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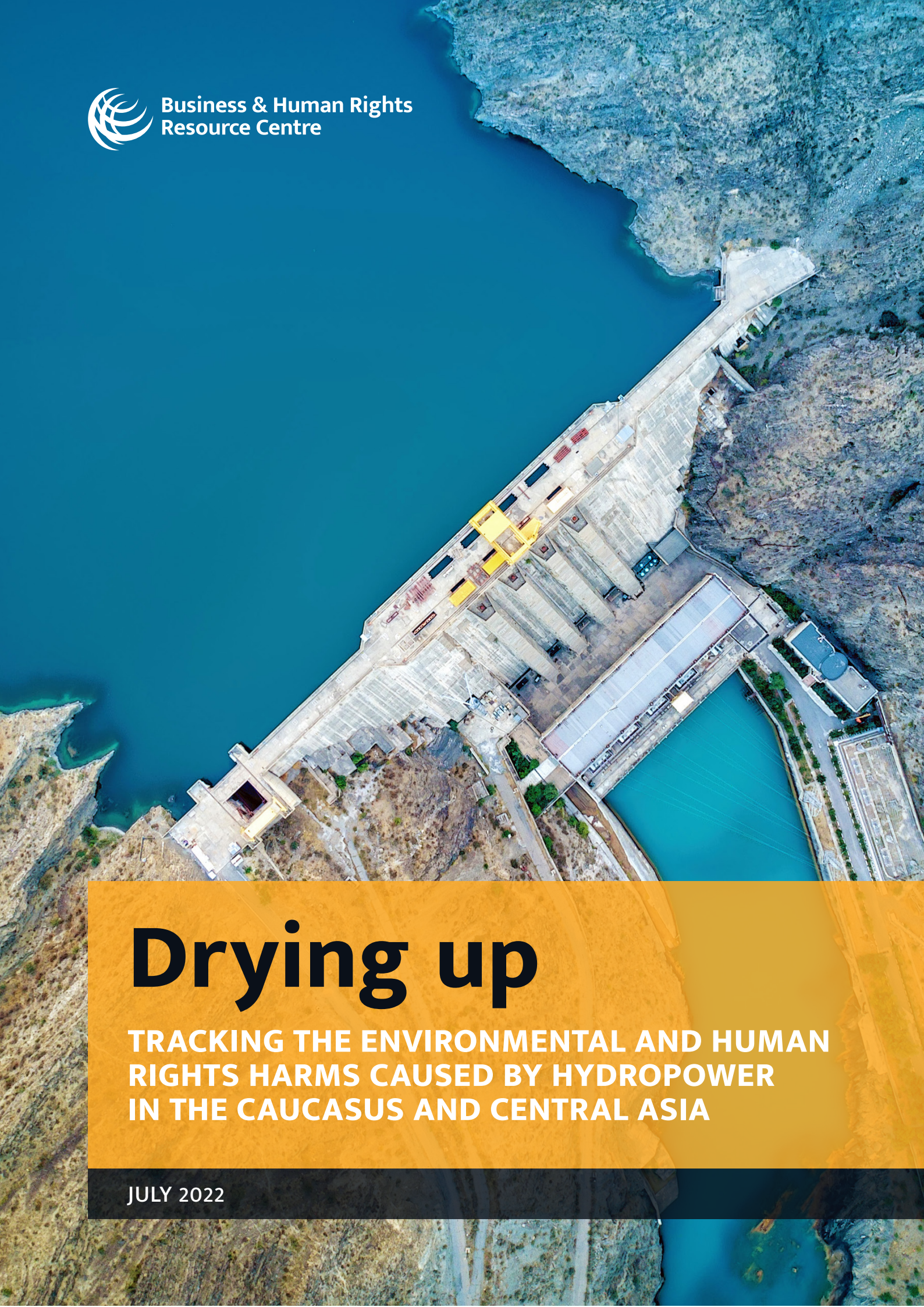

Drying up

TRACKING THE ENVIRONMENTAL AND HUMAN RIGHTS HARMS CAUSED BY HYDROPOWER IN THE CAUCASUS AND CENTRAL ASIA

JULY 2022

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Executive summary

Central Asia and the Caucasus need growing power sources to support their sustainable development. Increasingly, the region's oil and gas will have to be left in the ground to achieve net zero targets. Renewables, from wind, solar and hydropower sources, must play the central role in the region's energy future. However, as this briefing highlights, the hydropower industry model is broken, creating significant social and environmental costs with apparent impunity. The evidence of human misery and environmental damage – from our research on 265 alleged human rights issues linked to 32 hydropower projects – demands urgent attention from the international banks and investors backing these projects. The unnecessary harm linked to the hydropower industry now calls for a transformation of approach by investors and lenders in the region, as well as companies.

