



## Public Awareness Workshop Report

**TITLE:** Machakhela HPP Public Awareness Workshop with the communities of Adjarisaghamarti, Khelvachauri region, Adjara autonomous republic.

**DATE:** 18.07.2011

**VENUE:** Machakhela Valley Secondary School Building

**Speakers:**

**Giorgi Chikovani**, HIPP Project, Deputy Chief of Party  
**Mariam Bakhtadze**, HIPP Project Environmental Specialist, Deloitte,  
**Avtandil Lomiashvili**, HIPP Project Engineer, Deloitte,

**Facilitated by:**

**I. Iremashvili**, HIPP Project, Outreach and Communication Manager

**Background:**

The United States Agency for International Development (USAID) through the Hydropower Investment Promotion Project (HIPP) supports development of a minimum 400 MW in new, run-of-the-river hydropower stations in Georgia. This project is managed by Deloitte Consulting. As part of this program, HIPP has identified a cluster of project sites along the Machakhela River. HIPP is now conducting pre-feasibility studies for two projects with a total capacity of 38.3 MW. These two HPP sites are on the River Machakhela in Khelvachauri region along village Chkhutuneti.

The HIPP team is preparing basic technical studies to evaluate the technical and economical feasibility of the projects. As part of this process, public awareness workshop was held in the Building of Adjarisaghamarti Public School with the communities of the Chkhutuneti, Kedkedi and all other villages situated in Machakhela Valley to ensure their involvement at the early planning stage, identify areas of community concern, and gather feedback from local residents.

The project profiles, HIPP information leaflet and special brochure on Machakhela HPP Cascade, also, USAID energy map were used as supportive documentation. Meeting agenda, list of participants and photos are attached to this document as illustrative materials. The text of the brochures distributed among Community members is also attached.

**Aim of the Workshop:**

- Increase awareness of local communities on small and medium run-of-the-river hydro power plans and promote their support to such activities;
- Inform local community the goal of the project and ensure their involvement at the early planning stage.
- Identify community concerns regarding the possible development of the project and gain their feedback; ensure positive attitude towards the project and increase cooperation perspectives between public and project developers.

**Workshop Process:**

The purpose of the meetings was to provide information and get the opinions of the locals related to the project. The date, place and the scope of these meeting was preliminary informed and agreed with Khelvachauri local government during HIPP team field visits. Meeting date and venue were agreed with local Municipalities; Public workshop was announced to all communities in Khelvachauri region by local municipality, written advertisements were made at Municipality Building. It was also announced at the Media Workshop organized by HIPP to local press representatives. HIPP team facilitated attendance of the Attorney of all Villages located in Machjakhela Valley on the workshop. Totally 25 community members were attending the workshop (attached see list of participants).

During the workshop HIPP team members provided information about the project in general, and discussed technical characteristics of the proposed HPP project as well as possible environmental and social impact. Issue that project will not create significant impoundment causing displacement of adjacent population was stressed during the workshop.

The HIPP team stressed the importance of public participation at early project design phase. Participants have been asked to express their opinion/attitude towards the project in general as well as impact on environment and socio-economic conditions of their household.

The municipality representatives mentioned a few considerations about the project impacts both environmental and socio-economic point of view.

**Key issues/concerns raised by community members were as follows:**

- Community members asked to consider Fish path in the project implementation works;

- In 1943, 1962 and 2002 great flashfloods took place on River Machakhela, which harmed agricultural bids, as well as the population. Community member are concerned about the possibility of such flashfloods and requested to consider the mitigation measures in the project;
- Local benefits of project; Community members were interested whether they could benefit from the low electricity tariffs;
- How the hydrological regime will be observed? Is there a risk of emptying the river from water?
- Will the local community be able to influence on decision-making process of the project implementation? For instance, change certain component of the project.

### **CONCLUSIONS:**

- The Machakhela public awareness workshop outcome is as follows:
- Community's attitude towards the project development is positive; Community members think they could benefit from development of project in case the project developers properly consider their concerns/suggestions and watershed characteristics. On the other hand, community members are willing to cooperate with HPP project developers. From operation of the HPP local population expects to receive new job opportunities;
- It was agreed that future development of the project would be further discussed with the community members.

### **Other Needs and Suggestions**

For ensuring participatory attitudes and practices in HPP community it would be reasonable to contact the most active members of the community on a regular bases in parallel with the project development and inform them about possible environmental and social implications.

