Kharel		Bakhundole	IUCN	Sr. Program Officer	5528781	48	M
7	Sarita Maharjan	Newar	Chasal Kathmandu	Janmoorcha Nepal	Politician	4232682	46	F
8	Niru Dangol	Newar	Chasal Kathmandu	Janmoorcha Nepal	Politician	4232682	32	F
9	Krishma C. Manadhar	Newar	Thamel	JBIC	Consultant	4239726	54	M
10	Tetsuya Hirahara			JICA Study Team	Economist			M
11	Hiroshi Murashige			JICA Study Team	Engineer			M
12	Yoshimasa Ishii			JICA Study Team	Engineer			M
13	Jack Prosser			JICA Study Team	Environmental			M
14	Tomoo Aoki			JICA Study Team	Environment			M
15	Hironobu Nishimiya			JICA Study Team	Engineer			M
16	Toshiko Shimada			JICA Study Team	Social development			F
17	Sayako Tokuda		JICA	JICA	ARR	5552376	35	F
18	Saurab Rana		Pulchowk	JICA	Service	5552711	36	M
19	Batu Uprety	Bhraman		MOEST	Env. Officer		57	M
20	Pravin Aryal	Bhraman	SinghaDurbar	MOWR	SDE	4211501	43	M
21	Amar Raj Kaini		NC (D)	NC	Politician	4352119	56	M
22	Bhoj Raj Regmi	Bhraman		NEA	Eng. Department head			M
23	Mrigendra Shrestha	Newar	Dhapasi	NEA	Engineer	4355836	54	M
24	Vishnu Bahadur Singh			NEA	Chief	4370432	54	M
25	Laxman Raj	Bhraman	Baneshwor	NEA	Engineer	16220478	57	M
26	Chandra Ghimire	Bhraman		NEA	Accountant	9.851E+09	38	M
27	Shyam Shrestha	Newar	NEA	NEA	General Manager	4214299		M
28	Mohan K. Uprety	Bhraman	NEA	NEA	Dir.	4220449	52	M
29	Surendra Bahadur Pandey	Bhraman		NEA	Service	4258338	45	M
30	Shanti Laxmi Shakya	Newar	NEA	NEA	Service	4258342	42	F
31	Balram			NEA	Service	4229455	40	M
32	Hari Krishna Shah		NEA	NEA	Service	4254657	40	M
33	Biswa D		NEA	NEA	Engineer		45	M
34	T.M Shakya	Newar	Lazimpath	NEA	Director	4226715	53	M
35	R M Sulpya		Durbar	NEA	Engineer	4288128	50	M
36	B.K Pathak		Baluwatar	NEA	Director/Engineer	4227039	49	M
37	Dr. Jivendra Jha			NEA	DND/Planning	4227976	56	M
38	H.M Palikhe			NEA	Director	4226889	55	M
39	Sitaram Thapa		Sundarijal	NEA	Unioist	9.841E+09	26	M
40	Kamal Raj Pandey	Bhraman	NEA	NEA	Director	44955642	56	M
41	K. Man Pradhan	Newar	NEA	NEA	Director	4228212	56	M
42	Nesis		NEA	NEA	Asst. Manager	4225499	36	M
43	Rishi Kesh Sharma		NEA	NEA	Manager	9.851E+09	49	M
44	Annu Rabhandari	Newar		NEA, ESSD	Deputy Manger	4226730		F
45	Lalit Joshi			NEA, ESSD	Sociologist	4431628	57	F
46	Janaki Sangraula			NEA, ESSD	Sociologist	4480150		F
47	Shiva Chandra Jha	Bhraman	Swyambhu	NEA, ESSD	Engineer	4279217	55	M
48	Ritu Duwal	Newar		NEA, ESSD	Engineer	4226730	35	F
49	Umesh Bista	Bhraman		NEA, ESSD	Comp. operator	4226730	33	M
50	S.B Bajracharya	Newar	NEA	NEA, ESSD	Director	4225321	54	M
51	Kiran Poudel	Bhraman		NEA, PDD,	Ast. Manager			M
52	Shasti S. Rajbhandari	Newar	SRCL,NEA	NEA, SRCL	Director	4376860	51	M
53	R.M. Pradhanga	Newar	Thapathali	NEA/PPD	Engineer	4243227	54	M
54	Bhairav Risal			NEFEJ				M
55	Mahendra B. Gurung	Gurung	Handu Gaun	Nepal Engineers Association	General Secretary	5550072	52	M
56	Toran Sharma	Bhraman		NESS	MD	4244989		M
57	Ram K. Sharma	Bhraman		NESS	socio-economist	4473444	52	M
58	Pradeep Poudel	Bhraman	NESS	NESS	Environmental	9.841E+09	23	M
59	Madan Koirala	Bhraman		NESS/JICA	Environmental	4244989	50	M
60	Jagdish C. Pandey		NPC	NPC	Planning	5321663	53	M
61	Manish K. Suman		NSP (A)	NSP(A)	Social Service	984137449	30	M
62	Jagsish Neupane		Tanahu	Social Work		4361644		
63	Razen Manandhar		Anamnagar	The Himalayan Times	Journalist	4771489	36	M
64	Ritu Raj Subedi		KTM	The Rising Nepal	Reporter	4220700		F
65	Proj Dev kumar	Newar	Kuleshwor	Tribhuwan Univ	Environment	4279748	55	M
66	Kourcer Sharma		Winrock	Winrock	S.R Officer	4476101	40	F
67	Sandeep Chamling Rai	Rai		WWF	Program Manager	4434820		M
68	Arjun K. Karki		NEA	NEA				M
69	Seshkant Khanal		Samakhushi		Service	4354109	51	M
70	Tuka RajSigdel		Tanahu		MP	5544083	51	M
71	Uttam S. Shrestha	Newar	Shantinagar Baneshwor		Lecturer	4480109	41	M
72	Dilli Ratna Shakya	Newar	Newroad		Engineer	9.851E+09	60	M
73	Ram Chandra Poudel	Bhraman			MP			M
74	Krishna		Samakhushi					M