We have tracked publicly reported allegations of environmental and human rights abuses against companies planning or operating hydropower plants (HPPs) in Armenia, Georgia, Tajikistan and Kyrgyzstan. This briefing presents findings from data gathered over the last 10 years alongside illustrative case studies from the region. Further details are available in our methodology.

Key findings

In total, 265 human rights and environmental issues were recorded relating to 32 hydropower projects in the four countries included in our analysis.

- **Impacts on communities** were the most frequently reported, accounting for **98** of the issues recorded. **Sixty-seven** refer to **environmental impacts**. Other impacts raised include **governance and transparency issues (55)**, impacts on **human rights defenders (HRDs) and civil society (25)** and impacts on **labour rights (20)**.
- Of **32 hydropower projects** assessed, **17** received funding from international financial institutions (IFIs), including four HPPs which received funds for rehabilitation purposes.
- All of the investee companies have been linked to allegations of human rights and/or environmental abuses.
- Not a single investee company has a publicly available human rights policy.
- **Over two-thirds (71%)** of hydropower projects studied in Georgia are funded by the European Bank for Reconstruction and Development (EBRD). All were linked to issues with access to information and adverse impacts on community livelihoods.
- **Two-thirds (67%)** of hydropower projects assessed in Armenia are funded by IFIs (primarily the German Development Bank (KfW)). Seven out of eight faced issues related to access to water.

In Central Asia, many development banks continue to finance the construction of new plants, as well as the operation and/or rehabilitation of Soviet-era HPPs. Kyrgyzstan's **Toktogul HPP** and **Uch Kurgan HPP**, for example, received rehabilitation funding from the Asian Development Bank (ADB) and the Eurasian Development Bank (EDB). The rehabilitation of the **At-Bashi HPP** is funded by the Swiss Government. The EDB is investing in the operations of **Kambarata-2 HPP**, which faces allegations of adverse impacts on environment, community health and safety, and access to information. Some IFIs are also examining the potential of investing in the construction of new hydropower projects in Central Asia.

International finance institutions and development banks have human rights responsibilities under international standards and the UN Guiding Principles on Business and Human Rights (UNGPs). Most also have their own social, environmental and human rights standards. Financing irresponsible or harmful projects constitutes a failure to uphold these responsibilities.

The evidence demands a transformation of approach by hydropower companies and those investing in them. To avoid further human rights abuse and environmental harm, companies and investors should:

- Insist on companies developing **robust human rights policy and practice**, with strong board responsibility for oversight, rigorous reporting standards and transparency.
- Ensure effective **human rights and environmental due diligence** for every project, with strong community and worker engagement, to identify human rights and environmental risks in their operations and supply chains. Design effective action plans to mitigate or eliminate risks identified.
- Publish and implement a clear and publicly available policy on **access to remedy**, complemented with no-reprisal and whistle-blower policies to protect human rights and environmental defenders.
- Investigate **co-ownership and co-benefit models** to prevent abuse and bring strong benefit to both companies and communities through greater stability and security.
- Review any future hydropower project proposals mindful of alternative, less damaging **renewable energy options**, climate change risk for hydropower, and potential social and environmental costs.

AT A GLANCE: ALLEGATIONS TRACKER FINDINGS

265
human rights and environmental issues recorded

32
hydropower projects

0
companies have a publicly available human rights policy

98
issues relating to community impacts recorded

Country overviews

Armenia

Armenia has two large HPPs and approximately 189 small HPPs with operation licences (as of October 2021), plus an additional 23 small plants under construction. The number of small hydropower plants (SHPPs) has rapidly grown over the past decade, largely due to the adoption of a new law in 2001 requiring Armenia's Electric Networks of Armenia CJSC – the country's sole electricity distribution company – to buy up all electricity generated by SHPPs in their first 15 years of operation. The business became attractive to investors not only due to guaranteed full repayment of loans, but also due to lack of competition in the electricity consumption market, coupled with relatively high electricity tariffs. Overall, HPPs generate 28% of Armenia's electricity, with SHPPs contributing 10% of total energy generated.

