



CENTER OF
ANALYSIS OF
INTERNATIONAL
RELATIONS

ANALYSIS

Water security in the South Caucasus: meeting the challenges for Azerbaijan

Valentina Chabert

📍 Mirza İbrahimov 8, Baku, AZ1005, Azerbaijan

📞 (+994 12) 596-82-39, (+994 12) 596-82-41

🌐 E-mail: www.aircenter.az, info@aircenter.az

MARCH 2024

Water security in the South Caucasus: meeting the challenges for Azerbaijan

Introduction: water security in the South Caucasus

In the 1987 Brundtland Commission report entitled “Our Common Future: Report of the World Commission on Environment and Development”, the concept of sustainable development was mentioned and clarified for the first time. Similarly, the report stressed the need to expand the original concept of security, so as to include the impacts of environmental stress at the local, regional, national and global level. Within this context, the definition of security started to embrace water security as well.¹

The notion of water security has emerged as a paradigm to explain the contribution of water-related issues in the wider political and development agenda. UN Water outlines water security as the capacity of a population to safeguard sustainable access to adequate quantities of acceptable quality water for sustaining livelihoods, human well-being, and socioeconomic development, for ensuring protection against water-borne pollution and water-related disasters, and for preserving ecosystems in a climate of peace and political stability.²

In broader terms, environmental degradation, the climate crisis and overexploitation of resources has spurred the rethinking of the role of water in the global political discourse. This is also due to the fact that at present many watercourses are shared among two or more countries, which makes transboundary water cooperation to ensure water security particularly critical. For this reason, the issue of water security should be considered also from a military and political viewpoint, with the aim to establish cooperative arrangements which are able to ease an effective management of water challenges also in times of crisis.³

When it comes to South Caucasus, the thirty-year conflict between Armenia and Azerbaijan over the region of Karabakh equally encompasses a water security

¹ Report of the World Commission on Environment and Development: Our Common Future (Brundtland Report), 1987. Available from: <https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf> (accessed 20 February 2024).

² UN Water, *What is security? Working Definition*, 2013. Available from: https://www.unwater.org/sites/default/files/app/uploads/2017/05/unwater_poster_Oct2013.pdf (accessed 20 February 2024).

³ Z. Suleimenova, Water Security in Central Asia and Southern Caucasus, *Asia-Pacific Sustainable Development Journal*, Vol. 27, No. 1, 2021, pp.75-93.

dimension.⁴ It is worth noting that about 62% of the total water resources of the South Caucasus belong to Georgia, 28% to Armenia and 10% to Azerbaijan. As a matter of fact, the protracted dispute over water resources and environmental damages caused during and after the conflict have been relevant and still unresolved factors. Moreover, in spite of most of the literature on the Karabakh wars focusing exclusively on ethnic, territorial and confrontational aspects, water represents a cross-cutting factor connected to peace and stability in the region as well. At the same time, water security remains a challenging factor especially for Azerbaijan, which geographically speaking finds itself in the most unfavorable position with respect to the other two South Caucasian States.⁵

Water resources in South Caucasus: Azerbaijan's vulnerable position

The Kura and Araz rivers are the main water arteries in South Caucasus. Around 65% of the water resources are located in the region, while the remainder is divided between the Islamic Republic of Iran (approximately 19,5%) and Türkiye (15,1%). As concerns tributaries, the Kura River receives water from the Mtkvari, the Postkhovi, the Debet and the Agstay rivers, which originate respectively from Türkiye and from Armenia. Similarly, the Araz River generates in Türkiye, even though it streams at the border between Armenia and Türkiye, Azerbaijan and Türkiye and eventually Armenia, the Islamic Republic of Iran and Azerbaijan. Against this background, the distribution of water among countries in South Caucasus results to be unequal, with Georgia being the most water-abundant State and Azerbaijan the scarcest.⁶

As a matter of fact, it is estimated that most of water sources in Azerbaijan come from outside the country. It is worth noting that the formerly occupied territories and especially Karabakh region of Azerbaijan are rich with water resources, including 7 environmentally significant lakes, more than 6400 km of irrigation canals, 185 km of drain ditches, over 1400 wells, 539 waterworks and 8 water reservoirs, with a total volume of 640 million cubic meters.⁷ However, due to Armenian occupation of

⁴ N. Kuyumjian, Don't water it down: the role of water security in the Armenia – Azerbaijan war, *Eurasianet*, 22 December 2021.