## **Program Schedule of Second Stakeholder Meeting in Kathmandu**

## Program Schedule of Second Stakeholder Meeting in Kathmandu

**Date: December 6, 2006 (Mangsir 20, 2063)**

**Time: 9:00-1:00**

**Venue: The Malla Hotel, Lekhnath Marg, Kathmandu**

**Tel: 4418385/4410966 Fax:4418382**

**Chief Guest:** *Honorable Vice Chairman of NPC, Dr. J.C Pokharel*

**Chairperson:** *Managing Director of NEA, Mr. Arjun Kumar Karki*

### Program Schedule

No.	Time	Hrs	Events	Presenters
	8:30-9:00	0:30	Registration /Tea	
1	9:00-9:10	0:10	Opening Address	MD, NEA
2	9:10-9:20	0:10	Background of the Project	NEA
3	9:20-9:30	0:10	Study progress and necessity of the Project	JICA Study Team
4	9:30-9:50	0:20	Optimization of development plan	JICA Study Team
5	9:50-10:05	0:15	Physical and biological environment impact	JICA Study Team
6	10:05-10:20	0:15	Socio-Economic and cultural environment impact	JICA Study Team
7	10:20-11:00	0:40	Comment from MOWR, MoEST, MoFSC, DoED and donor agencies	JICA Study Team
8	11:00-12:00	1:00	Discussions	
9	12:00-12:05	0:05	Vote of thanks	NEA
10	12:05-12:15	0:10	Closing Address	Chief Guest
11	12:15-1:00	0:45	Lunch	

### Contact Address

✧ Nepal Electricity Authority Environmental and Social Studies Department Engineering Services Advait Marg, Kathmandu Tel :4226730 Fax:4225248

✧ JICA Study Team c/o. JICA Nepal Office

P.O. Box 450, Kathmandu, Nepal Karmachari Sanchaya Kosh Bldg, Hariharbhavan, Lalitpur  
Tel: 5552711 Fax:5552284

## Presentation Material in Kathmandu

## **Background of Upper Seti(Damauli) Storage Hydroelectric Project**

**B.R. Regmi  
General Manager,  
Engineering Services,  
Nepal Electricity Authority**

Kathmandu  
December 6, 2006

2nd Stakeholder Meeting

1

### **1.0 Background**

The present total installed capacity in Nepal is 614 MW. The power demand in the country has been growing approximately at a rate of 8 % per annum in recent ten years period (1995 to 2005)

As per NEA Power Generation Expansion Plan 2004/2005 the targeted commissioning date of Upper Seti Storage HEP is 2012/2013.

2nd Stakeholder Meeting

2

Since ROR type of hydropower plants can marginally regulate river discharge for power generation, Nepal has been facing shortage of power in the dry season.

Hence, Nepal Electricity Authority (NEA) has felt the necessity to develop storage type of hydropower plants.

2nd Stakeholder Meeting

3

The technical team of Project Development Department of NEA undertook the initiative to identify the medium sized storage projects nation-wide.

The Study Consisted of three Phases:

Phase I: Coarse Screening and Ranking Study

A total of 102 potential projects in the range of 10 - 300 MW were identified during this study in February, 2000.

2nd Stakeholder Meeting

4

#### **Phase II: Fine Screening and Ranking Study**

During this study out of those 102 projects only 10 most attractive projects were selected and studied. ( September, 2000).

