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Veröffentlichungsversion / Published Version
Zeitschriftenartikel / journal article

Empfohlene Zitierung / Suggested Citation:
German, T. (2021). Georgia: Focus on Hydropower Generating Protest. *Caucasus Analytical Digest*, 120, 12-15. https://doi.org/10.3929/ethz-b-000476772

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https://nbn-resolving.org/urn:nbn:de:0168-ssoar-87114-7

Georgia: Focus on Hydropower Generating Protest

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DOI: 10.3929/ethz-b-000476772

Abstract

Georgia has significant hydropower potential and there are plans to construct a number of new hydropower plants (HPPs). However, concerns have been raised about the impact of these new HPPs on local communities, as well as damage to pristine mountain environments and the biodiversity of the Caucasus. Additionally, Georgia is situated in a seismically unstable region, meaning it is prone to frequent tremors and earthquakes. There have been a number of protests about proposed projects, notably clashes between police and protestors in April 2019 over the construction of an HPP in the Pankisi Gorge. Thus, the example and experience of Georgia raises questions about the push towards renewables, in particular the need to ensure project sustainability. This article will assess the contribution that hydropower makes to Georgia's energy mix, future projects and what lessons can be drawn from the Georgian experience about the demands of balancing the country's electricity needs against environmental and social costs.

Introduction

Sources of renewable energy, such as hydropower, are viewed as a potential solution to the challenges of climate change and sustainable development, a way to offset a country's demand for electricity against its commitments to meeting the climate targets set by the Paris Agreement. However, the experience of Georgia suggests that states need to be cognisant of the difficult trade-off between the development of renewable energy sources, which may not always be as clean and sustainable as anticipated, environmental conservation and the impact on local communities.

Hydropower constitutes over 80% of Georgia's generating capacity and from 75% to 90% of power generation. The country has over 70 hydropower plants (HPPs) in operation, providing over 2,700 megawatts of generating capacity. Of these, two HPPs provide nearly half of the country's electricity supply: Enguri and Vardnili, two Soviet-era plants located in the north-west of the country. Georgia has significant hydropower potential and the government is keen to develop the country's hydropower potential further in order to bolster energy security. According to the country's National Renewable Energy Action Plan, approved in 2019, the potential capacity of Georgia's hydropower is estimated to be 15,000 megawatts (MW), of which less than 25% is currently utilised (Ministry of Economy and Sustainable Development, 2019).

Domestic renewable resources such as hydropower are viewed as a natural alternative to dependence on imported fossil fuels such as crude oil and natural gas for power generation, and the government hopes to achieve energy self-sufficiency through the utilisation of indigenous renewables. Until late 2008, Georgia was heavily dependent upon imported Russian gas and consequently was at the mercy of the Kremlin, which has wielded the "energy weapon" several times in its spats with the Georgian government over the years. Gas supplies were frequently cut off during the winter months as political tensions spilled over (most notably following an explosion on a pipeline in North Ossetia in January 2006), forcing Tbilisi to seek increased supplies from neighbouring Azerbaijan. Since 2009, most of Georgia's natural gas needs have been met by imports from Azerbaijan, with only a very small amount coming from Russia.

Georgia's hydropower potential is thus viewed as a way to strengthen the country's energy security whilst also meeting its environmental commitments. The 2015 Energy Policy sets out a number of core objectives, including the diversification of supply sources and optimal utilisation of local resources, alongside the development of renewable resources: the document notes that Georgia is 'remarkably rich' in hydropower resources. A further key objective is the establishment of Georgia as a regional platform for the generation and trade of clean energy: 'Georgia's wealth in existing hydro-resources, corresponding infrastructure and favourable investment climate enable the country to establish itself as a regional platform for the generation and trading of clean energy' (Ministry of Energy, 2015). The utilisation of the country's existing clear energy potential, including hydropower, is a vital step towards achievement of this goal and there are plans to construct a number of new HPPs, including the Namakhvani HPP cascade project in western Georgia and the Nenskra HPP project in the Svaneti region.

However, one of the key issues with the use of hydropower for electricity generation is its seasonality, which leads to a gap between generation and consumption over the winter months, when high demand for electricity

coincides with depleted storage in reservoirs, reducing hydropower generating capacity. During the summer months, Georgia exports power to its neighbours, including Turkey and Russia, but has to import from Azerbaijan and Russia during the winter. In 2019, imports of electricity were needed even during the summer months to meet growing demand, and the supply-demand gap continues to grow. Furthermore, the exploitation of renewable resources has a cost, both in terms of social and environmental effects, and these projects have met considerable opposition from local communities and environmental organisations. The very features that make Georgia an ideal location for the construction of new HPPs also undermine the rationale for doing so: pristine mountain areas with fast-flowing rivers. Whilst hydropower harnesses the power of nature to generate electricity and is emission-free, it relies upon the natural environment and the construction of industrial generating facilities such as large dams which block river flow, have serious environmental and social impacts, and displace local communities and wildlife.