⁵ A. Mihr, C. Pierobon, *Polarization, Shifting Borders and Liquid Governance: Studies on Transformation and Development in the OSCE Region*, Springer, 2023, pp. 79-95.

⁶ Z. Suleimenova, *cit.*, p. 84.

⁷ Karabakh Center, *Ecocide in Karabakh*, 2021. Available from: <https://story.karabakh.center/en/ecocide-in-karabakh> (accessed 21 February 2024).

Azerbaijani territories until September 19, 2023, Azerbaijan could not have direct access to the abovementioned water resources for almost three decades.



Figure 1: Water Resources in South Caucasus. Source: GRID-ARENDAL, 2014.

Nevertheless, two additional fundamental problems for Azerbaijan subsist. On the one hand, most of the rivers flowing through Azerbaijan originate outside the country. Therefore, the country is trapped in an extremely vulnerable position, since all its territories are located downstream of these rivers. For this reason, Azerbaijan results to be heavily dependent on external inflow of water from neighboring Armenia.

On the other hand, it should be noted that unlike Azerbaijan, Armenia is not party to the UNECE Convention on the protection and Use of Transboundary Watercourses and International Lakes (hereinafter Water Convention).⁸ Adopted in 1992 in Helsinki and entered into force in 1996, the Convention plays a fundamental role as a mechanism for strengthening international cooperation and achieving environmentally sound management and protection of transboundary surface and ground waters. For this reason and as a consequence of occupation, Azerbaijan has been deprived of the possibility to monitor and cooperate with Armenia in the joint

⁸ United Nations Economic Commission for Europe (UNECE), *Convention on the Protection and Use of Transboundary Watercourses and International Lakes*, Helsinki, 17 March 1992.

management of water resources, as well as of the dischargement of its obligations under the Convention. On this point, of great importance is the fact that Armenia exclusively signed the Protocol on Water and Health, which is part of the 1992 UNECE Water Convention, in June 1999.⁹

However, despite initiating the process of ratification twice, some reservations concerning the so-called *polluter pays principle* and the reference to the Convention enshrined in article 13 paragraph 2 of the Protocol were advanced by the Armenian Ministry of Foreign Affairs, which suggested to revise the reference information on the ratification of the Protocol. Accordingly, it was stated that the principle of polluter pays in the Protocol should only apply within the country, and cannot serve as a basis for the claiming of compensation by downstream countries in case of transboundary impact. Similarly, the reference to the Convention in article 13 should apply only to those countries that are at the same time parties to the UNECE Water Convention.¹⁰

Within this framework and in light of the fact that nations have the responsibility to ensure that activities within their jurisdiction or under their control do not cause damage to the environment of other States or areas beyond the limits of national jurisdiction (the so-called '*no harm principle*'), it can be observed that by voluntarily refusing to ratify the Protocol and the Convention, Armenia is currently failing to take responsibility for the environmental harm and pollution of water resources that has been caused since the first Karabakh war.

Water pollution during occupation: the case of the Okhchuchay river

Examples of anthropogenic harm and collateral environmental effects during the thirty-year period of Armenian occupation of Karabakh abound.

First of all, the water quality of the Araz River has been reportedly deteriorating, thereby causing serious problems to the provision of water resources to irrigate farming lands in Azerbaijan. Similarly, Azerbaijani media reported that on August

⁹ United Nations Economic Commission for Europe (UNECE), Protocol on water and health to the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes, 1999.

¹⁰ Protocol on Water and Health – Improving health in Armenia through target setting to ensure sustainable water management, access to safe water and adequate sanitation. *Technical report containing the baseline analysis of legal, institutional and substantive aspects related to target-setting process under the Protocol on Water and Health in Armenia*, Yerevan, May 2014. Available from: <https://unece.org/fileadmin/DAM/env/water/npd/Armenia/baseline-eng-final.pdf> (accessed 22 February 2024).