State regulation of the operation of HPPs is not effective. In 2021 alone, the scale of damage caused by 17 hydropower plants was over 626 million Armenian Drams (approx. USD 1.5 million). Non-compliance with regulations has been exacerbated in the past decade as officials – from local government to top political figures in the country – are among SHPP owners.

The hydropower sector causes environmental havoc by disrupting ecosystems, causing loss of biodiversity, declining water quality and quantity in rivers, and deforestation. Worsening water quality also leads to socio-economic harm for communities, who face difficulties accessing water for agriculture and recreational use. Often, there is no local participation in decision-making regarding the development of SHPPs.

Local inhabitants do not benefit from electricity generated in their communities, as price tariffs are not lower for local residents. Companies rarely provide socio-economic assistance to communities where SHPPs operate. Their operations often do not comply with Armenia's Environmental Impact Assessment (EIA) requirements, and other laws, such as the Water Code, Forest Code, Law on Specially Protected Nature Areas, and laws on Flora, Fauna, Lake Sevan are often violated.

IFIs have shown great interest in providing loans for many of the SHPPs in Armenia, specifically the EBRD, KfW, and the International Finance Corporation (IFC). These financial institutions provide loans through local commercial banks in Armenia such as Ameriabank and Cascade Bank. The largest share of loans is provided by KfW, at EUR 66 million.

Case study: Yeghegis river

Around 17 SHPPs operate on the Yeghegis river and its surrounding streams, causing stress for the ecosystem as well as for nearby communities. Monitoring has shown communities such as Shatin and Yeghegis, located on the banks of the river, have problems with access to water for irrigation and livestock, which began after operations commenced at the nearby **Nane SHPP**, built by **Arates Energy LLC** on a tributary of Yeghegis and owned by the deputy head of the Yeghegis community. Elsewhere, **Yegheg SHPP**, operated by a company of the same name, was met with opposition when Shatin community members raised concerns over a lack of proper public hearings and consultations.

Communities residing near the Yeghegis river have raised concerns about changes in local climate, reporting hotter summers and lack of moisture resulting in drying of flora and shrinking fish populations. Livelihoods have been affected by cases of SHPP pipeline explosions which flooded community land, leaving areas unfit for further cultivation.

Yeghegis reserve is a habitat and migration corridor for animals listed as threatened species by the International Union for Conservation of Nature (IUCN), such as the bezoar goat, Armenian moufflon and Caucasian leopard. Armenian law bans the construction of SHPPs in protected areas. As a result, Armenia's laws "On Flora", RA Law "On Fauna", and the UN Convention on Biological Diversity are violated.

Despite projects contravening their own socio-environmental regulations, including the provision on public participation in decision-making, as well as responsibilities outlined in the UNGPs, IFIs have invested in some of these SHPPs: EBRD sponsors the **Yeghegnadzor SHPP**, owned by **Mina-Maya LLC**; KfW funds **Yegheg SHPP**, owned by **Yegheg SHPP LLC**.

Georgia

Georgia's hydropower sector has seen growing investments in recent decades. Approximately 84 HPPs are in operation, with a further 24 at the construction and licensing stage and 67 projects at the technical-economic research stage of development. Hydropower accounts for around 78% of Georgia's total energy generation, but there is growing public opposition to hydropower projects. The 2018 National Baseline Study on Business and Human Rights highlighted hydropower projects' inadequate assessments of impacts on the environment and communities.

Communities face land and property deprivation due to geological risks, since many hydropower plants are built or planned on seismic and landslide zones, and also due to improper land registration in Georgia and the absence of legislation for involuntary resettlement resulting from infrastructure projects. As a result, locals face risk of land grabs during infrastructure development, while Indigenous groups face the additional threat of loss of cultural heritage when major projects are given the green light without effective human rights impact assessment. Even if hydropower projects do not pose the risk of resettlement or land grabs, communities have raised concerns over access to water and flood risks due to dam construction, which can lead to food insecurity.

Investors have benefited from Georgia's recent moves to liberalise the energy market. IFIs have actively invested in hydropower projects in Georgia while international corporations eagerly participate in ownership, construction and management. IFIs investing in HPPs in Georgia include EBRD, European Investment Bank (EIB), IFC, Asian Infrastructure Investment Bank (AIIB), ADB, and Korea Development Bank. EBRD and IFC have been criticised for their involvement in projects which do not meet their own social and environmental standards, and potentially setting precedents for other project developers using the same standards. This raises the question of IFI responsibility to mitigate harms in other projects in addition to their own investments.