Environmental Challenges

Concerns have been raised about the impact of the construction of Georgia's proposed new HPPs on local communities, as well as damage to pristine mountain environments and the biodiversity of the Caucasus, which is one of the most biologically rich areas on earth. Described by the World Wildlife Fund as a 'biodiversity hotspot', it is also one of the world's most endangered areas.[1] Georgia's National Security Concept, adopted in 2011, identifies the threat posed by environmental challenges and states that 'ensuring the environmental security of Georgia and the region' is a key national interest.[2] Squeezed between the Greater Caucasus Mountains to the north and Lesser Caucasus Mountains to the south, Georgia is situated in a seismically unstable region, meaning it is prone to frequent tremors and earthquakes. It is also vulnerable to natural environmental disasters such as drought and flooding, all of which pose significant risks to the development of HPPs. The most powerful earthquakes in the contemporary era have taken place along the Greater Caucasus: the Racha earthquake of 1991, measuring 7 (Richter scale) in magnitude, and the earthquake of 2009 in Oni region, measuring over 6, both occurred in the mountainous northwest of the country where HPPs are either planned or under construction.

Climate change is expected to increase the frequency and magnitude of natural disasters such as flooding and droughts. Climate change has the potential to exacerbate existing social, economic and environmental difficulties. At a regional and local level, infrastructure will be threatened, health and social services will come under great pressure, homes and property will be damaged and possibly destroyed, and there may be tensions between environmental refugees and local inhabitants. A regional study on the impact of climate change estimates that Georgia suffered economic losses of at least US$2.7 billion due to climate-related natural disasters and land erosion over the last 30 years (Westphal et al., 2011). While hydropower is one way for the state to meet its climate change commitments, the development of new HPPs comes at a cost: for example, the construction of dams often entails deforestation of rural areas, which can lead to landslides.

Social Protests

There have been protests against proposed hydropower projects across Georgia since the 1980s. The construction of the 702MW Khudoni HPP on the Svaneti region's Inguri River triggered nationwide protests and a hunger strike, leading to construction being suspended in 1989. Subsequent governments have sought to reinvigorate the project, but its future remains unclear. As part of its election manifesto in 2012, the "Georgian Dream" coalition pledged to ban the construction of large HPPs (Dundua & Karaia 2019), a promise that was abandoned once it took power and hydropower became linked to Georgia's economic development.

The proposed construction of new HPPs remains a controversial issue in the country and there have been ongoing protests, notably clashes between police and protestors in April 2019 over the construction of an HPP in the Pankisi Gorge. A number of non-governmental organisations (NGOs) are actively engaged in opposing new projects and drawing public attention to the wider environmental and societal costs, including Green Alternative and the Green Advocacy Platform (which brings together Green Alternative, the Georgian Young Lawyers' Association and the Human Rights Education and Monitoring Centre).

In November 2020, police forcibly dispersed a rally blocking the main Kutaisi–Tsageri road, as protestors attempted to prevent construction equipment reaching the site of the proposed Namakhvani HPP cascade project, which is being developed by Turkish construction company Enka and Norway's Clean Energy Group. There have been long-running protests against the planned HPP in western Georgia's Tskaltubo and Tsageri districts, which residents of the Rioni Gorge say will have devastat-

1 For further details see http://wwf.panda.org/what_we_do/where_we_work/project/projects/index.cfm?uProjectID=GE0026 [accessed 20 November 2015].

2 *National Security Concept of Georgia*, adopted by parliament on 23 December 2011, https://mod.gov.ge/uploads/2018/pdf/NSC-ENG.pdf [accessed 10 January 2021], p. 6.

ing environmental and social impacts. The Namakhvani HPP cascade is one of the country's largest hydropower projects, estimated for completion in 2024, and would include two dams with a planned combined capacity of 433MW, over 12% of Georgia's electricity consumption.

Georgia's Public Defender[3], Nino Lomjaria, added her voice to criticism of the government's plans in a public statement. Acknowledging the critical importance of developing the country's energy potential and natural resources, she noted it was 'unfortunate that the State has not yet planned a long-term energy policy for the rational use and sustainable development of energy resources, which should be created and implemented in practice as a result of extensive public discussions and on the basis of the principle of transparency' (Public Defender of Georgia, 2020). Reminding the authorities that Article 29 of the Constitution enshrines in law the right of all citizens to participate in the adoption of decisions related to the environment, she stated that decisions made by state agencies with regard to the project had failed to answer the "legitimate questions" of society, pointing to a lack of trust in the outcomes of environmental impact assessments, a lack of public involvement, disregard for the socio-economic interests of local populations and doubts about the utility of the project.

