Environmental & social impacts of the Khudoni hydropower project

Report on the fact finding mission to upper Svaneti, Georgia

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1 Background

Purpose of the mission

The purpose of the fact-finding mission was to visit villages in the Svaneti region of northwestern Georgia that will be impacted by the Khudoni project, namely the villages in and around the Khaishi community: Vedi, Tsvirmindi, Tobari, Lakhani, Lakhami, Lukhi, Khaishi, Totani, Jhgeti, Barjashi; as well as Idliani Chuberi. During the visit 250 people were interviewed, of which around 160 were women.

The goals of the mission were to:

- Inspire local groups and communities to strive for sustainable progress in Georgia’s energy sector;
- Establish public participation with reference to best EU practice; and
- Monitor public participation during the hearings organised by the project company and the compliance of the process with the Aarhus convention.

Project background

The Indian company Trans Electrica Ltd plans to construct the 702 MW Khudoni hydropower plant (HPP) in the Enguri river gorge on the territory of the Mestia municipality in upper Svaneti, which will generate 1.5 billion kilowatts per hour of electricity each year. The site selected for the construction of the Khudoni dam is located 32 kilometres upstream from the existing Enguri HPP dam and four kilometres south of the village of Khaishi. The proposed project requires the construction of a plant with a volume of 364.5 million m³ between the elevations of 520 (the highest point of the Enguri reservoir) and 700 metres, with a 200 metre arch dam and a 528 hectare reservoir.

In July 2013 Trans Electrica Ltd. released a revised preliminary Environmental Impact Assessment report for the Khudoni project, and a public discussion about the report was scheduled for 17 September in Khaishi and 19 September in Tbilisi.

The project will impact the villages of Khaishi and Chuberi, including agricultural lands, pastures, forests, two churches, burial grounds, and historical monuments like
the yet-to-be explored archaeological area from the first century AD, as well as the road between Jvari and Mestia. Over 2000 people will need to be resettled to make room for the project, increasing the political risks for the country in a long-term perspective as the project site is located near the conflict zone between Russia and Georgia.

Kaishi
2 Findings

Cost benefit analysis of the project

It is impossible to assess how Georgia will benefit from the project because the project sponsor has not published a cost–benefit analysis. Similarly the Ministry of Economy and Sustainable Development has neither conducted such an analysis itself, nor demanded one from the investor. The Dutch Commission on Environmental Assessment remarked on this substantial omission, concluding in its report on the project:

"the existing analysis is a financial analysis from the investor’s perspective. An analysis of the societal costs and benefits at country level is not available. The project involves more than just private costs and benefits. Important broader, public economic interests such as loss of property and livelihood, resettlement, environmental degradation, loss of flora and fauna, and the effects of the project on national energy supply and demand are largely ignored."

Though the profitability of the project for the investor is undoubtable, what Georgia stands to gain remains to be seen. The project sponsor asserts that annual growth rate in electricity demand in Georgia is about ten percent, and that Khudoni is essential for the country’s energy independence. Yet Georgia is set to receive annually just nice percent of Khudoni’s output, and in case it needs additional power, the state will have to purchase electricity from Khudoni on the international markets, and according to the contract, the investor is free to choose which market and the price. Such an arrangement is a clear signal that the project is export–oriented. Project documentation also does not discuss alternative scenarios, like the full rehabilitation of existing hydro power plants or energy efficiency measures to overcome the country’s energy deficit. Nor does the project discuss adequately the economic, social and ecological consequences of other technical alternatives to Khudoni, such as relatively small hydropower plants that are lower and will not cause the resettlement of the villages. Because Georgia does not have a strategy in place for the energy sector, nor has it developed since 2001 an energy balance sheet, ascribing a unique role for Khudoni in Georgia’s energy system is placing the cart before the horse.

1 Advisory review of the Environmental and Social Impact Assessment of the Khudoni Hydropower Project; Paragraph 2.4
http://moe.gov.ge/files/PDF%20%20Eng/News/Angarishi_ENG.pdf
The project’s economics are also suspect. Khudoni will bring insignificant benefits in terms of mobilising property and income taxes for the state and local budgets\(^2\). From the macroeconomic point of view, Khudoni will have little impact on GDP growth (at least not on the levels indicated in the EIA report\(^3\)).

**Social impacts of the project**

The impacts of the project to the people living near the site are the most significant issues at stake. Resettling around 2000 people from the area will have a devastating impact on the small ethnographic group of Svans living in the area. The scale of the damage may even be more severe, since the project sponsor does not document the indirect impacts on villages beyond the flooding area.