Case study: Nenskra HPP

EBRD and EIB are two of several financial institutions investing in the planned 280MW **Nenskra HPP** on the Nakra and Nenskra rivers in the Upper Svaneti region of north-west Georgia. ADB, AIIB, and Korea Development Bank are also involved in the project. In 2020, EBRD and EIB published their conclusions following a two-year investigation of the Nenskra project based on complaints submitted by project-affected communities and environmental groups. The findings showed the project's failure to comply with the banks' own standards on issues including Indigenous peoples' rights, protection of cultural heritage, information disclosure and engagement of local communities and other stakeholders. With regard to the project's land acquisition and livelihood restoration plan, EBRD's complaint mechanism found *"the Bank non-compliant with paras. 4, 5, 6 and 36 of the 2014 ESP with respect to PR 5, as Bank Management did not seek to ensure that PR 5 requirements related to livelihood restoration were met, and allowed an arbitrary threshold for livelihood restoration to be established."*

Apart from complaints submitted to investors, communities and activists also organised protests in local villages and in Tbilisi. In March 2018, Svan Indigenous communities published a joint statement expressing their legal entitlement and authority over the territory of Svaneti and their opposition to any project, including HPPs, mining and other activities which harm nature, livelihood, material and non-material cultural heritage of the entire Svaneti region.

At the end of their visit to Georgia in April 2019, the UN Working Group on Business and Human Rights (UNWG) raised concerns about Nenskra and other HPP projects, mentioning that *"despite the additional measures taken to comply with the standards of international financial institutions [...] there was a perception that consultations with communities were conducted as a check box exercise."*

The Nenskra HPP project is located in a region prone to landslides, raising concerns that excavation and vibrations during construction could trigger mudflows and landslides and prompting community fears for safety and well-being. Non-recognition of the distinct culture and traditional land tenure of Indigenous Svans by the Georgian Government adds to economic vulnerability in the event of resettlement or other circumstances leading to land/property loss.

In addition to socio-economic impacts, in 2016, the Government of Georgia reduced the size of one of the country's Candidate Emerald sites, recognised for high biodiversity and conservation value, to pave the way for further development of around 30 HPPs. The Bern Convention Standing Committee expressed concerns over these plans for 'one of the most pristine nature areas in Georgia.' Business & Human Rights Resource Centre invited JSC Nenskra to respond to the allegations mentioned above. The company's response is available here.

Tajikistan

Hydropower is the main source of energy in Tajikistan, accounting for 90% of installed electricity generation capacity. Despite this, 70% of the population experience power shortages, particularly during winter. Most of the electricity produced in Tajikistan comes from five completed HPPs and dams. **Nurek HPP** is currently the largest, generating over 60% of all installed hydropower capacity (although **Rogun HPP** will supersede Nurek once it is completed). Along with the general population, the biggest consumer of electricity is Tajik Aluminium Company (TALCO), which uses about 35% of Tajikistan's electricity output.

There are some concerns about how the climate crisis will affect glaciers which feed the Vakhsh river and the hydroelectric sector which depends on it. Glaciers cover around 6% of the total area of Tajikistan, yet this area is reducing due to the effects of the climate crisis. The short-term result of glacier decline is a greater flood risk; longer-term, reduced water supply will affect hydropower generation and regional food security. Seismicity is another concern since the area is prone to earthquakes, which can result in landslides and blockages in the river which damage infrastructure.

The country's main industrial company, TALCO, faces no cuts in electricity supply and even pays lower electricity fees than the overall population. Despite this, reports of TALCO's unpaid debts to Barqi Tojik – the state-owned utility which owns and operates the majority of Tajikistan's electricity systems – date back years (TALCO previously denied debt allegations in 2009). Barqi Tojik is in turn deeply indebted to other HPPs such as foreign-owned **Sangtuda-1** and **Sangtuda-2**.

In recent years, rehabilitation of Nurek HPP was carried out with the assistance of the World Bank, AIIB, EDB, and KfW. Despite electricity shortages, electricity transmission project CASA-1000 has been commissioned with finances provided by the World Bank, Islamic Development Bank, EIB, EBRD, Foreign and Commonwealth Development Office (UK), and the US Agency for International Development (USAID) to facilitate exports of surplus hydroelectricity from Tajikistan and Kyrgyzstan to Afghanistan and Pakistan.