2020 Armenia deliberately stopped the flow of the Injasu River originating in the country and flowing towards the Gazakh District of Azerbaijan. Due to the reduction of water reserves in the Kemerli village reservoir, farmland irrigation processes were allegedly disrupted.¹¹

Secondly, a further case of environmental harm caused during occupation relates to the critical ecological conditions of the Okhchuchay river, whose length reaches 83 km with its bigger part within the Syunik region of Armenia. In particular, the liberation of the Zangilan district from Armenian occupation allowed Azerbaijani ecologists and experts to assess the harsh conditions of the river, that because of serious pollutions has become unsuitable for irrigation and inhospitable to endemic flora and fauna. The level of the Okhchuchay river pollution appears to be of fundamental importance for Azerbaijan, as it flows into the Araz river – the second largest river in South Caucasus. From there, it becomes a tributary of the Kura river, from which water is mainly employed for irrigation of the farming lands of Azerbaijan. In addition, the Caspian endorheic basin appears to be under serious threat as well. Notably, results of the water test portions from the Okhchuchay river retrieved from January to March 2021 revealed a high content of heavy metals, including copper, molybdenum, manganese, iron, zinc and chromium.¹²

On that point, the Ministry of Ecology and Natural Resources of Azerbaijan declared that the content of copper-molybdenum was twice the normal level.¹³ Similarly, iron resulted to be 4 times and nickel even 7 times higher than the norm. Furthermore, the color of the river periodically changed either to white or to acid-yellow and a mass fish mortality was recorded in March 2021, thereby warning Azerbaijani authorities regarding the state of health of the river. In fact, not only does the content of heavy metals in the waters damage fluvial flora and fauna, but it also appears to be extremely dangerous for human health. Use of contaminated water can thus bring to gastrointestinal disorders, cardiovascular, nervous and hematopoietic diseases, and to the development of a musculoskeletal system named ‘manganese rickets’

¹¹ Karabakh Center, *cit.*

¹² J. Valiyev, *Armenia's ecological invasion of Azerbaijan's Okhchuchay*, Center of Analysis of International Relations, 29 July 2021. Available from: <https://aircenter.az/en/single/armenias-ecological-invasion-of-azerbajians-okchuchay-763> (accessed 22 February 2024).

¹³ Ministry of Ecology and Natural Resources of Azerbaijan, *Joint Statement of the Environmental Public Council and Environmental Civil Society Organizations of the Republic of Azerbaijan on destruction of natural heritage and continuous threat to the environment and human wellbeing as a result of Armenian aggression*, 16 October 2020.

among kids. Carcinogenic effects and negative impacts on children's mental development have also been documented.¹⁴

Interestingly, investigation on the ongoing degradation of the Okhchuchay river has also been opened by Armenia itself.¹⁵ Indeed, in October 2019 the Press Service of the Ministry of Emergency Situations of Armenia reported that toxic waste had been discharged into the Voghji river (the Armenian name for the Okhchuchay river). Likewise, Armenian environmentalists raised their voice expressing concern about the river's conditions.¹⁶ Against this background and in light of the presence of several mining areas in the region, there is reason to believe that the dumping of production waste into the Okhchuchay river without any preliminary treatment has been provoked by some of the largest mining enterprises headquartered in Armenia and operating in the Syunik province, bordering the territory of Azerbaijan in the east and the Nakhchivan Autonomous Republic of Azerbaijan in the west.¹⁷

Among these, the Zangezur Copper Molybdenum Combine is one of the key industrial enterprises and the largest taxpayer in Armenia. Despite being owned by several small Armenian companies, most of its shares (approximately 60%) belong to the German CRONIMET Mining AG, who manages the Kaharan copper-molybdenum mine. This mine results to be the largest in South Caucasus in terms of deposits, as its reserves are estimated at more than 1 billion tons. After a more in-depth examination, however, the history of CRONIMET appears to be relevant to eventually assess the responsibility of Armenia for the environmental harm to the Okhchuchay river. CRONIMET HOLDING company has been established in the German city of Karlsruhe back in 1980. Since then, it is engaged in the extraction, treatment and processing of minerals and metals, as well as in the supply of raw materials for the production of stainless steel. As of 2022, the enterprise's annual turnover amounted to \$4.3 billion.¹⁸

The CRONIMET group of companies is owned by the German – Polish Pilarsky family and chaired by the 83-old managing partner Günter Pilarsky, who holds this position

¹⁴ F. Chiragov, *Continuing crimes against the natural environment: the case of Okhchuchay river*, Center of Analysis of International Relations, Environmental impacts of occupation: neglected victim of the Armenia-Azerbaijan conflict, 2021, p. 37.