No resettlement plan has been released with the EIA report. While the project developers have stated Khudoni will adhere to World Bank policies and standards on resettlement\(^4\), the measures taken to date are far from both World Bank policy and international human rights law. According to the latter, purpose-oriented consultations should be held with the population subject to resettlement and the latter should have an opportunity to participate in planning and implementation of the resettlement programme. The field visit confirmed that an absolute majority of the population subject to resettlement is against it. Yet Georgia has no policies nor procedures on involuntary resettlement in development projects to ensure appropriate standards of living for resettled people, as required by relevant international acts. It should also be noted that a part of the population was resettled during construction on Khudoni during the Soviet era, but a significant portion have returned to their initial housing. Repeated resettlement is even more difficult and unacceptable for these families.

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2. According to the ESIA the company will pay GEL 21.53 million as income tax (20 percent of salaries) to the state budget and GEL 4.8 million as property tax (1 percent of balance value of the property of the company). However these figures are exaggerated.

3. Based on the assumption that USD 1 billion in foreign direct investment in Georgia will lead to GDP growth of 5.5 percent, the ESIA concludes that by investing on average USD 200 million in Georgia during the construction phase, the impact on GDP growth will be proportionally 1.1 percent. This kind of correlation between FDI and GDP growth does not exist, and such assumptions do not have any real ground (further documentation of this assumption does not exist in the ESIA).

In spite of the fact that no consultations have been held with the project-affected community, more than 1500 hectares of land and property located on the project site, including an estimated USD 178 million in dam infrastructure carried out during the Soviet period on Khudoni, were transferred to the investor at a symbolic price of one dollar.

**Public opinion about the project**

The majority of locals interviewed during the visit (about 250 residents in 12 villages) expressed negative attitudes towards resettlement. "We have spent our entire lives here. We cultivate this land, we have relatives and neighbours here and we will lose these contacts. Here are the graves of our family members, our churches," they say. Locals also claim that they will not allow the project to be implemented in its current design, and about 90 families (Currently more than 200 families joined the oath) have taken an oath to protect their lands. Locals have also said that they do not oppose all hydropower projects, just those that would cause flooding on such a scale: "We are not against the construction of several medium or small hydropower plants, or a large hydropower plant above Khaishi. Invest in the community, Svaneti is rich with natural resources, and the Government will benefit from this and so will we. We'll be employed, but we will not allow the construction of Khudoni at the expense of the flooding of our villages."

As noted above, the indirect impacts of the project have received little attention, and locals from the villages of Lakhami and Vedi claim that they may not receive compensation because their villages do not fall directly in the area of flooding. However if Khaishi is abandoned, then a new road connecting Mestia or the Samegrelo Region will limit access to medical aid and schools, and the villagers will be left in isolation without any compensation.

Mistrust towards authorities and the investor has further strengthened locals resolve against the project. Residents of Khaishi recall election promises made by Prime

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5 As of today, over 200 families have put their signatures under the oath.
Minister Ivanishvili during his visit to Khaishi in 2012. Ivanishvili told locals that Georgia does not need “electricity at the expense of its people, and decisions will only be made through negotiations with local population.”

### Opinion of the local government and regional administration about the project

Some local authorities are against the project. The chairman of the Mestia local council said that deserting Khaishi was unacceptable. The government of the Mestia municipality has taken a more neutral position, preferring instead to find common grounds and establishing communication between the state and locals. Authorities in Khaishi, Chuberi and several other villages have a much more negative attitude towards the project, having said that it is impossible to implement the project in its proposed form and that they fully share the position of locals.

Chuberi’s deputy governor Gari Chkhvimiani believes that Khudoni will be followed by other projects, like the Neskra dam upstream from the site, leading to the cumulative destruction of villages in and around the Khudoni project area.

### Unregistered lands and property handed to the investor

The problem of land registration also arose during the field visit, with many locals noting difficulties securing proper tender to property in the past years. “I filed an application, paid a fee and it appeared that my own house falls within the red lines,” a Khaishi resident says. The 1500 hectares of land handed over to the investor for project development included unregistered agricultural plots, pastures and in some cases residential areas belonging to locals that no longer can be claimed.

Despite assertions from company representatives that the property will be returned and expenses defrayed, locals remain unconvinced and have asked for the unconditional return of their lands. Locals suspect that this situation may lead to blackmail, where the company may promise compensation for unregistered lands only in the case that people agree to resettlement.