Case study: Rogun HPP

Rogun HPP, part of the Vashkh hydropower cascade, is the biggest plant planned on the Vashkh river since the Soviet era. Its construction resumed in 2007 and it is expected to have a 3600MW capacity with a 335m high dam. The plant is funded by the Tajikistan Government, with local and international companies among its contractors, including the Italian WeBuild group, formerly Salini Impregilo SpA. Between 2018-2020, the first two turbines of Rogun HPP were launched and in 2020 it produced 6.5% of the total produced electricity in Tajikistan.

In addition to environmental challenges posed by the climate crisis, the project has been linked to human rights concerns. Lack of funds for Rogun HPP back in 2010 resulted in local communities being forced to buy shares in Rogun project (with some reportedly paying as much as half their salary) or risk losing their jobs. The resettlement of around 42,000 people near the dam site has been another cause for concern. A study by Human Rights Watch showed the standard of living for many resettled families deteriorated as a result of land loss, lack of employment and poor access to essential services in new settlements. Some resettled communities faced water shortages, as well as lack of schools. Those not yet resettled have seen their homes damaged because of vibration at the construction site. When approached by Human Rights Watch, local officials of settlements where residents were relocated stated their awareness of water shortages and indicated discussions around the issue of drinking water. Cases of non-payment of wages at the construction site have also been recorded.

Local experts highlight a lack of transparency in the use of allocated funds and loans for this project. Their concerns include “illegal trafficking” of materials intended for the project and alleged misappropriation of funds. In 2019, a crack on the dam was reported, which local experts attributed to the use of low-quality cement, steel and other building materials. The only publicly known audit, carried out in 2016 by the Agency for State Financial Control and Combating Corruption, revealed violations and financial improprieties totalling USD 19.7 million. Tajikistan continues searching for investors for Rogun and was in discussions with the EBRD in 2021.

Kyrgyzstan

Kyrgyzstan generates 90% of its energy from hydropower. Like Tajikistan, Kyrgyzstan's upstream position allows for transboundary use of its rivers, meaning that water distribution issues in the country also affect downstream areas both within Kyrgyzstan and in neighboring Uzbekistan and Kazakhstan, potentially putting agricultural activities at risk. The effects of the climate crisis make Kyrgyzstan vulnerable to fluctuations in water availability both for agriculture and energy production. This vulnerability was recently demonstrated by a drought in 2021 which not only caused a critical drop in the water level at **Toktogul** dam, risking light and heat supplies for the coming winter, but also affected local agriculture. Outages have also left populations relying on coal in winter, despite documented public health harms.

Major operating HPPs were built in Kyrgzstan during the Soviet period. Some of the oldest operating HPPs have seen refurbishment investments from the ADB, EDB and the Swiss Government, as in the cases of **Toktogul HPP**, Uch-Kurgan HPP and At-Bashi HPP. Several other large and small HPPs are planned, but the human rights risks associated with these projects, from climate impacts, systemic corruption and weak regulation, and the rise of illegal cryptocurrency miners (a situation also recorded in Georgia) should be formally considered by investors.

Case study: Toktogul HPP

Toktogul HPP provides at least 30% (40% by some estimates) of Kyrgyzstan's electricity and has a capacity of around 1200MW. The HPP regulates the water flow in the Naryn river, thus impacting the water distribution throughout the Syrdarya river basin. Faulty or worn out equipment at the plant has contributed to frequent electricity outages in recent years. ADB and EDB are supporting the rehabilitation of Toktogul, which is expected to increase its capacity to 1440MW.

The climate crisis presents a significant challenge for Toktogul and other HPPs in the region. Critically low water levels in the reservoir caused by major droughts in 2021 had a knock-on effect within and outside the country. Farmers were left without irrigation water, while electricity outages were widespread. Coal was used to make up the shortfall during the winter, heating private households as well as operating the thermal power station in the country's capital, Bishkek, and causing a health hazard for residents.

Despite telling farmers there was no more water, the Kyrgyzstan government released extra water from the Toktogul reservoir downstream to Uzbekistan and Kazakhstan as part of an energy trade deal. Decreasing water levels at Toktogul reservoir caused an electricity crisis throughout the country. As a response, the Kyrgyzstani government enforced power restrictions onto businesses and streetlights, at times leaving the population in complete darkness.