Based on those studies 2 projects namely Upper Seti and Madi-Ishaneshwor Storage Projects were recommended for the Feasibility Study.

#### **Phase III: Feasibility Study**

The Feasibility Study of the Upper Seti was conducted and completed in FY 2057/2058 by NEA team.

2nd Stakeholder Meeting

5

### **2.0 JICA Study**

The Government of Nepal requested the Government of Japan to promote the Project by financing an Upgrading Feasibility Study under the technical assistance of Japan International Cooperation Agency (JICA). The JICA Study team commenced the Study in February 2005.

#### **2.1 Objectives of the JICA Study**

- To formulate the optimum plan for development
- To assess the technical, economical, financial and environmental viabilities of the Project.

2nd Stakeholder Meeting

6



### 3.0 Main Features of the Project:

Location of the project : Tanahu, Western Development Region

Dam site : 3 km upstream of the confluence of the Seti and Madi river

Dam height: 136 m

Full Supply Level: 420 masl

Effective volume: 131.4 Mm<sup>3</sup>

Design Discharge: 121.3 m<sup>3</sup>/Sec

Installed Capacity: 132 MW

Annual Energy: 635.55 GWh

Powerhouse Site and Type : underground powerhouse, located downstream of the Dam site

2nd Stakeholder Meeting

7



Dam Site of Upper Seti HEP

8

### 4.0 Environmental Study and Status

- Environmental Impact Study (EIA) is conducted by NEA and the report is in MoWR in the process of approval.
- Additional EIA is being conducted by JICA study Team as per the JICA Guidelines on Environmental and Social Consideration.
- Stakeholders meetings are being arranged through the Environment and Social Studies Department of NEA with the assistance of JICA Study Team.

2nd Stakeholder Meeting

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- Initial Stakeholder Meetings were held in June 2006 which included intensive discussions with the local affected people in Damauli and with the concerned institutional representatives in Kathmandu.
- Second Stakeholder Meeting was conducted in Damauli on December 1, 2006 to solicit views, concerns and suggestions from affected local people.
- This Meeting is also a part of the Second Stakeholder Meeting with the concerned institutional representatives in Kathmandu.

2nd Stakeholder Meeting

10



Participants of First Stakeholders Meeting at Damauli

2nd Stakeholder Meeting

11



2nd Stakeholder Meeting at Damauli, DDC Hall

12



Participants of 2nd Stakeholder Meeting at Damauli, DDC Hall

13

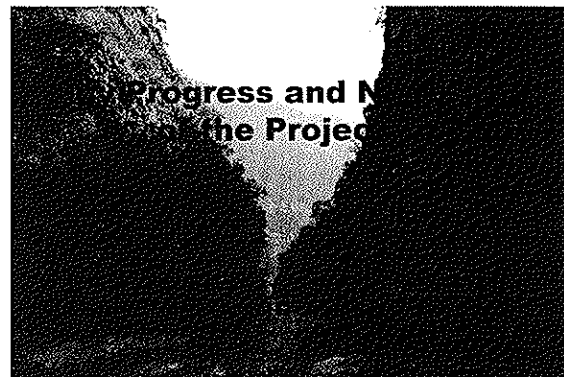
## 5.0 Conclusions

The JICA Study Team will continue this study, and design the Project at Upgraded feasibility study level, estimate project cost, and conduct overall economic and financial analysis. The study will be completed by June, 2007.

The final Stakeholder Meetings are scheduled to be held in April or May 2007 in Damauli and Kathmandu to discuss about the final design, mitigation measures, environmental management plan and enhancement programs.

The findings of the Upgrading Feasibility Study and the inputs from the stakeholders meetings received so far indicate that the project is technically and environmentally viable.

14



1

## Study Progress

### Preliminary Study Stage

1. Review of existing documents and data
2. Preparation of alternative layout
3. Preparation of investigation plan
4. Power Sector Survey

### Detailed Investigation Stage

1. Investigation by Subcontracting by Study Team
2. Environmental Impact
3. Optimization of Development Plan

### Feasibility Design Stage

1. Design at F/S level
2. Preparation of construction plan
3. Project cost estimation
4. Supplemental EIA
5. Economic & financial analysis

2

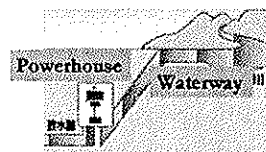
## Presentation

### Study Team's Presentation

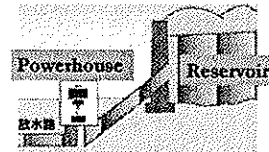
- Optimization of development plan
- Physical and biological environment impact
- Socio-economic and cultural environment impact

