

Problems of Hydroplant Constructing in Georgia – Dead-end or Opportunity?

Opinion

A protest wave against construction of hydropower stations in Georgia has reached its peak recently. For a large portion of citizens, HPPs are associated not so much with useful electricity and progress, as with environmental damage, involuntary resettlement, threats to interests and health of population. The public protest is an important reason of stalling or delays of the majority of about 124 announced projects. At the same time, the electricity consumption as well as related and import-dependence on other countries are increasing. 2018 forecast shows growth in demand of 7% and increase in net import of 42% (350 GWh) compared to 2017. Processes around HPP construction are getting alarming political overtone and are likely to be used to provoke regional separatist attitudes.

Although hydropower is a well-proven, traditional technology used for over a century, the rate of HPP construction has drastically increased in recent years and the global additions of capacity has reached 39% in 2005-2015 due, mostly in developing countries¹. The developed countries like Italy, Austria, Norway or Switzerland have almost fully used their economic hydropower potential², while they also have the high standards of protecting the nature, cultural heritage and citizens wellbeing. Georgia, despite having a strong tradition of hydropower and the lack of fossil fuels, has utilized only about its 20% (according to expert assessments) and is struggling to develop it further.

What are the reasons of controversy over hydropower development? Why Georgia is struggling to find the balance of economic, social and environmental interests without endangering its energy or national security? Below, we try to discuss some of the reasons and possible ways of their resolution.

1. Problems of HPPs Construction

- **Lack of strategies and strategic visions.** Georgia is still lacking the robust energy strategy and strategic vision that would clearly define the role of new HPPs and prioritize their development. The declaration of “maximal development of Hydropower” has not been convincing neither for society nor for specialists, especially while less cost-effective projects (e.g. Nenskra HPP) are being implemented. Strengthening of energy security requires a comprehensive analysis of alternatives based on professional planning methods

¹ https://www.worldenergy.org/wp-content/uploads/2017/03/WEResources_Hydropower_2016.pdf page.4

² For instance, see maps of hydro energy facilities in these countries: Norway - <https://imgur.com/POHfrOo> or medium and large HPPs in Alps: <http://maps.unomaha.edu/Peterson/funda/MapLinks/EuropeOverview/tfsv1map4.jpg>

which should be followed by convincing cost-benefit analyses regulatory impact assessments, strategic environmental impact assessments and public discussions of strategic documents.

- **Quality assurance and control of hydropower projects:** Mistakes and technical flaws in design and construction have affected the reputation of hydropower and development of plants. Unfinished construction of Mtkvari HPP, collapse of Shuakhevi HPP tunnel, landslide at Bakhvi 3 HPP, Dariali and Larsi HPPs damaged by Devdoraki landslide are the significant indications of underlying problems. These mistakes are not being duly recognized and analyzed for lessons learnt to avoid similar events in future. Instead, we see that after implementing one unsuccessful project, the same developers sometimes continue with other major projects, which raises a major concern in the society³.

- **Flaws in environmental procedures and environmental study documents:** it has been a subject of criticism of environmentalists for a long time, that environmental impact assessment lagged behind the main technical decisions of projects and could not affect them properly. This has been partly addressed by recent legislation changes. Another subject of criticism was the quality of studies in EIA documents which has raised concerns and negative attitudes.

- **PPP procedures:** Memorandums on the construction of more than 124 HPPs majority of which have been signed within the past few years feature largely uneven and sometimes undisclosed terms and conditions⁴. The procedure with high level of arbitrariness leaves a space for allegations in personal interests of officials. Public distrust is strengthened further by specific individual benefits to some of the projects: e.g. 1500ha-s of land given to Khudoni HPP project, building dedicated transmission lines to other projects, questionable extensions of terms etc. The state backed PPAs signed as a part of these agreements, largely contradict with market competition and impose excessive financial risks on the state (as indicated by IMF). This mechanism have been ineffective in attracting real strategic investors. Many of the developers lack experience, technical knowledge and/or financial resources to properly develop projects on time.

- **Lack of communication** – local population in general complains for the lack of consistent and sincere communication from government and developers. Restoration of trust becomes much more difficult after the breakdown in communication and involvement of SWAT teams makes the situation even worse. The mistrust was fueled by doubts in integrity of officials and incomplete or misleading information provided to uninformed population by third parties as well as possible participation of individuals with undisclosed personal interests.

2. Problems of opposition to hydro power plants

³ For instance, right to construct Namakhvani HPP cascade was obtained by Clean Energy Group which supposedly failed to properly complete the construction of Shuakhevi HPP.

⁴ 15 of signed memorandums imply 12-month guaranteed electricity procurement, 57 memorandums imply – 8-month guaranteed electricity procurement, 19 – 3-6 months or 20% of generation. Prices vary from 4.5 cents to 10.5 cents (needs to be clarified) while some of them are completely classified.