Kyrgyzstan's Ministry of Energy has announced that more water has flown out of, rather than into, the reservoir in recent years, and that every year sees gradual decrease of water in the reservoir by about 1.5-1.8 billion c/m. As the impacts of the climate crisis affect the country's water supply, investors and the government should reconsider hydropower projects to avoid worsening the problem and contributing to environmental and human rights harms. Despite this, the government is planning to build dozens of smaller HPPs in response to declining output from Toktogul.

Allegations tracker: **Key findings**

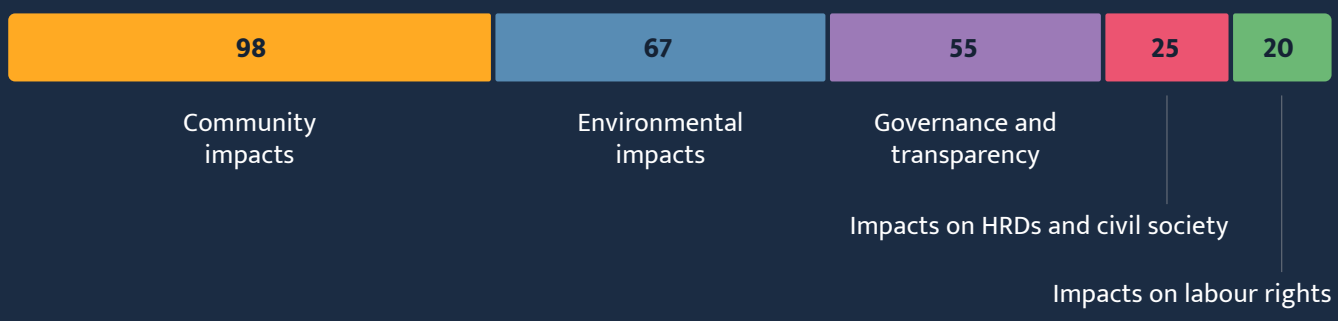
Our allegations tracker has recorded 265 human rights and environmental issues linked to 32 small and large hydropower projects in Armenia, Georgia, Tajikistan and Kyrgyzstan. Impacts on communities were the most frequently reported, accounting for 98 of the issues recorded. Sixty-seven refer to environmental impacts. Other impacts raised include governance and transparency issues (55), impacts on human rights defenders (HRDs) and civil society (25), impacts on labour rights (20).

Governance and transparency

We recorded more issues (169 out of 265) in the Caucasus countries (Georgia & Armenia) than in the Central Asian countries (Tajikistan & Kyrgyzstan), due to more hydropower plants being built there, particularly in recent decades. Better access to information could also play a role in this. Out of 24 allegations relating to the lack of access to information, 15 allegations are from Central Asia. Significantly more allegations of corruption were recorded in Central Asia than in the Caucasus (16 allegations out of 18).

Most of the hydropower plants in Central Asia are state-owned, as opposed to almost none in the Caucasus. Alleged complicity between state bodies and companies is accordingly more commonly reported in the Caucasus (8 cases out of 13). IFIs and hydropower operating companies are more involved in the Caucasus. In Georgia, there is a bigger involvement of companies with investments from EBRD, while in Armenia funds from KfW are supporting a number of smaller HPPs. In Central Asia the picture is different: because many HPPs have been in operation since Soviet times, IFIs such as ADB and EDB are financing rehabilitation while also examining the potential of investing in the construction of new plants. None of the companies involved in the hydropower sector in the Caucasus or Central Asia have a specific human rights policy, although most have general statements on sustainability and two companies have general statements on occupational health and safety. IFIs should consider investing in companies with environmental and human rights policies in place, or else take the responsibility of introducing such policies for partner companies and ensuring their implementation.

TYPES OF ISSUES RECORDED



Environmental impacts

The tracker recorded 55 issues relating to environmental impacts in the Caucasus (out of a total of 67), due in part to the increase of construction of HPPs in recent decades. An increase in the number of hydropower plants in the geographically smaller Caucasian states has a cumulative effect on rivers, since often more than one hydropower plant is built on the same river or in the same area, increasing the risk of adverse impacts on the environment and communities. As a result, a large number of allegations (21) relate to access to water (16 from Caucasus and five from Central Asia). Six allegations (two from Georgia, three from Armenia, one from Kyrgyzstan) refer to water quality change in the rivers. All 17 allegations of impacts on wildlife took place in Caucasus. Allegations including problems with impact assessments were largely recorded in Georgia (six) and Armenia (four), with one allegation of inadequate impact assessment from Kyrgyzstan.

