

Khudoni hydropower plant – a risky deal



CEE Bankwatch Network's mission is to prevent environmentally and socially harmful impacts of international development finance, and to promote alternative solutions and public participation.

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The proposed Khudoni hydro power plant is located in Svaneti Mountains¹, on the Enguri river Gorge, upstream from the Enguri HPP. The river Enguri represents the natural border between Georgia and separatist Georgian region Abkhazia, whose declared independence was recognized only by Russia².

According to official calculations, the Khudoni HPP will require four to five years of construction with a total projected cost of USD 780 million, for an installed capacity of 702 MW. It is expected to produce 1,445 TWh of output annually. According to the Ministry of Energy and Natural Resources of Georgia, 25 % of the work on Khudoni is already completed, in the form of existing infrastructure.

Historical background

The construction of Khudoni dam began in 1979. Fierce protests by the local population and civil society groups, joined by members of the pro-independence movement, convinced the Georgian government to issue a decree calling for the halt of construction works in June 1989.

However, the new Georgian government coming to power after the Rose Revolution has started once again looking for investors for Khudoni HPP.

In 2005, the World Bank approved a technical assistance grant for Khudoni, to be used for preparatory works (preliminary and feasibility studies), technical studies, an environmental impact assessment (EIA) and a Resettlement Action Plan (RAP). Nevertheless, the implementation of this

¹ Svaneti is one of the most beautiful and picturesque alpine regions of Georgia, situated on the southern slope of the main Caucasian range. The Greek geographer Strabo (end of 1st century B.C.) describes the Svans as a fierce, warlike mountain people, ruled by a king and a council of 300 elders and capable of fielding an army of 200,000. Svans History and Cultural Relations, <http://www.everyculture.com/Russia-Eurasia-China/Svans-History-and-Cultural-Relations>.

² The Georgia -Abkhazia war in 1991-1993 led to the displacement of 300 000 Georgian ethnic representatives who were forced to leave Abkhazia. The conflict between Georgia and Abkhazia did not finish there however. In August 2011, during the Georgia- Russia war, Russians occupied Abkhazian Svaneti - Kodori gorge during the occupation of Khaishi village. As a consequence, all 1,500 inhabitants of Kodori Gorge were forced to leave their homes and become internally displaced people.

project had to be delayed significantly as it failed to identify the risks stemming from the proximity of the Khudoni Project to an area (i.e. Abkhazia) outside of central governmental control and a potential site of military activities.³ Twice, in 2006 and 2008, Russian regular troops appeared in Khaishi village and occupied the area.

Already in 2005, the World Bank showed signs of enthusiasm about providing 50 million USD from their IBRD fund for the construction of export-oriented Khudoni plant⁴. The project appeared on the World Bank pipeline in June 2009, despite the fact that the Country Partnership Strategy for 2010–2013 did not recognise the priority of Khudoni project⁵.

Threat to nature and people

Khudoni HPP would intensify the devastation of endemic forests and wildlife habitat, facilitate erosion and landslide processes, and cause the degradation of upstream catchment areas in case of flooding of the reservoir area. Hence the 200 meter dam poses the serious risk of an ecological disaster in one of the most amazing highland regions of Georgia.

The Upper Svaneti area is inhabited by the Svans, an ethnographic Georgian population that managed to preserve even today their own language, traditions, architectural styles and ancient customs as part of everyday life. But today the Svans' livelihoods and cultural heritage are under threat. The HPP construction will lead to the forced resettlement of Khaishi Community (25 villages) inhabited by Svans. In total, around 2000–2500 people are expected to be relocated, representing as much as a quarter of the entire population of the Zemo Svaneti region (8 000 – 10 000 people).

It should be underlined that the Khaishi villagers have been resettled once before, by the Soviet Union. The majority of them chose to go back to their homes after the collapse of the empire.

The majority of Georgians as well as the local population are strongly against the construction of large HPPs in the region even if these were not involving the resettlement of a significant number of people⁶. In Upper Svaneti, locals have already experienced the negative impacts of the Enguri

³ Implementation Completion and Results Report (IDA-H2040) for a grant in the amount of SDR 3.5 million (US\$5.5 million equivalent) to Georgia for an infrastructure pre-investment facility project, September 28, 2011. World Bank.