The protest against HPPs is facilitated by environmental watchdog organizations who conduct effective, informed and allegedly resourceful campaign. Along with appealing to the abovementioned flaws in HPP development, these campaign also bears some signs of subjectivity and partisanship:

- Along with fair criticism of the specific projects, there is a tendency of wider demonization and defamation of hydropower as outdated technology, harmful to the country, dangerous for local population and rejected by modern world. This attitude, to varying extent, extends to all types of plants: large or small, dam or run-of-river;
- Legitimate environmental concerns are sometimes accompanied by exaggeration of minor issues and diminishing benefits for country or local residents that might be derived from development;
- The fair criticism of environmental studies is sometimes accompanied with exaggeration of relatively small technical inaccuracies and the whole EIA process as well as participating professionals are being discredited;
- There are signs of inflating the fears of less informed part of the population, including the issues of landslides, floods, earthquakes or threats coming from electricity transmission or generating infrastructure;
- Unrealistic alternatives for satisfying the demand by means of only energy-efficiency and wind or solar energy are being offered vs. constructing the HPPs;
- A fair criticism of state energy policy is accompanied by neglect of ongoing developments e.g. construction of thermal power, development of solar or wind projects;
- Legitimate economic and cultural/traditional interests of local population are sometimes being promoted at the cost or with neglect of common national interests.
- The problems extend even to the projects with minor environmental damage where the agreements might be achieved relatively easily to the benefit of stakeholders.

This makes us believe that the environmental organizations and persons should be considered as essentially one party of the process who tries to defend the nature and interests of local residents. If not balanced with alternative views they may sometimes go beyond the limit of competence, including the directions contradicting the interests of state and society.

Results

The situation is becoming more like a stale mate. On the one side, increasing energy deficit and high costs of import, as well as obligations to investors and their financial losses encourages the government to accelerate construction of hydro power plants. On the other side, agreement on compromises with local residents is complicated by the lack of information and trust, publicly announced collective firm decisions and presumably, encouragement from the third parties.

Protest against HPPs has become particularly intense in Svaneti Region where several medium and large size HPPs are being developed, including Nenskra and Khudoni HPPs. It came to the point, where the protesters against HPP construction, supported by non-governmental organizations, are ready to announce Svanetians as citizens distinguished from others “with the legitimate right of many-sided

superiority and priority in Svaneti⁵". They are asking to assign Svanetians with the status of "aboriginal" or "indigenous" residents almost presenting them as suppressed and different from the rest of Georgians. The traditional lifestyle of Svaneti is presented in contrast with the state rule at local and international forums. This resembles the features a political campaign, creating the regional separatist sentiments and weakening the state, in line with other hybrid threats from Russia. Another issue is, how thoughtful and useful it is for Svaneti residents to live in the environment of isolationism and medieval traditions in 21st century.

This situation endangers energy safety of the country and interests of economic developers are incurring losses, while local residents may be losing the potential benefits brought by development. Polarization of society and encouraging local isolation sentiments endanger national security of the country in view of potential hybrid threats. It is necessary to act energetically in order to come from this dead-end with minimal losses.

Possible ways out

Sustainable and safe progress of the country requires thoughtful, balanced development of natural resources including energy potential. Economic and energy interests should be balanced with environmental and social development interests which obviously does not mean rejection of every potential HPP neither their chaotic "maximal" development.

It is necessary to **turn the current crisis into a working process** so that on the background of severe foreign and domestic challenges, time and energy of the society is not spent on destructive controversies, but is used for constructive development. It is necessary to start a **qualified dialogue among stakeholders** based on the principles of sustainable development where every party will be properly represented, including developers and local residents, state and non-governmental organizations and specialists. Initially, **there is a need to position the parties correctly** in order to clearly define their interests, competences and exclude potential hidden motives among public officials as well as developers and protesters against HPPs.

It is necessary to achieve a shared vision of basic values and sustainable development principles in order to be able to balance, economic, environmental, social and security interests. Open dialogue must be based on professional studies and data, best international practices and scientific knowledge to limit unprofessional and populist interventions.

More specifically, it is necessary to:

- Develop a robust energy strategy, starting with a series of relatively simple cost assessments and cost-benefit analyses for simpler decisions;
- Start the professional analyses of the flaws during the design and construction of HPPs, derive conclusions and lessons learned for establishing a strict quality assurance system and communication system based on international practice;

⁵ Free translation

- Evaluate the status of MoUs on HPP construction. Analyze the cost-efficiency of their continuation with the account of current state of the projects energy security requirements, mutual obligations of the parties, investments made and the damage to environment already inflicted;
- Ensure qualified strategic communication and awareness raising of citizens on energy security, energy planning, principles of environment protection and sustainable development, arrange public discussions of strategic documents.

The state needs to take an initiative and proceed with professional, balanced and sincere dialogue to alleviate the tensions, turn the contradiction into working process and create a room for reasonable, sustainable development of energy sector. This also is also an opportunity to bring up the level and capacity of public institutes, civil actors and professionals and this chance should not be missed.

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