3

## Necessity of Project-Type of Hydropower Plant



Run-off-River Type



Storage Type

4

## Necessity of Project

### Results of Power Sector Survey:

Storage project is necessary for stable power supply in the country

- Supply power during peak time (around 5:00 p.m. to 10:00 or 11:00 p.m.)
- Especially supply power during dry season, because of decrease river water

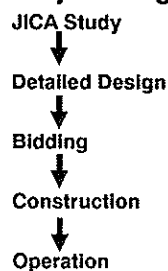
### Conclusion:

Upper Seti storage project is necessary

5

## Project Stage

### Project Stage:



6

## Minutes of Second Stakeholder Meeting in Kathmandu

## Minutes of Second Stakeholder Meeting in Kathmandu

*Project: Upper Seti Storage Hydroelectric Project*

*Venue: Hotel Malla, Lainchaur, Kathmandu, Nepal*

*Date: December 6,, 2006*

*Time: 9:00 hrs*

*Language: Basically Nepali except for presentation made by the JICA Study Team in English*

The second stakeholders' consultation meeting on the proposed upper Seti storage hydroelectric project under the upgrading feasibility study assisted by the JICA study team was held on 6<sup>th</sup> December in Kathmandu. The meeting was attended by more than 75 people representing different sectoral ministries, donor agencies, non-government organizations, members of parliament, and professionals from project area and people from different walks of life (See *List of Participants*).

Mr. Kiran Paudyal, civil engineer from Project Preparation Department of Nepal Electricity Authority was the Master of Ceremony. Mr. Poudyal invited following guests to take their seat in the dice.

Dr. Jagadish Chandra Pokhrel, Vice Chairman, National Planning commission

Mr. Arjun Karki, Executive Director of NEA

Mr. Ram Chandra Paudel, seating Member of Parliament of Tanahu District and former Speaker of the Parliament;

Mr. Tuk Raj Sigdel, seating Member of Parliament of Tanahu District;

Mr. Amar Raj Kaini, former Member of Parliament of Tanahu District,

Mr. Yoshimasa Ishii, JICA Study Team, Team Leader

Mr. Bhoj Raj Regmi, General Manager, Engineering Services, NEA

Mr. Shiva Chandra Jha, Chief, Environment and Social Study Division, NEA

The program was chaired by **Mr. Arjun Karki**, Executive Director of NEA and the chief guest of the program was **Dr. Jagadish Chandra Pokherel**, Vice Chairman, National Planning commissions.

The program started with the opening address by **Mr. Shiva Chandra Jha**, Chief, Environment and Social Study Division, NEA. Highlighting on the objectives of the second stakeholders meeting in Katmandu, Mr Jha pointed out that the JICA guidelines requires such consultations with the stakeholders as a part of the project preparation. He also reminded that similar stakeholder meeting was conducted in Damauli during the EIA preparation phase by NEA. According to him the NEA prepared EIA is under evaluation by Ministry of Water Resources and will be soon forwarded to Ministry of Environment, Science and Technology for final approval. Since the preparation of EIA many additional information has been collected by the JICA study Team which will be incorporated in the NEA prepared report once this JICA study is accomplished. He requested to all the concerned to give their valuable comments and suggestions to the JICA study Team to make the environmental study comprehensive.

**Mr. Bhoj Raj Regmi**, General Manager, Engineering Services, NEA explained the background of the Upper Seti (Damauli) Storage Hydroelectric Project (See *Presentation 0*). He highlighted the project and described the need of the project by 2013 AD to meet the peak electricity demand of the country. In the context of present installed capacity, 614 MW and yearly demand increment by 8 to 10%, the Upper Seti Storage Project is essential to balance the existing demand and supply of electricity.

Explaining on how this project has been selected out of 102 potential projects, he stressed its role in meeting the electricity needs of the country. He reminded that the present study by JICA will prepare a bankable report on the technical, economical, financial and environmental aspects of the project for subsequent funding arrangements.

Regarding the environmental study and status, he briefed that EIA has been accomplished by NEA and the report is in Ministry of Water Resources in the process of approval. Upgrading EIA is also being conducted by JICA Study team in this stage. Stakeholders meetings are being held in this context to fulfill the JICA guideline requirements. The JICA team will conduct the final stakeholder meeting in April 2007. Local people participated in the 1<sup>st</sup> and 2<sup>nd</sup> stakeholders meeting with full enthusiasm and NEA expresses thanks to them. According to Regmi, the envisaged environmental impacts could be mitigated to acceptable degree and hence the project deserves implementation.

**Mr. Yoshimasa Ishii**, Team Leader, JICA Study Team, described the different project study stages, and their objectives and findings (See *Presentation 1*). Mr. Ishii explained the necessity of Project and elaborated 2 types of potential hydropower plants in Nepal. According to him Run Off the River hydropower plant doesn't regulate water seasonally and could not generate electricity required during peak demand period, whereas storage type hydropower plant could regulate water in the reservoir and this could be effectively used for electricity generation in the peak demand period. In the prevailing demand and supply situation of Nepal, to meet the energy demand in the peak demand period, the storage type hydropower plants are most suitable. In the above background, the Upper Seti (Storage) Hydroelectric Project is the necessity of the country.