Impacts on communities

Hydropower projects affect the quality and quantity of water in rivers, which impacts biodiversity and affects access to water for communities. Lack of access to water impacts communities' right to livelihood, as well as the rights to food and health of community members. Health and safety risks are also created by potential landslides, explosions or other risks (six such allegations were recorded in Georgia, one in Armenia, two in Tajikistan and three in Kyrgyzstan), which also affects communities' right to their land and property (five allegations relating to land rights were recorded in Georgia, four in Armenia, and one each in Kyrgyzstan and Tajikistan).

Of 98 issues relating to impacts on communities, 49 refer specifically to livelihood and public health & safety issues (22 in Central Asia and 27 in Caucasus). Inadequate community consultation is reported in Caucasus (six in Armenia and three in Georgia) but not in Central Asia, as most of the HPPs studied in that region were built several decades ago. A number of allegations – nine, seven of which were recorded in Central Asia – relate to mismanagement of hydropower plants, resulting in electricity outages and leaving people without light and heat. Construction of new hydropower plants is presented as a solution for such outages, yet the issue of decreasing water levels due to climate change often remains unaddressed.

Impacts on other stakeholders

All allegations regarding impacts on human rights defenders and civil society (25) are reported in the Caucasus, of which 20 cases took place in Georgia. Bigger projects, and thus involvement of more communities and activists in protests, can explain the prevalence of cases from Georgia (eight cases of protests were reported in Georgia, and five in Armenia). The greater number of oppositions to hydropower plants has resulted in more prosecution of activists in a country with partly-limited freedoms and civic space such as Georgia (10 allegations of violence, injuries, persecution and detention recorded).

The tracker recorded 20 allegations related to labour rights. None are recorded in Armenia, which denotes an overall disregard of the issue by the public and private sector in the country, rather than an absence of violations. Armenia's relatively smaller power plants also employ fewer employees, potentially contributing to lower frequency of allegations. In the other three countries, labour rights allegations refer to occupational health and safety and unpaid wages, with most allegations taking place in Central Asia, where hydropower plants are already operational (seven allegations from Georgia, four from Tajikistan, and nine allegations from Kyrgyzstan).

Conclusion

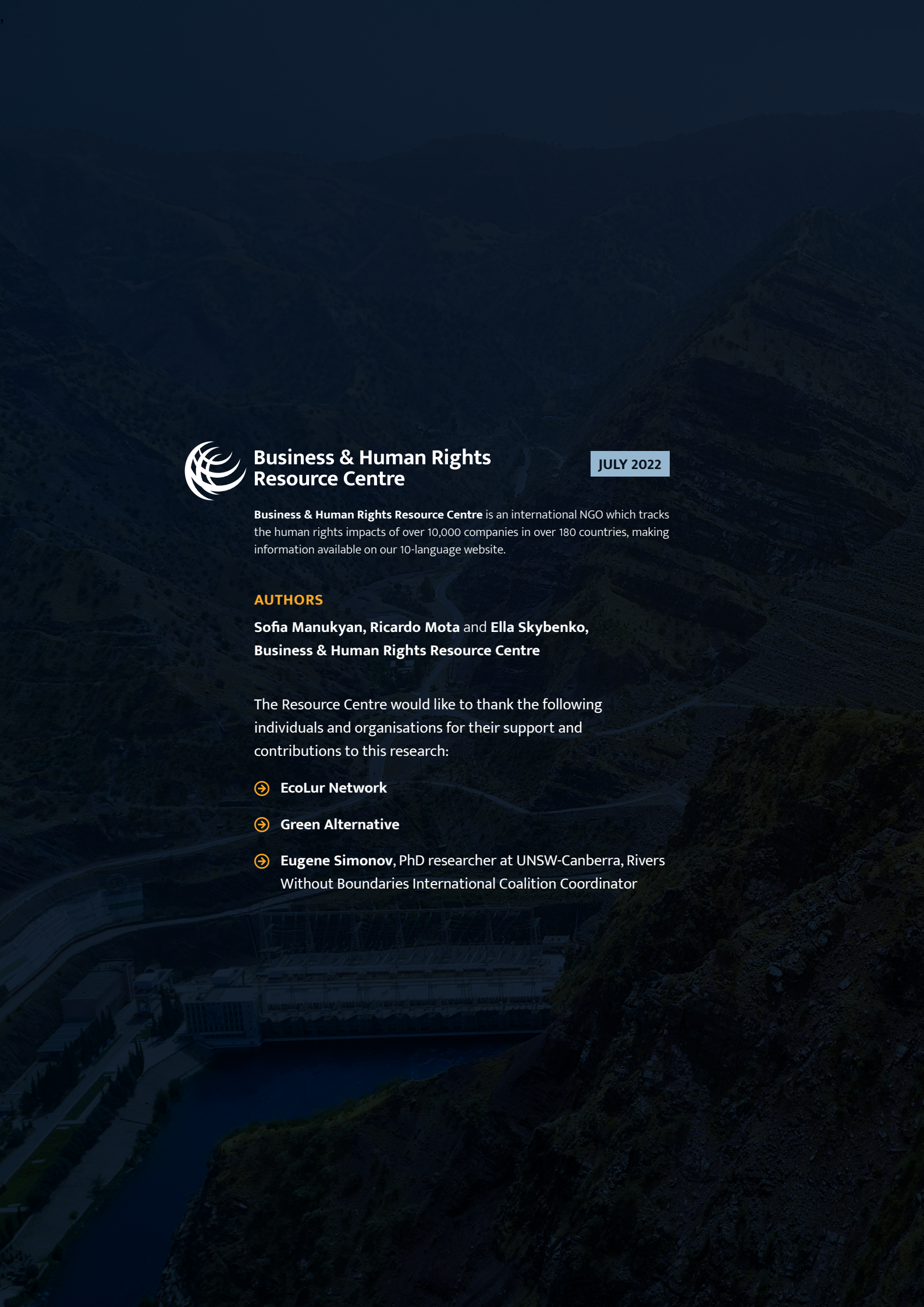
As the analysis shows, the impacts of hydropower projects are wide-ranging. Communities and civil society are not being effectively consulted in the planning of projects in their neighbourhoods and are excluded from participating in decisions which affect their lives and livelihoods. Companies have a responsibility to respect human rights, yet none of the companies we researched even have a publicly available human rights policy. IFIs continue to invest in controversial projects which harm the environment and communities, often in violation of their own social, environmental, and human rights standards. As is made clear in the UNGPs, all stakeholders should have effective input in decision-making, and the human rights of workers and the community should not be subordinated to private interests.

