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**Hydropower Investment
Promotion Project (HIPP)**

HIPP PUBLIC AWARENESS WORKSHOP IN ARAGVI RIVER BASIN COMMUNITY

Report, August 01, 2013



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USAID HYDROPOWER INVESTMENT PROMOTION PROJECT
(HIPP)

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DELOITTE CONSULTING LLP

USAID/CAUCASUS OFFICE OF ENERGY AND ENVIRONMENT

DISCLAIMER:

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

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 two project sites in the Aragvi River Basin. HIPP is now conducting pre-feasibility studies for 2 projects with a total capacity of more than 24 MW. These HPP sites are on the River Aragvi (Black and White Aragvies) in Pasaauri, Dusheti region. The HIPP team is preparing basic technical studies to evaluate the technical and economic feasibility of the projects.

As part of this process and with the aim of ensuring public participation at the early stage of project planning; identify areas of community concern, and gather feedback from local residents, Public Awareness Workshop (PAW) was held in the Building of Pasaauri House of Culture with the communities of Pasaauri, Mleta and Bedoni.

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 Dusheti local government during HIPP team field visits. Meeting date and venue were agreed with Local Municipality of Pasaauri; public workshop was announced to Pasaauri, Mleta and Bedoni (river basin villages) communities by local Municipality. Announcement was sent through CENN's electronic distribution network. HIPP team facilitated attendance of the Acting Director and Coordinator of Renewable Energy Program at Georgian Energy Efficiency Center, Ms. Manana Dadiani. Aragvi (in village Pasaauri) PAW attended by community members from: Pasaauri, Mleta and Bedoni communities. Totally up to 30 community members attended the workshop. Together with HIPP team the PAW was conducted by USAID's Senior Energy Infrastructure Advisor, Sukru Bogut.

During the workshop USAID and HIPP team members provided information about the project in general, made presentations on technical characteristics of the proposed HPP projects and on possible environmental and social impact. At the meeting it was underlined that project will not create significant impoundment causing displacement of adjacent population.

USAID and 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.

THEMES:

- Community members expressed fear for the possibility of air and water contamination; derangement of soil, woods and agricultural lands; also erosion and landslides; possibility of increasing density;
- Community Members strictly objected to the place selected for the power house of Aragvi 2 HPP as this is a small island at the juncture of two rivers, Black and White Aragvies.
- In general Aragvi HPPs community was against the implementation of the proposed projects unless all their requirements are observed. The majority of the PAW participants that filled in the distributed questionnaires during the Workshop negatively.

CONCLUSIONS:

- The outcome of Aragvi Community PAW is as follows:
- In general, the community's attitude towards the project development was negative, though the community members agreed that in case of proper and detailed geological studies mitigating the risks of erosion, landslides and flooding, and provided that all their requirements concerning the location of the power houses and intake structures are taken into consideration, they could benefit from implementation of the proposed projects.
- Local Government representatives, Governor of Dusheti region and Head of Pasanauri Municipality were very supportive to HIPP's initiative and expressed gratitude for providing the forum to extensive consultations with the local communities, and also, expressed hope for future cooperation with potential investors on the proposed projects based on the communities concerns.

The presentation on the project profiles, informational brochure on Aragvi River Basin HPPs, also, the local map, were used as supportive documentation. Meeting agenda, photos, and electronic version of the brochure distributed among them are attached to this report as illustrative materials.

ATTACHMENT A: PUBLIC AWARENESS WORKSHOP AGENDA

Public Awareness Meeting for Aragvi River Basin HPP Cascades

Agenda

30 July 2013

Pasanauri House of Culture, Dusheti Municipal District

14:00–14:10	Registration		10 min
	Introductions	Moderator :	Duration
14:10–14:20	Opening remarks	USAID/ S. Bogut	10 min
14:20–14:50	HIPP Project description, social and environmental issues	HIPP/K. Skhireli	30 min
14:50–15:20	HPP Project outline	HIPP/G. Sikharulidze	30 min
	Questions and Discussion		
15:20–15.50	Filling Out of Meeting Questionnaire Discussion • Socioe-conomic Issues • Environmental Issues • Public Health & Safety Issues • Construction Issues	Facilitated by: HIPP / I. Iremashvili HIPP / G. Pochkhua	30 min
15:50–16:00	Concluding Remarks	HIPP/Local Municipality	10 min

ATTACHMENT B: PHOTOS OF PUBLIC AWARENESS WORKSHOPS IN ARAGVI



ATTACHMENT C: INFORMATIONAL BROCHURE ON HIPP AND ARAGVI HPP PROJECTS

Project Location Map



Local Community Benefits by 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.
- 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 with total length of 4 km will be constructed and existing 4 km will be rehabilitated 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 supply.

Expected results

Implementation of the project will support the realization of Georgia's hydropower potential. Aragvi 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 Aragvi HPP Cascade will amount to more than 24.4 MW. Realization of the project will create good opportunities for:

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



Aragvi HPP Cascade



Promoting Renewable Energy
Promoting the Renewal of Georgia

Tbilisi, June, 2013
11, Apakides St. Tbilisi Business Center
Tel.: (+995 32) 23 45 70 71

Hydropower Investment Promotion Project (HIPP)

HIPP - Main Goals and Activity

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, power generation 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 in Georgia's small and medium-sized hydropower market, Deloitte/HIPP is working with local and international partners in all areas to promote

Aragvi HPP Cascade

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.

As part of this program, HIPP has identified a cluster of project sites along the Aragvi River (2 HPPs), one on the Tetri (White) Aragvi and another on the Shavi (Black) Aragvi in Dusheti district with total capacity of 24.4 MW. The cascade of 2 HPPs (Aragvi 1 and 2 HPPs) will be positioned near the villages: Bedoni, Kvesheti, Arakhveti, Zemo (Upper) Mleta, Zanduki and small town of Pasanauri on the Aragvi River. Near the small town of Pasanauri, The Tetri and Shavi Aragvi merge to form the Aragvi River, which flows through the Zhinvali Reservoir into the Mtkvari River near the town of Mtskheta. The Aragvi river has nearly 716 tributaries. The river flows in the Aragvi watershed area are very seasonal. High flows are observed in Tetri Aragvi in spring and summer from snowmelt in the alpine areas, while moderate flows occur in autumn and relatively stable low flows are common during the winter.

General Technical Data

- **Aragvi 1 HPP** will be positioned on the left-bank of the Tetri Aragvi river near Bedoni, Kvesheti, Arakhveti and Zemo Mleta villages: its power house is in 1 km upstream from Kvesheti, while intake structure is planned to be in 2.0 km upstream from Zemo Mleta. The HPP will be the first stage in a cascade of two HPPs. According to the preliminary assessments, the 10.2 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 29.60 GWh, at a plant factor of about 52 percent.
- **Aragvi 2 HPP** will be positioned on the Shavi Aragvi river very near Zanduki village and small town of Pasanauri: its power house located at the confluence of the Shavi and Tetri Aragvi rivers in 0.5 km downstream of Pasanauri, as for the intake structure of the plant it should be built in 1.0 km downstream of Zanduki village. The HPP will be the second stage in a cascade of two HPPs. According to the preliminary assessments, the 14.2 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 54.4 GWh, at a plant factor of about 46 percent.

This Brochure was prepared by Deloitte Consulting, the implementer of USAID funded Hydropower Investment Promotion Program

USAID Hydropower Investment Promotion Project (USAID-HIPP)

Deloitte Consulting Overseas Projects - HIPP

11 Apakidze Street, Tiflis Business Center

Tbilisi, 0171, Georgia