**Mr. Murashige**, Civil Engineer, Member JICA Study Team presented the results of *Optimization of Development Plan for Upper Seti HP Project* (See *Presentation 2*). He explained the different alternative layout designs evaluated for the selection of the best alternative. He briefly summarized the results of comparative study of the different layout design from geological, environmental, technical, economic and financial aspects and explained the key criteria taken for the selection of the optimum development plan for the project. Lastly, he presented the salient design features of the selected alternative and its development plan.

**Mr. Jack Prosser**, Member of JICA Study Team presented the underlying environmental issues and impacts highlighting the candidate mitigation measures to avoid, minimize and

compensate the adverse environmental impacts (See *Presentation 3*). His presentation covered three major components of natural environment:

- Watershed Planning & Reservoir Area
- Water Quality & Eutrophication
- Biological Environment

On the watershed, he focused on the erosion features of the watershed and their potentials in the sediment contribution with brief account on the possible measures for watershed planning for erosion control. On water quality, he raised the concern of eutrophication in the reservoir and possible alternatives for the water quality enhancement measures. On the Biological environment, he presented the database on the forest resources, wildlife and wildlife habitat and fishery of the Seti River and the potential impacts on the above resources by the project. He briefly presented the nature of the impact (direct and indirect) and the list of measures which could be implemented to avoid, minimize and compensate the adverse impacts.

Mr. Prosser, also presented the findings of IEE level study of 220 kV Transmission Line linking the project with the sub-station at Bharatpur. A brief account of the affected areas and resources were also discussed during presentation highlighting the environmental characteristics of the selected alternative alignment. He strongly recommended for the EIA level study of the selected alignment.

Ms. Shimada, Member of JICA Study Team, presented the Socio-Economic and Cultural Impacts of the project. Her presentation covered following aspects of the study (See *presentation 4*):

- Study objectives
- Study Methodologies
- Affected Areas
- Framework of Resettlement Plan, and Social Action Plan

After highlighting the study objectives and methodologies, she presented the database on the affected land and property by the reservoir and project facility sites for the selected project alternative. She also presented the lists of the affected community infrastructures, community built structures, and the number of households and individuals whose land, structures, will be affected by the project directly. She also presented the number of households who may need relocation from their present dwellings due to the project.

As a measure for mitigation, she presented the framework of resettlement plan and social action plan. According to Ms. Shimada the resettlement plan will be based on the following key principles:

- Affected persons (APs) shall be compensated at replacement rates for all losses and damaged assets.
- APs shall be fully compensated and resettled before their houses and demolished and their land and facilities are required.

- A resettlement plan shall be prepared, consulted with APs and implemented in advance of the implementation of the project.

To rehabilitate the affected persons and communities, she stressed the preparation of Social Action Plan Framework including restoration of affected infrastructure, skill enhancement, agricultural development, women development, rural electrification, community's initiative support etc. as key components.

**Mr. Pravin Aryal**, Senior Division Engineer, MoWR expressed thanks to JICA for undertaking the assignment. He clarified that EIA report done by NEA is already with MoWR. He expressed hope that NEA team will incorporate the findings of upgrading EIA study of the JICA team and submit to concerned agency for approval very soon.. He suggested to the JICA team to incorporate the lessons learnt from KaliGandaki and Middle Marsyangdi Hydroelectric Project. An independent monitoring of the project may be very useful in the environmental management even involving local stakeholders in order to minimize the conflict during project implementation.

He pointed out the need of a policy from the government in matters related to conservation issues. Project of the size of Upper Seti, is bound to affect large areas of forest and other ecological habitats. Existing provisions guiding the institutional stakeholders for decision making are not adequate enough to deal these issues of development and conservation. Development and conservation policies often conflict. This has become one of the hindrances for project decision making. Project level EIAs could not address these issues and the Planning Commission should take initiatives to resolve these issues at high level policy making bodies

After presentation on the findings of supplementary EIA of the project by JICA Study team comments were invited from the stakeholders.

**Mr. Batu Krishna Uprety**, representing Ministry of Environment, Science and Technology commented that EIA study should present its findings based on inventory and not on sample. Many of the project EIA report are prepared as cut and paste of earlier reports, and such practice should not be continued. MOEST is not compelled to approve the EIA report submitted by the proponent. The institutional stakeholders should be consulted as many of the decisions are made based on the provisions of policies and legislation of the stakeholders institutions such as Forestry. As the project affects a large area of forest, the representative of Ministry of Forest could have contributed more in these meetings. As Nepal is signatory to many of the international conventions such as CBD and Ramsar, their provisions should also be a part of the report. As I heard the EIA of the project is already in the approval process in the custody of the Ministry of Water Resources, I am afraid how the results of upgrading EIA will be incorporated in that EIA for approval. It is these things that delay in the approval process and conflict situation arise between proponent and approval authority.