An inclusive approach is essential for a transition to a healthy-functioning society and environment. However, to be able to publicly participate in decision-making and pursue justice when harms occur, impacted communities must have access to information. This is not the case – in all four countries, poor access to information is one of the major issues identified in our research.

This research and the tracker demonstrate it is high time for hydropower companies and their investors to undertake effective human rights due diligence to identify and address the human rights impacts of their operations. It is crucial to do so to avoid violating human rights and exacerbating the impacts of the climate crisis. Sustainable projects implemented by companies which engage in co-benefit models are urgently needed. Even further, investment into hydropower needs to be reconsidered if companies, investors and states hope to avoid incurring unreturnable costs emerging as a result of climate change affecting water flow in rivers, and thus the operational capacities of small and large hydropower plants. Transition to circular economies relying on clean energy is the only path for a dignified future.

Recommendations to companies and investors

- Insist on the development of **robust human rights policies and practices**, with strong board responsibility for oversight, and rigorous reporting standards and transparency.
- Ensure effective **human rights and environmental due diligence** for every project, with strong community and worker engagement, to identify human rights and environmental risks throughout operations and supply chains. Design effective action plans to mitigate or eliminate identified risks.
- Publish and implement a clear and public policy of **access to remedy**, complemented with no-reprisal and whistle-blower policies to protect human rights and environmental defenders.
- Investigate **co-ownership and co-benefit models** to prevent abuse and bring strong benefit to both companies and communities through greater stability and security.
- Ensure early and timely **access to information** for affected rights-holders to allow for effective engagement in informed discussion and co-design of projects.
- Strengthen **Free, Prior and Informed Consent** requirements for Indigenous communities, and monitor their implementation.
- Use **leverage with investee companies** which cause, contribute to, or are directly linked to human rights and environmental harms, so that companies mitigate negative impacts and provide access to remedy to those affected.
- Review any future hydropower project proposals mindful of alternative, less damaging **renewable energy options**, climate change risk for hydropower, and social and environmental costs.



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Business & Human Rights Resource Centre is an international NGO which tracks the human rights impacts of over 10,000 companies in over 180 countries, making information available on our 10-language website.

AUTHORS

Sofia Manukyan, Ricardo Mota and **Ella Skybenko,**
Business & Human Rights Resource Centre

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