¹⁵ Azatutyun, *Реку Вохчи загрязняет Зангезурский медно-молибденовый комбинат - министр охраны природы*, 17 October 2017. Available from: <https://rus.azatutyun.am/a/30221785.html> (accessed 22 February 2024).

¹⁶ Business & Human Rights Resource Center, *Armenia: Environmental activist facing new charges by mining company after claiming pipeline breakdown and river pollution at mine site*, 5 January 2023.

¹⁷ F. Chiragov, *cit.*, p. 37.

¹⁸ More information is available from: <https://www.cronimet.de/en/unternehmen/who-we-are/facts-und-figures/> (accessed 24 February 2024).

since the enterprise was founded 40 years ago. Under his leadership, CRONIMET has become one of the leading processors of stainless steel in Europe and abroad, especially in Armenia's mining sector, where it is present since 1996. Correspondingly, CRONIMET Mining acquired 60% of the Zangezur Copper Molybdenum Combine in 2004, during the privatization phase of the company. As indicated on CRONIMET's website, special connections with the political élite of Armenia exist. In spite of the fact that CRONIMET Group is present in various countries, profound ties with Armenian leaders led to the appointment of Pilarsky as Honorary Consul of Armenia in the German state of Baden-Württemberg since 2006 as an appreciation for his effort in the development of the economic cooperation between Germany and Armenia. In the same year, the Jocelyn & Günter Pilarsky Foundation was established with the paramount goal of supporting projects for the benefit of needy children. Notably, in spite of CRONIMET's global business, the Foundation exclusively operates in the Philippines and in Armenia.¹⁹

Further liasons with the Armenian leadership were also acknowledged in November 2019 by a report published by the Armenian media Civilnet, which noted that a co-owner of the Zangezur Copper Molybdenum Combine concealed through third parties and named Mikael Minasyan resulted to be the son-in-law of former Armenian President Serzh Sargsyan and similarly a former Ambassador of Armenia to the Vatican.²⁰ Apparently, the aim of a criminal investigation opened by Armenia in 2019 after the publication of Civilnet's report was to remove Minasyan's share of the company. Even though Zangezur Copper Molybdenum Combine Director Mher Poloskov denied such information, there is no doubt that CRONIMET ties with Armenian's political élite and its consequent privileged position are continuing to allow the company's wealth accumulation at the expense of the environmental conditions and the basic rights of people both of Armenia and of Azerbaijan. However, the latter results to be the most affected by the transboundary harm due to its downstream location and its water dependence on rivers originating in Armenia.

At the same time, no formal response nor accountability has come from the German government, from which Azerbaijan expected a reaction due to the nationality of

¹⁹ More information is available from: <https://www.cronimet.de/en/unternehmen/who-we-are/management/> (accessed 24 February 2024).

²⁰ Civilnet, *The Secret Owners of Armenia's Largest Enterprise*, 2019. Available from: <https://www.civilnet.am/en/news/382889/the-secret-owners-of-armenias-largest-enterprise/> (accessed 24 February 2024).

CRONIMET and the severity of the environmental damages committed in South Caucasus. In this sense, the Ministry of Ecology and Natural Resources of Azerbaijan has even raised its concerns to the Green Party faction of the German Bundestag to draw its attention to this matter. However, no action has been taken by the German side.²¹

Water management as a political tool: the Sarsang water reservoir issue

Alongside water pollution of the Okhchuchay river, the environmental issues involving the Sarsang water reservoir appear to be worthy of consideration. Built in 1976 under the former Soviet Union, the Sarsang reservoir contains up to 560 million cubic meters of water and has the capacity of providing irrigation water for 100,000 hectares of agricultural land in six regions in Azerbaijan, namely Tartar, Ağdam, Barda, Goranboy, Yevlakh and Aghjabadi. Notwithstanding, the water reservoir is located in Karabakh's formerly occupied territories. Therefore, also in this case Azerbaijan could not have full control over Sarsang's resources.