**Mr. Bhawani P. Kharel**, representing IUCN pointed out that the report need to incorporate issues related to environmental flow. I hope this is included in the detail report. Similarly the health issues related to impounding of large area should also be part of the report. With the participation of NEA and other experts IUCN has framed strategies for the high dam construction for Nepal. Issues raised in that report should also be reviewed and incorporated in the upgrading EIA Report.

**Mr. Mahendra Gurung**, General Secretary, Nepal Engineering Association commented that the issues presented in stakeholders meeting deserve appreciation. In the context of Nepal, Engineering Association reiterates its focus that there is a development need in Nepal and such projects should be developed for national development. In the context of Nepal development should be given priority than conservation. Tree need to be embraced as well as used for construction. Our objective should be development for conservation. Let the development and conservation go pace to pace. Screening of project from a total of 102 to 2 is good However, the project scale covered was wide (10 – 300 MW). Further grouping into 10 to 100 and 100 to 300 MW would have been better. JICA team has really worked hard for the developing optimization plan.

Mr. Sandip Chandra Rai, WWF commented that Conservation and development should go side by side, for a win-win situation. Funds for compensation and rehabilitation measures could be derived from CDM mechanism. Carbon Trading is widely practiced and if applicable to the project, it will be a good measure. I request JICA team to look into these matters.

**Mr. Bishnu Dhakal**, LDO, Tanahu explained that there was encouraging participation of the affected population in Damauli on 1<sup>st</sup> December. He stressed the following local people demands and concerns to be incorporated in the upgrading EIA study:

- Safety of Bhimad Bazaar
- Mode of compensation for 399 households, amount, time line
- Employment to the local people,
- Ring road around the dam site for enhancement of livelihood especially promoting rural tourism.
- Impacts to cultural and religious sites such as Vyas birth place (Madi and Seti confluence)

**Mr. T.M. Shakya**, Technical Director, NEA raised his query on financial aspect of the project, cost per kilowatt or kWh for the project. He asked even the tentative price at the moment will be okay to clarify the price level. Further, he enquired that 220 kV transmission line doesn't exist with the NEA grid at Bharatpur sub-station, and how these things will be matched.

**Mr. Bhairab Risal**, NEFEJ representing himself as a consumer and concerned stakeholder of the project raised the issue of Development versus Conservation. During the Pharping hydroelectric project (first project in Nepal developed in 1910) there was no issue of conservation only development was prioritized. Now, conservation is an issue for

sustainable development of resources. And how do we address the issue of conservation in this development Project. During Arun III the stakeholder meeting was almost underground. The country is rather hungry for development. As conservation is concerned with the development, there should be some yardstick/ indicator/range for environmental loss in an interface of development. Conservation and development is very intricately interlinked and hence country like Nepal needs to formulate some guidelines. Major irreversible issues need to be considered with caution. Some thing need to be lost to gain something. What is the optimum range of acceptable loss, I hope should be addressed by the policy. Since this is a serious issue, alternatives must be conceived well in advance. Electricity is the need of the hour. Let the knowledgeable people in the sector sit together and try to find way out.

**Mr. Resham Raj Dhital**, Fishery Development Division, raised his concern on the functioning and operation of Kali Gandaki mitigation program for fishery. Hatchery need to be run, but should have a pre-defined objective and responsibility. In the previous study of Upper Seti only 32 species were reported now 36 species have been reported. Expert involved in the present study should be congratulated for identifying few more species in the river. I would request all concerned that fish biodiversity conservation be addressed properly for the project.

**Mr. Uttam Sagar Shrestha**, SchEMS, opined that the EIA report should also include beneficial impacts of the project. While preparing resettlement plan and social action plan, formation of committees at local level will be more beneficial in reflecting the people's resettlement and rehabilitation needs.

**Mr. Sarita Maharjan**, United Democratic Front, Central Committee Member and Treasurer, Kathmandu District expressed her view that project need to be considered at country perspective. Demand of the local people need to be concerned, project might fail if the concerns of the local people were not addressed properly. Resettlement of local people needs to be given due consideration. They should be compensated. Production loss needs to be incorporated while formulating the plans. Local stakeholders' participation in the construction committee needs to be ensured.

**Dr. Toran Sharma**, on behalf of the JICA Study team responded the queries raised by the participants. **Mr. Ishii** provided the tentative cost estimate of the project per KW.