***The table below shows the public awareness meeting in Adjaristsaghamarti Public Shool. (Machakhela Valley)***



*Table 1. Pictures of the public awareness workshop*





Hydropower Investment  
Promotion Project (HIPP)

Public Awareness Workshop Report  
[July 18, 2011, Monday, Public Awareness Workshop  
on Machekhela HPP Cascade]



**Attachment A: Public Awareness Workshop Agenda**
**Public Awareness Meeting for Tskhenistskali HPP Cascade Project**
**Agenda**
**14 June, 2011, Alvani Secondary School Building**

11:00–11:15	Registration		
	<b>Introductions</b>	<b>Moderator :</b>	<b>Duration</b>
11.15–11.20	Opening Remarks	HIPP/G. Chikovani	5 min
11:20–11:30	HIPP Project Descriptions	HIPP/A. Lomiashvili	10 min
11:30–12:00	HPP Project Outline	HIPP/A. Lomiashvili	30 min
12:00–12:20	Identified Environmental/Social Issues	HIPP/M. Bakhtadze	20 min
	<b>Questions and Discussion</b>		
12:20–13.45	Discussion <ul style="list-style-type: none"> <li>• Socioeconomic Issues</li> <li>• Environmental Issues</li> <li>• Public Health &amp; Safety Issues</li> <li>• Construction Issues</li> </ul>	Facilitated by HIPP/I.Iremashvili	1 hour and 25 min
13:45–14:00	<b>Concluding Remarks</b>	HIPP/Local Municipality	15 min



**Attachment B: Attendance list**

Event	<b>Public Awareness Workshop on Machakhela HPP Cascade</b>	
Dates	18.07.2011	12.00-03.00 pm

	First Name, Last Name	Position	Contact Details	Comment
1.	Nodar Mortuladze	State Attorney of Machakhela Community	(877) 203870	
2.	Qetevan Muakanadze	Teacher of Adjarisaghmarti Public School	(558) 420497	
3.	Zhuzhuna Tsintsadze	Director of Adjarisaghmarti Public School	(577) 304211	
4.	Roland Mskhaladze	Kedkedi Community Member	(558) 118416	
5.	Nugzar Mopinadze	State Attorney of Scurdidi Community	(577) 203871	
6.	Tengiz Vartsenadze	State Attorney of Adjarisaghmarti Community	(577) 203869	
7.	Otar Mskhaladze	State Attorney of Kedkedi Community	(577) 203868	
8.	Irina Tarieladze	Teacher of Adjarisaghmarti Public School	(593) 227952	
9.	Zurab Nagervadze	Teacher of Adjarisaghmarti Public School	(599) 262792	
10.	Akhmed Kakhnidze	Chkhutuneti Community Member	(555) 625170	
11.	Severian Salvadze	Tskhemluri Community Member	(577) 203872	
12.	Revaz Kakhidze	Chkhutuneti Community Member	(577) 203874	



13.	Valiko Basiladze	Chikuneti Community Member	(577) 203875	
14.	Tamaz Qoqoladze	Qhoqholeti Community Member	(577) 203876	
15.	Merab Putkaradze	Chkhutuneti Community Member	(558) 562109	
16.	Revaz Shashikadze	Teacher of Kedkedi Public School	(593) 390543	
17.	Vezir Nagervadze	Adjarisaghmarti Community Member	(593) 336598	
18.	Tengiz Kakhidze	State Attorney of Chkhutuneti Community	(577) 203873	
19.	Lamara Nagervadze	Teacher of Adjarisaghmarti Public School	(577) 304210	
20.	Guli Qatamade	Employee of Adjarisaghmarti Public School	(558) 377282	
21.	Tamila Partenadze	Manager, Adjarisaghmarti	(588) 182362	
22.	Ekaterine Mopidze	Housewife, Adjarisaghmarti	(598) 476088	
23.	Nadia Nagervadze	Nurse, Adjarisaghmarti	(593) 913517	
24.	Mindia Nagervadze	Adjarisaghmarti Community member	(593) 252409	
25.	Ilia Partsenadze	Adjarisaghmarti Community member	(593) 504830	



### Attachment C: Text of the PAW Brochure on Machakhela HPP Cascade in English

## General Description of Hydro Power Investment Promotion Project

By the request of Georgian Government, the United States Agency for International Development (USAID) has been supporting a three year Hydropower Investment Promotion Project (HIPP) since March, 2010. HIPP is implemented by the international consulting company Deloitte Consulting.