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6 ‘Red lines’ refer to the construction area of the project that was granted for one dollar to the investor.
Environmental impacts

According to EIA document, the project will lead to the destruction of a number of rare, endemic and endangered plant species. It will also cause the destruction of habitats belonging to endangered animal species. Decades will be needed to establish new fauna habitats, and their complete restoration will never be possible. The EIA also notes that further research should be carried out to determine the full environmental impacts, which is not in line with current Georgian legislation, as EIA reports must provide comprehensive research findings.

The EIA lists a number of mitigation and compensation measures that have yet to be implemented, including: transplantation in relevant conservation centres; plant reproduction from seeds collected in nature; and the creation of live plant collections in conservation centres. The Ministry of Environment and Natural Resources Protection has so far yet to take any steps to rectify these failures by the project developer.

It is unclear how much forest ecosystems will be destroyed or flooded by the project. According to the EIA, the surface area of Khudoni reservoir and total flooding area are the same at 528 hectares. This is one of the most serious mistakes made in the EIA report, because the Enguri River flows in the gorge with upward slopes, meaning that the area of the reservoir surface and total flooding area of the reservoir must be different. Because of this mistake, the assessment of the project’s impacts on climate change, ecosystem services and biodiversity loss are incorrect and the damages are unaccounted for.

*The Khaishura river and gorge*
It should also be noted that approximately the same amount of forest ecosystems were destroyed in the Borjomi district during the Russian military aggression of August 2008, and the Georgian authorities described the damage as ‘ecocide,’ assessing the damages at USD 1 billion.

The EIA also provides an insufficient assessment of the project’s cumulative impact on biodiversity. The EIA report reviews only the cumulative impact of the upstream Nenskra HPP; however, official information from the Ministry of Energy shows that nine more hydro plans are planned on the Enguri, including three with large reservoirs: Khaishi, Pari and Tobari. The Ministry of Energy also signed a memorandum for the construction of HPPs on the Nenskra outfalls and the River Mestiachala.

The EIA report neglects the cumulative impacts caused to biodiversity from the preparation of timber under long-term processing licenses. The Georgian–Chinese company owns a 20-year license of 38 000 hectares including Khudoni forest farms in Khudoni and Jvari; additionally, 25 five-year and ten-year timber preparation licenses have been issued, covering over 18 000 hectares adjacent to the villages of Khaishi and Chuberi.

It is clear from the plans of the Ministry of Energy and the EIA report that neither the investor nor the state plan to implement compensation or offset measures to address the high conservation status of Svaneti as a nature reserve and national park, or to protect its drainage basins. While there is no official protected status in Svaneti, the rich biological diversity of the unique area would be irreparably impacted by Khudoni. This is why the Dutch Commission for Environmental has made recommendations to protect different parts of Svaneti; however, the Ministry of Energy continues to act in a way that will cause irreversible damage to the unique environment of Svaneti.

**Impacts on microclimate change and health**

Locals are concerned that the construction of the Enguri reservoir has made the climate more humid, making life more difficult. “Fruit is rotting before ripening; we
even cannot dry our clothes," they say. Locals also fear that the construction of the second reservoir will make their lives even more unbearable and trigger negative impacts on their health. A doctor in Khaishi confirms these allegations, saying that cases of cardiovascular and pulmonary diseases are much more recurrent in Khaishi than other villages located similar distances from the Enguri reservoir.

High seismic zone and risks of dam failure

Locals say that the risk of dam failure is extremely high, because Svaneti is located in a seismically active area. The elderly population even has doubts over the strength of one of the load-bearing walls of the dam. Some locals from the villages of Zhgeti and Khaishi recall that during Soviet era construction, rock samples from another location were sent for analysis, because the rock in place was totally eroded and would not be able to bear such load. The Enguri river gorge is also sedimentary and at such risks of landslides are more higher. The Dutch Commission on Environmental Assessment also recommended additional research on sedimentation and landslide processes.

Landslides and erosion on the main road to Khaishi

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9 Advisory review of the Environmental and Social Impact Assessment of the Khudoni Hydropower Project; Paragraph 2.2: „The Commission recommends to measure the sediment load of the Enguri at Khaishi during at least one (hydrological) year. Also, we recommend to measure the rate of sedimentation in the existing Enguri Reservoir. And „The Commission recommends the ESIA to include field investigations to identify potential landslides and rock falls, a stability analysis, and the development of mitigation measures for unstable slopes to avoid landslides and rock falls into the reservoir area. “ http://moe.gov.ge/files/PDF%20%20Eng/News/Angarishi_ENG.pdf
Information disclosure and public participation

During the field visits we found that information about the project and the planned public discussion was distributed inconsistently and in piecemeal. While Khaishi residents were better informed, with almost all aware of the 17 September discussion, only a few had familiarised themselves with the EIA documents, though these were available at the local municipal hall.