**Dr. Jagadish Chandra Pokhrel**, Vice Chairman, National Planning Commission from the seat of Chief Guest commented that we must take lesson from the previous projects. Enrichment in experience and knowledge need to be added up or incorporated rather not ignored. Let us share the experiences learnt from the previous projects. Let's document both the pros and cons of each of the projects and decide how we can go ahead. Let us have a permanent Stakeholder Ministry Standing Committee to look into inter-sectoral issues. Policy formulated by one ministry need to be approved by another ministry.

However, participation and involvement of the inter-sectoral institutions is essential at all levels. If the member of one ministry is not involved at local level, they prefer to avoid

the participation at implementation stage. We have very many examples of such incidents. Hence let us not repeat the same mistake.

Resettlement is one of the issues to be looked after sensitively at all levels. Inclusiveness principles should be incorporated at all levels. Present state structure is quite different, thus we need to internalize the values that people are empowered and take the decisions. Indigenous population, women issues need to be revisited. Thirty three percent participation of the women at all level needs to be incorporated through networking at local level. Employment need to be incorporated at local level from unskilled, skilled to professional level.

The issues and concerns raised in the stakeholders meetings should be distributed to the stakeholders along with the measures that are considered to resolve the issues and concerns. If we have addressed all the issues (local, national, global) then the consultation is considered fruitful otherwise homework is not complete. Let the hidden fear not come out, technically we are sound; the trickiest part is environmental and social part. A consensus at working level is needed during implementation. Like cost we need to spell out total man months (unskilled, skilled, and professional). National Resettlement Policy has been framed out and is being sent to cabinet for approval.

**Mr. Arjun K. Karki**, Executive Director, and the chair person of the meeting concluded the meeting with the following remarks.

We have a total installed capacity is 614 MW in our grid. Most of the Projects are based on run off the river schemes. Kulekhani is the only storage project. This project is also highly dependent upon the monsoon rainfall. The rainfall in August 2006, has helped us to some extent to reduce the power cuts. If we do not have additional storage projects, situation harder than this will come, and we should be ready to face. It is because of this, it is important to develop a new storage project for hydropower generation.

Therefore, it is very important to develop an explicit Power Development Policy which can lead us ahead and meet the power requirement in future. At this juncture it is important to go for development friendly conservation policies.

At present, we are concerned with 2.5 hours load shedding to the 40 percent population who are enjoying the electricity. But NEA is equally concerned to facilitate access to those who are devoid of the electricity facility.

The Middle Marsyangdi hydroelectric Project is the only on going project. When commissioned, it will generate 70MW of electricity in the wet season. Currently our power demand is nearly 1000 MW. We don't have other projects under construction. Hence it is high time to make decisions on the new projects. If not, in the coming 5/6 years, Nepal will be known as the most power short country.

In the mean time we need to improve NEA's managerial and administrative capabilities. Past records reveal that NEA constructed projects are rather cheaper compared to the

projects constructed by private sectors. We are interested in the construction of Upper Tamakoshi Project. We don't have the financial resources for its construction. We pledge National Planning Commission to take the lead role to arrange financial resources for NEA.

Foreign exchange risk if shouldered to NEA and load handed over to it, we will be able to improve NEA's financial status. Upper Seti, if supplemented through such financing, we understand that available energy will then ensure the electricity demand even with the development of run off the river projects.

Compensation to the affected owners, who don't have legal landownership, need to be compensated; however, there is a need of guideline from the government. We know all the development needs of the local people could not be addressed by the project. Other sector's stakeholders also should participate equally, if we want to develop project in cheaper costs. I would personally request government of Japan to provide funding for the project implementation.

## Media Coverage of Second Stakeholder Meeting

## Media Coverage of Second Stakeholder Meeting

1- Published in the national newspaper "The Himalayan Times" 7<sup>th</sup> December 2006 (English)

# Upper Seti project to inundate 811 ha 1,057 households, flora, fauna to be hit

Himalayan News Service  
Kathmandu, December 6

The proposed Upper Seti Storage Hydro-electricity Project, which aims to produce 132 megawatts of electricity for Tanahun district, will sweep away 811 hectares of land, which includes forests, wetlands and also a habitat for hundreds of conserved wild species.

Jack Prosser, a member of an environment team that conducted a study in the area, today said that out of the total area to be covered by the project, 121 hectares is either under cultivation or has houses, 127 hectares form a grazing area, forests occupy 428 hectares and 227 hectares form other barren land. Prosser is a senior partner of the Environment Planning Associates and his study was part of the studies for the Japan International Cooperation Agency (JICA).