Further controversy arose in the spring of 2020 when the government gave the go-ahead for the construction of the 206MW Oni HPP Cascade in Racha region (the location of one of the country's largest recorded earthquakes in 1991). Ministerial approval for the project was granted during the early days of the COVID-19 crisis, when restrictions prevented any public protest against the decision. In response to public anger and opposition from a number of environmental NGOs, the Minister of Environmental Protection and Agriculture, Levan Davitashvili, warned that disinformation about the project was being spread and accused NGOs of making "irresponsible" and "misleading" statements with the intention of "deliberately deceiving the population" (Ministry of Environmental Protection and Agriculture of Georgia, 2020). Such strong public accusations from a serving minster indicate a high level of frustration within government at continuing to come up against strong popular opposition to their plans for economic development at the expense of long-term sustainability.

Another major project, the construction of the Nenskra HPP (which was due to be completed in 2021), has been the subject of a compliance review following a formal complaint initiated by several Georgian civil society organisations and affected communities in 2018. The project, being developed by the Georgian government and Korean company K-Water—with funding from the European Bank for Reconstruction and Development (EBRD) and the European Investment Bank (EIB)—envisages the construction of a 130-metre dam with an installed capacity of 280MW on the Nenskra river in Georgia's mountainous Svaneti region. The review, released in September 2020 after a two-year investigation, found significant failures in the project's compliance with the standards required by both the EBRD and EIB in relation to a number of issues, including indigenous peoples, the assessment and management of environmental and social impacts, and cultural heritage (European Bank for Reconstruction and Development July 2020). The findings raised questions about the viability of the project and highlighted enduring concerns about the environmental and social impacts of Georgia's aspirations to harness its hydropower resources.

Conclusions

Georgia has significant hydropower potential and there are plans to construct a number of new hydropower plants. However, the very features that make Georgia an ideal location for the construction of new HPPs, also undermine the rationale for doing so: pristine mountain areas with fast-flowing rivers. Whilst hydropower harnesses the power of nature and is emission-free, it relies upon the natural environment and the construction of industrial generating facilities such as large dams, which block and divert river flow, have serious environmental and social impacts, and displace local communities and wildlife. The International Energy Agency has recommended that the Georgian government ensures adequate measures be taken to guarantee that new HPPs comply with the highest technical, safety, environmental and social quality standards as a possible way of reducing local opposition in the future.

A focus on renewable energy entails trade-offs that have long-term implications in terms of social and economic consequences, particularly for the livelihoods of local communities living near such projects. There is a tension between the current and future needs of local communities, the demands of economic development, investor interest and international commitments, which gives rise to a complicated balancing act for national governments. The Georgian government is facing a further challenge in its ongoing democratic consolidation, balancing the requirement for sustainable economic growth against the needs of local populations, whilst simultaneously protecting the country's unique environment, its biodiversity and its independence.

Please see overleaf for information about the author and a bibliography.

3 The Public Defender is an independent office responsible for overseeing the observance of human rights and freedoms in Georgia. It advises the government on human rights issues and analyses the state's laws, policies and practices, in compliance with international standards.

About the Author
Dr Tracey German is a Reader in the Defence Studies Department at King's College, London. Her research focuses on Russia's relations with its neighbours and on conflict and security in the Caucasus and the Caspian region.

Bibliography

- European Bank of Reconstruction and Development (2020). *Nenskra HPP Compliance Review Report: EBRD Project Complaint Mechanism, Case 2018/08*, July, London, EBRD. Available at: https://www.ebrd.com/documents/ipam/ipam-compliance-review-report-nenskra-hpp.pdf?blobnocache=true. Accessed 1 February 2021.
- Ministry of Economy and Sustainable Development of Georgia (2019) *National Renewable Energy Action Plan (NREAP)*, August. Available at: http://www.economy.ge/uploads/files/2017/energy/samoqmedo_gegma/nreap_v_3_eng_21022020.pdf. Accessed 18 December 2020.
- Ministry of Energy of Georgia (2015) *Main Directions of the State Policy in the Energy Sector of Georgia*. Available at: http://energy.gov.ge/ministry.php?id_pages=12&lang=eng [accessed 9 January 2021]
- Ministry of Environmental Protection and Agriculture of Georgia (2020) *Press release*, 12 May. Available at: https://mepa.gov.ge/En/News/Details/18944. Accessed 1 February 2021.
- Public Defender (Ombudsman) of Georgia (2020) *Public Defender Responds to Public Protest over Namakhvani HPP Cascade Project*, 22 November. Available at: https://www.ombudsman.ge/eng/akhali-ambebi/sakhalkho-damtsveli-namakhvanis-hesebis-kaskadis-proekttan-dakavshirebit-sazogadoebashi-arsebul-protests-ekhmianeba. Accessed 3 January 2021.
- Westphal, M. I., Mehtiyev, M., Shvangiradze, M. and Tonoyan, V. (2011) *Regional Climate Change Impacts Study for the South Caucasus*. Tbilisi: UNDP. Available at: http://www.ge.undp.org/content/dam/georgia/docs/publications/GE_SC-CC-2011.pdf. Accessed 28 August 2015.