Georgia's hydropower potential is largely undeveloped. Currently only 25% of the country's total generation potential has been realized. The country has many rivers that can provide environmentally friendly, run-of-river hydropower projects with high annual plant factors, making them highly attractive to investors.

The goal of the HIPP initiative is to identify investment opportunities and incentivize investors resulting in private sector commitments to construct run-of-river hydropower plants – leading to increased generating capacity, locally produced energy, enhanced energy security, and the elimination of winter imports, greatly reducing the use of natural gas and other fuel sources for electricity production.

To stimulate and secure investment into Georgia's small-and medium-sized hydropower market, Deloitte/HIPP is working with local and international partners in all areas to promote awareness and investment in Georgia's hydropower resources. Key areas of activity include:

- Developing Quality Engineering and Technical Information;
- Providing Targeted and Effective Investor Outreach and Promotion;
- Supporting Institutional Strengthening and Capacity Building; and
- Partnering Programs and Opportunities to Stimulate Investment.

One of the proposed projects under HIPP involves construction of the cascade of two medium sized hydro power plants on the Machakhela River in Adjara region, Western Georgia.

### Cascade of Machakhela Hydro Power Plants

#### General overview

The cascade of HPPs (**Machakhela 1 and Machakhela 2**) will be positioned south west of Kveda Chkhutuneti village, on the Machakhela River, which is characterized by high flows. The Machakhela River rises in the Turkish territory, in the western range of the Karchkhali Mountain and flows into the Chorockhi River by the right tributary. The Machakhelastskali River drains an area of 369 km<sup>2</sup>. The river is characterized by high flows in spring and autumn, with minimum water levels in winter. Mtirala National park is located within 15 km from the Cascade. Total arch area comprises 15,804 hectares and is in 14 km from Batumi–Tbilisi highway. The Mtirala Mountain is the heaviest precipitation mountain in the post Soviet area. Average annual precipitation index is above 2000 mm and on the sea-directed slope of the Mtirala Mountain the index exceeds 4000 mm.

Access roads, up to 7 km long in total, will be rehabilitated for the HPP construction purposes. Two 5-km-long transmission lines of 35 kV each will be built to transmit electricity generated at the Machakhela HPPs cascade.

- 1) **Machakhela 1 HPP** will be positioned to the south of Kveda Chkhutuneti village, on the Machakhela River. The HPP will be first stage in a cascade of two HPPs. According to the preliminary assessments, the 18-20 Megawatt (MW) run-of-river, tunnel derivation type Hydro



Power Plant can be built on the river. The site offers seasonally variable average annual generation of about 98 GWh, at a plant factor of about 65 percent.

- 2) **Machakhela 2 HPP** involves construction of a 16,5 Megawatt (MW) run-of-river, tunnel derivation type Hydro Power Plant (HPP) on the Machakhela River. The HPP will be positioned to the south of **Machakhela 1 HPP**. The HPP will be the second stage in a cascade of two HPPs (**Machakhela 1 and Machakhela 2**). The site offers seasonally variable average annual generation of about 86 GWh, at a plant factor of about 65 percent.

### Expected Results

Implementation of the project will support the realization of Georgia's hydro potential. Machakhela HPPs Cascade will substantially increase power generation and help to raise the Country's energy security for a future with sustainable energy resources. Total hydroelectric generation of Machakhela HPP Cascade will amount to more than 35 MW. Realization of the project will create good opportunities for:

- selling electricity inside Georgia supplementing expensive thermal power during winter;
- exporting energy during non-winter months to take advantage of the seasonal differentials in power prices between Georgia and its neighboring countries;
- use of additional renewable energy source that will help to reduce local as well as global carbon oxide emissions to the atmosphere.

### Local Community Benefits from Project Implementation

- Local labor forces will be employed during the construction period, as well as after commissioning of the Plant to carry out operations and maintenance works. Job creation will also help the community as most of the people will get training in their proficiencies.
- New high quality access roads will be constructed that will significantly improve the village infrastructure.
- Small gabions will result in more regular water flows in river bed and help minimize flooding.
- Increased reliability of electricity supply and improved energy quality.

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