⁴ „Under the possible IBRD enclave energy project (USD 50 million) the development of a new hydropower resource at Khudoni is envisaged that could generate more than 10 percent of annual consumption and about 20 percent of current hydropower production, improving the security of Georgia's energy supply. The project would be structured as an export oriented sale of power to neighboring countries“. Georgian Country Partnership Strategy for FY 2005–2009.

⁵ International Bank for Reconstruction and Development and The international Development Association and International Finance Corporation Country Partnership Strategy for Georgia for Period FY 10–FY13, August 2009.

⁶ Public hearings on scoping in Mestia and Khasihi in 2008, in Khasi and Tbilisi, 2011.

Dam: changes in the microclimate, negative impacts on health and agricultural practices, as well as negative impacts on cultural heritage. This makes them even more strongly opposed to yet another dam in their region.

Additionally, there is serious concern about the seismic and geological stability of the proposed dam. Georgia is located in a highly seismic zone, and the Svaneti Mountains are prone to earthquakes: in 1989, the Spitak earthquake ($M_s=6.9$) affected the region, followed by an even more intense one, the Racha–Dzjava earthquake ($M_s=7$) occurring on 29 April 1991.

High Cumulative Impact

A high level cumulative environmental impact assessment of existing and potential HPPs in the Enguri Gorge, including the impact of already existing Enguri Dam, has been done, but it covers only areas downstream from the proposed Khudoni Dam. With more plans to construct several other dams on the Enguri and Nenska rivers (upstream to Khudoni), it is not difficult to imagine that the the cumulative impact of the HPPs on the environment and the climate of the region, in conjunction with global climate change processes, would result in very strong negative effect on the unique biodiversity and water quality of Svaneti.

Economic Justification

The contract⁷ signed between the Georgian government and completely unknown, offshore Virgin Islands registered Georgian–Indian Company Transelectrica Ltd, is based on the BOO (Build–Own–Operate) principle that does not bring any significant income for the Georgian budget. Even in case the company sells the electricity to Georgia during winter months, the project proponent has the right to negotiate the tariff up to the price of thermal generation.

Meanwhile, the external costs including the construction of new roads (instead of flooded ones) that would connect the Upper Svaneti with the rest of Georgia and/or erosion management plans are not included in the project costs.

In addition, the feasibility studies undertaken by the World Bank make it clear that the Khudoni Dam construction does not represent the best option for Georgian energy security. One of the main pro–construction arguments used by the Georgian authorities and the developer, regarding the possibility to generate financial inflows from Khudoni through the selling of energy to neighboring countries, particularly to the Russian Federation and Turkey, is highly doubtful given that all these countries are doing extensive redeveloping of their energy generation systems at the moment⁸.

⁷ http://www.greenalt.org/webmill/data/file/xelshekruleba_opt.pdf

Recommendations

The government of Georgia plans that, with support from international financial institutions, it will execute at least 7 large greenfield projects in the forthcoming years including Khudoni⁹.

To ensure that the development of Georgia's power sector is sustainable, the IFIs must:

1. Enforce a moratorium on the funding of any large dam construction in Georgia until the strategic development plans of Georgia's power sector are developed in a participatory manner.
2. Carry out a Strategic Environmental Impact Assessment that would: address the ways in which existing electricity demand can be satisfied using the existing potential and alternatives; address the existing dams' issues¹⁰ as well as develop the most sustainable solutions for the sector; ensure inflows for the country budget; present a cost-benefit analysis of these alternatives, along with a cumulative impact assessment of the planned projects. The SEA should present the best scenarios not only for the development of new generation capacities or the rehabilitation of infrastructure, but include also the development of new renewable technologies as well as energy efficiency.
3. Ensure wide and fair public participation for the revision of the findings of the SEA and the follow up decision-making process.
4. Assist in the developing of a strategic development plan for Georgia's power sector based on participative processes.

For more information

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⁸ http://aarhus.ge/uploaded_files/aadc51690729057d4806cec364afd208aff35e7cbd8b6601778234180852d14d.pdf

⁹ EBRD and IFC already financed the Paravani HPP, and the IFC also considers funding of the HPP Cascade on Ajaratskali.

¹⁰ While Georgia has approximately 1600 MW of hydropower capacity that actually generate electricity at the moment, the installed capacity is around 2700 MW. The rehabilitation of these sites could bring around 2.2–2.5 TWh of additional hydro electricity. According to expert estimates, energy efficiency measures would decrease Georgia's dependence on gas by 10–20%.