"The forest accounts for 42 per cent or 381.7 hectares in the reservoir area out of the total area of

904.1 hectares. The project area is a habitat for 27 mammals, 17 reptiles and amphibians, 62 birds and 46 butterflies and moths," he said. He was addressing a stakeholders' meeting in the capital. He said his team has also recorded 209 wild species of plants, some of which — including the Screw Pine and four types of orchids — are under the conservation category.

Prosser said that a supplementary Environment Impact Assessment is necessary to make a final decision on the project.

Toshiko Shimada, a member of the JICA study group, said the project would affect 166 hectares of cultivated land, causing a loss of 854 metric tonnes of food grain annually.

"This will also affect seven stretches of gravel road, seven suspension bridges, 22 foot trails, two irrigation canals, four electricity distribution lines, one bridge and one causeway," she said, adding that the project will also be a threat to 449 private constructions, six

resting places, one temple and one ghat.

According to her, 1,057 households will lose their private land, 155 households will lose their structures and 122 households from Chhang, Rising Ranipokhari, Jamunie, Kahun Shivapur VDCs as well as from Vyas Municipality will also be affected. "We need to develop a strong resettlement and social action plan for the families that will be affected," she said.

Hiroshi Murashike, another member of the JICA team, presented four options for the construction of the project. She said the treatment of sedimentation, geological conditions of project layouts, the role of the project and environment issues should be taken into consideration while discussing the project.

Addressing the programme, Arjun Kumar Karki, the executive director of Nepal Electricity Authority, urged the government to come up with "power-friendly" plans to start projects in the pipeline.

2- Published in the national newspaper "The Rising Nepal" 7<sup>th</sup> December 2006 (English)

## Upper-Seti plant essential for stable power supply

By A Staff Reporter  
KATHMANDU, Dec. 6: Policy makers and stakeholders Wednesday said that the construction of Upper Seti storage hydro plant was essential for stable power supply during the dry season. They were discussing on a feasibility study on the project jointly carried out by the Nepal Electricity Authority (NEA) and Japan International Cooperation Agency (JICA) at the 2nd stakeholders meeting organised in Kathmandu Wednesday.

"The upper Seti storage hydro project is not only financially and environmentally viable but also necessary to address country's growing electricity demand and meet its shortage caused by the decrease of water

level in the dry season," said the report.

Majority of hydro plants are based on the Run-Off-the-River (ROR) that can only marginally regulate river discharge for power generation, thereby causing power shortage in the dry season.

In search of storage type of hydro project, the NEA identified Upper Seti hydro project as a potential one and commenced the study in February 2005 with the assistance of JICA.

The JICA team conducted a preliminary feasibility study that includes technical, geological, environmental and social aspects of the project. Located at Damauli in Vyas Municipality of Tanahun district, the project's

construction is estimated to cost US\$ 400 million and per unit of electricity at five cent.

It is expected to be completed by 2013 but the NEA is not in a sound financial position to build the 232-megawatt project.

"We have expected Japanese assistance in constructing the Upper Seti Storage Hydroelectricity Project," said Arjun Bahadur Karki, NEA Executive Director.

Karki said the construction of the project was timely as the country was witnessing power demand at the rate of 8 per cent annually.

The experiences have shown that the hydro plants constructed by the private sectors are more expensive than those built by the NEA, he said.

"The private sector is unable to provide cheap electricity that is accessible to the people."

He also urged the government to give priority to this sector by introducing power development friendly policy.

"The environmentalists should also focus on development friendly conservation policy."

Vice-chairman of National Planning Commission Dr. Jagadish Chandra Pokharel stressed on sharing past experiences in constructing this project.

"We must take lesson from Kulekhani, Kaligandaki and Maryangdi in order to avoid possible financial, legal and social problems while implementing the project," added Dr. Pokharel.

He also suggested forming a

committee of representatives from line agencies, ministries and stakeholders for the purpose.

The project implementation should be based on the concept of participatory and inclusive democracy, he added.

Local Development Officer of Tanahun district Bishnu Dhakal said that local people were highly encouraged by the project but they had expected compensation and employment after the completion of project.

Altogether 1,057 households will be affected while some 122 of them require relocation, as their residential structures will be demolished, he said. "The public support is the key to the success of project. Thus, the concerned body must address the problem of local people."

According to the report, the project impacts on cultivated area including 166 hectares of land in the reservoir area. Seven stretches: motorable gravel roads, one bridge, 7 suspension bridges, 22-foot trails, one causeway, 2 irrigation canals and 4 electric distribution lines route will also be affected.

Bhoj Raj Regmi of NEA and Ishit Mayayoshi (team leader), Toshiko Shimada, Jack Prosser and Mureshige Hiroshi from the JICA made their presentations on different aspects of report at the programme.

The country has generated only 614 MW from its abundant water resources. More than 68 per cent population are deprived of electricity supply.