Azerbaijan's regional ecological and economic situation has been severely damaged since the occupation in the early 1990s due to the utilization of the water reserve by Armenia as a political tool, through which it was possible to eventually put pressure on Azerbaijani citizens and authorities. Hence, Azerbaijan has repeatedly complained at the international level that the self-proclaimed regime in former "Nagorno-Karabakh" has persistently reduced (and ultimately stopped) the outflow of water from the Sarsang Reservoir to downstream regions in summer, when water demand for people and especially agriculture is higher. Conversely, up to 85 – 90% of the reservoir has been released in wintertime, when farming and irrigation do not require a similar quantity of water. As a result, downstream villages have been flooded, the agricultural sector seriously damaged and lands and roads severely eroded.²²

In 2016, the Council of Europe confirmed the distressing level of water-related environmental problems in the occupied territories and especially pronounced on the issue of the Sarsang water reservoir. Hence, in Parliamentary Assembly Resolution 2085(2016) the Council of Europe stressed that "*the lack of regular*

²¹ F. Chiragov, *cit.*, p. 39.

²² V.Huseynov, *The environmental costs of the Armenian occupation of Azerbaijani territories*. In: Center of Analysis of International Relations, *Neglected victims of the Armenia-Azerbaijan conflict: environmental impacts of occupation*, 2020, p. 11.

*maintenance work for over twenty years on the Sarsang reservoir, located in one of the areas of Azerbaijan occupied by Armenia, poses a danger to the whole border region”.*²³ Furthermore, the Assembly emphasized that *“the state of disrepair of the Sarsang dam could result in a major disaster with great loss of human life and possibly a fresh humanitarian crisis”.*²⁴

Most importantly, the Council of Europe reminded the importance of access to drinking water as a basic right, thereby affirming the impossibility of using the deliberate tool of deprivation of water as a means to harm innocent citizens. Along these lines, the voluntary creation of an artificial environmental crisis is to be conceived as an *“environmental aggression”*, as well as a hostile act by one State towards another aimed at creating environmental disaster areas and making normal life impossible for the population. In view of the urgent humanitarian situation resulting from the Sarsang reservoir’s water deprivation, the Assembly requested the immediate withdrawal of Armenian armed forces from the region concerned, in order to allow access by independent experts and international supervision of the irrigation canals. The cessation of the use of water resources as tools of political influence or as instrument of pressure by Armenia was equally requested.²⁵ Eventually, the Assembly firmly condemned the lack of cooperation of the Armenian parliamentary delegation and the Armenian authorities during the preparation of the report on the water deprivation issue, deeming such behavior as incompatible with the obligations and commitments of a State party to the Council of Europe.²⁶

In spite of this, the situation remained unchanged, leading the Ministry of Ecology and Natural Resources, the Ministry of Agriculture and the State Water Reserves Agency of Azerbaijan to issue, on 25 August 2023, a further joint statement regarding the situation around the Sarsang reservoir. Alongside the recalling of the previous declarations within the framework of the Council of Europe, the document calls on Armenia *“through the forces patronizing it to abandon its actions aimed at violating the fundamental human right of the population of the [mentioned] districts enshrined in one of the United Nations sustainable development goals, ‘access to safe and clean*

²³ Parliamentary Assembly of the Council of Europe, Inhabitants of frontier regions of Azerbaijan are deliberately deprived of water, Resolution 2085, adopted 26 January 2016. Available from: <https://assembly.coe.int/nw/xml/XRef/Xref-XML2HTML-EN.asp?fileid=22429&lang=en> (accessed 25 February 2024).

²⁴ *Ivi*, at 2.

²⁵ *Ivi*, at 7.

²⁶ *Ivi*, at 8.

water', causing the degradation of the region's ecosystem and the loss of its fauna and flora".²⁷

Azerbaijan's quest for accountability at the international level: the Bern Convention Arbitration

When it comes to accountability, Azerbaijan has tried to raise the question of transboundary environmental damages committed by Armenia at the international level, and especially within the framework of the Council of Europe. On January 18, 2023, Azerbaijan has commenced the first known inter-State arbitration under the Council of Europe Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) adopted in 1979, whose aim is to ensure conservation of wild flora and fauna species and their habitats (including endangered and vulnerable ones).²⁸

According to a recent press release of the Ministry of Foreign Affairs of Azerbaijan, the arbitration aims at holding Armenia accountable for the extensive harm to Azerbaijan's environment and biodiversity over a period of nearly thirty years during which the internationally recognized sovereign territory of Azerbaijan has been occupied.²⁹ Evidence collected by Azerbaijan includes severe harm to Karabakh's natural habitats and species; depletion of natural resources; destruction of biodiversity; widespread deforestation; pollution through significant mining in protected nature reserves; and especially water pollution of transboundary rivers that run from Armenia into Azerbaijan's territory. The previously mentioned issue of the Okhchuchay river is furthermore present in the Ministry of Foreign Affairs' statement, as chemical pollution of water and soil and the death of several protected fish and amphibians has been considered exceptionally relevant and serious.