However in other villages like Zhgeti, Vedi, Idliani and Chuberi, only several respondents knew that a discussion was planned on September 17, however those did were unaware of the meetings content. Many expressed a desire to attend the meeting – "we should know what they want, what they intend to do, we should express our opinions and tell them that we are against resettlement" - but at least a few feared the meeting related to a number of problems like transportation. Locals were also displeased with the chosen time for the public discussion – 14.00 on a Tuesday is very inconvenient for the working population.

Pressures on locals

A number of instances of intimidation and pressure were observed with interviews with villagers. Locals claim that the local police chief promised unreal compensation like automobiles and also advised them to agree on the resettlement. The day prior to the public discussion, the police chief arrived at Khaishi together with the director of the Trans Electrica and said that he was assisting him in opening an office, though locals had refused on a number of occasions to allocate an office area to the company. "Avoid making any noise, any posters and similar things tomorrow," the Deputy Police Chief, Goga Khupatsaria warned Khaishi residents.

Despite warnings’ from authorities, locals brought posters to the public hearing in Kaishi.

During the public discussion, the Deputy Energy Minister and deputy police chief ‘reminded’ the local governor several times that he was a public servant, which the
governor viewed as a threat, because he does not agree with the government’s position on the project and is among those 90 residents who swore that they would not allow the construction of Khudoni.

That public officials have also said that construction on Khudoni has already been decided is also a form of pressure, since some locals believe their opinions will not be taken into consideration. The Prime Minister’s call for Svans “to address the Khudoni issue with understanding” is another example of pressure from officials. “Keep in mind that Khudoni needs to be constructed like many other hydro power plans,” Ivanishvili said a just one day before the public discussion in September. That same evening, Energy Minister Kakha Kaladze gave a televised interview and promised that all Svans would receive appropriate compensation. “They talk to us resolutely, but our opinion is that the Khudoni dam must not be built,” said local priest Giorgi Chartolani to the Deputy Energy Minister.

Moreover, police officers were mobilised in Khaishi for the September consultations, and they refused to disclose their names. Locals say that they have not seen so many police officers in the village for years, adding that “this may frighten some locals who want to come out and express their opinions but will not because of such police presence.”

Locals from the village of Lukhi say that the Revenue Service also exerts pressure on locals. In particular, they claim that one of their neighbours was illegally fined for transporting one and a half cubic metres of wood. Locals link this incident to the project developers or their supporters. “They try to terrify us to make our lives here unbearable if we refuse to leave,” locals from Lukhi say.

**Political risks**

Khaishi is strategically located, for on the one hand it serves as the administrative center for surrounding communities like Idliani and Chuberi, and on the other it borders the Russian-occupied Kodori gorge. And unlike other mountain villages in Georgia, the population of Khaishi is increasing. Locals believe that if Khaishi is deserted, it will increase the risk of losing additional lands. Without Khaishi the villages of Chuberi and Idliani will likely be deserted, because the nearest potential administrative centers in either Zugdidi or Mestia are located 70 kilometers away.

During the 2008 conflict with Russia, troops occupied the Kodori gorge by passing first through Khaishi, after which they established there a checkpoint, indicating a
clear interest in the village. Locals say that if Khaishi is deserted, Abkhazians will openly voice their ambitions to occupy the Enguri gorge, as they still believe that the Enguri river represents a natural border between breakaway Abkhazia and Georgia. Moreover the proximity of large infrastructure to the conflict zone will add additional risk as a potential target.

Trans Electrica – Khudoni’s future owner

Trans Electrica Ltd was registered in the British Virgin Islands on 25 January 2010 and is the legal successor to Continental Energy Limited. Its authorised capital is GEL 200 million, and the company has two Indian and two Georgian directors.

During the scoping meeting on 4 November 2011, Paata Tsereteli, the company’s Georgian director, said that although Trans Electrica Limited has not implemented any project to date, its shareholders are experienced and competent, and Trans Electrica is a good example of joint business management. However Mr. Tsereteli did not name these shareholders, which were later identified as World Energy Limited\(^{10}\), SGGS Infrastructure Limited\(^{11}\); and Olney Assets S.A.\(^{12}\). According to the British Virgin Islands registry, the company World Energy Limited stopped functioning on 11 February, 2003, while the two other companies appear registered in offshore jurisdictions.

\(^{10}\) According to the data from the British Registry, the company with the same name really underwent registration on May 8, 2000, but it was dissolved on February 11, 2003. No information about any company with the same name can be searched so far. [http://www.cdrex.com/world-energy-limited-7536425.html](http://www.cdrex.com/world-energy-limited-7536425.html)

\(^{11}\) This company was established in the British offshore zone on July 29, 2011; [https://www.jerseyfsc.org/registry/documentsearch/NameDetail.aspx?id=281565](https://www.jerseyfsc.org/registry/documentsearch/NameDetail.aspx?id=281565)

\(^{12}\) This company was established in the Panama offshore zone on September 24, 2010. [http://opencorporates.com/companies/pa/713419](http://opencorporates.com/companies/pa/713419)
Annex

Public discussion in Khaishi, 17 September 2013

On September 16, Paata Tsereteli, the director of Trans Electrica, visited Khaishi together with Samegrelo–Zemo Svaneti’s deputy chief of police regional police department, where they met about ten local residents. The chief demanded that locals not express their protest against the project during the discussion and not to display protest posters.

The public discussion was scheduled for 2pm at the Khaishi municipality building, though the notification posted on the door of the building indicated the wrong venue.

A few hours before the discussion at about 10am, police from other locations gathered at the Khaishi police building. About 20 officers were mobilised with some carrying firearms. Later 20 more officers came to the consultation venue, along with the deputy chief and the Mestia police chief. When asked why so many police officers were mobilised, one police officer spokesman said that police regularly gather in Khaishi on a monthly basis. A local standing nearby said that he had never seen so many police officers in the village.

Shortly before the public meeting began, several police officers entered the meeting room and sat attentively, which to observers appeared as an attempt to silence those who might speak out against the project. Then Deputy Energy Minister Ilia Eloshvili came to the administrative building and told locals outside that Khudoni would be built in any case. He repeated the same thing during the meeting, fuelling already-high tensions.

The meeting room was too small for all interested in attending the discussion, and because of this, elderly people with children had to stand. Therefore the meeting
started 40 minutes delayed and was held outside the school building, under the open sun without any audio amplification. Next instead of company representatives speaking, Deputy Energy Minister Ilia Eloshvili addressed the audience, and instead of listening to opinions of locals, he spoke about the irreversibility of the project implementation. His approach was confrontational, arguing with anyone who expressed concerns about the project.

Many policemen were in the meeting room that was too small already.

After the three-hour meeting, locals asked to suspend the meeting, because mostly present were company representatives, consultants, public officials and police officers, with more locals unable to attend.

Project discussions in Tbilisi, 19 September 2013

Prior to the commencement of the public discussion, the company registered participants by recording their name, occupation and telephone number, a practice which is not in line with principles of public discussions on EIA reports, as it might encourage self-censoring for fear of retaliation. The entrance to the meeting room was guarded by a representative of Trans Electrica, prohibiting people who left temporarily or were late to re-enter (particularly representatives of NGOs and media).

The company’s three-page advertisement about the advantages of Khudoni was disseminated from the registration table, yet it did cover issues discussed in the EIA
like a project description or alternatives, its impact and scopes and so one. The meeting was scheduled to last just two hours, and ten minutes were dedicated to receiving the guests, another 20 for greetings and one hour for a presentation of the project. This left just 20 minutes for questions and answers and five minutes for final remarks. Because of the number of participants and public interest in the project, it was obvious from the beginning that 20 minutes was not enough time to address all opinions.

The meeting was opened by Deputy Energy Minister Eloshvili, triggering objections from participants, as it should be the investor presenting and defending the EIA findings, which is required by law. In response, Eloshvili explained that the agreement concluded between the investor and the Energy Ministry authorised him to do so. After the first presentation finished, participants expressed a desire to ask some questions, but the host of the meeting, the director of Trans Electrica Paata Tsereteli, did not let allow it. He deferred questions until after the second presentation, but then participants were not given the opportunity to ask them. The second presentation was dedicated to principles of resettlement instead of a presentation of the resettlement plan. A number of participants were not given the opportunity to ask questions, seek clarifications or express their opinions.

After the meeting ended, the host of the meeting, the director of Trans Electrica, accused a representative of Green Alternative who had been recording the meeting of verbally insulting another participant. The unspecified person tried to force Green Alternative’s representative out of the hall, resulting in commotion. Paata Tsereteli concluded the meeting, saying that the company had only hired the hall for two hours, with participants expressing as very few had had the opportunity to express their opinions.
The 1500 hectares of land handed over to the investor for project development included unregistered agricultural plots, pastures and in some cases residential areas belonging to locals that no longer can be claimed.