When it comes to the said Bern Convention, Azerbaijan's interstate lawsuit is based on the alleged violation by Armenia of its legal obligations under the Convention with respect to the maintenance, conservation, restoration and improvement of populations of all wild flora and fauna and their habitats. Furthermore, Azerbaijan

²⁷ Ministry of Ecology and Natural Resources, Ministry of Agriculture and State Water Reserves Agency of the Republic of Azerbaijan, *Joint statement issued regarding situation around Sarsang reservoir*, 25 August 2023. Available from: <https://azerbaijan.az/en/news/12180> (accessed 25 February 2024).

²⁸ Council of Europe, *Convention on the Conservation of European Wildlife and Natural Habitats*, ETS No.104, 1979.

²⁹ Ministry of Foreign Affairs of the Republic of Azerbaijan, No:015/23, Press Release on arbitration filed by Azerbaijan against Armenia for widespread environmental destruction, 18 January 2023. Available from: <https://www.mfa.gov.az/en/news/no01523> (accessed 24 February 2024).

demands the cessation of all ongoing violations of the Bern Convention and the payment of full reparation for the environmental harm perpetrated in the formerly occupied territories. Before reaching the arbitration panel, however, a standing committee composed of all the contracting parties will have to use its best endeavors to facilitate a friendly settlement of the dispute, as envisaged by article 18 of the Bern Convention.³⁰ Only in case of failure a formal arbitration process can be launched before an arbitration tribunal. Nonetheless, since the procedure has never been activated, the advancement of any possible prediction concerning the development of the lawsuit and the kind of compensation States will be able to request does not yet appear to be feasible.³¹

The liberation of Karabakh and the impact on Azerbaijan's water security

As mentioned, the disputed status of the formerly occupied territories of Azerbaijan has negatively impacted on the country's water security, as territories are located downstream of the Karabakh region. Nonetheless, after the restoration of its territorial integrity, new perspectives open for Azerbaijan.

A first watershed moment was marked by the end of the Second Karabakh War in November 2020. Indeed, in a chaired meeting on water management President Ilham Aliyev acknowledged Azerbaijan's challenging position with respect to water issues, as well as the pivotal role of drinking water and irrigation projects in the coming years' government agenda.³² On that occasion, a dedicated Action Plan for 2020-2022 to ensure a more efficient utilization of water resources – including water pipelines and irrigation canals – was adopted.

Similarly, in 2020 the liberation of adjacent districts which were formerly under the control of separatist forces backed by Armenia provided Azerbaijan with the possibility of increasing its hydropower production capacity, taking control of multiple hydroelectric power plants and creating new facilities in the territories it retook in the war.³³ For example, 5,000 cubic meters of thermal water per day have been at Azerbaijan's disposal in the Kalbajar, Lachin and Shusha districts since 2020,

³⁰ Council of Europe, *Convention on the Conservation of European Wildlife and Natural Habitats*, ETS No.104, 1979, art. 18.

³¹ V. Chabert, Contractualization of Environmental Protection: Prospects for Post- conflict Recovery of the Formerly Occupied Territories of Azerbaijan, *Caucasus Strategic Perspectives*, vol. 4, issue 2, winter 2023, pp. 73-97.

³² President of the Republic of Azerbaijan, Ilham Aliyev chaired meeting in a video format on water management situation, 23 July 2020. Available from: <https://president.az/en/articles/view/39990> (accessed 27 February 2024).

³³ A. Mihr, C. Pierobon, *op. cit.*, p. 86.

and the country could equally access the Khodaafarin reservoir by virtue of its restored control of the Jabrayil district and the State border with Iran. These facts arguably permit to affirm that the Second Karabakh War profoundly started to alter the balance of power in the region in terms of water resources.³⁴

After September 2023, the liberation of formerly occupied territories not only allowed Azerbaijan to fully restore its sovereignty over water resources in Karabakh, but it also permitted a general assessment of water issues suffered over a thirty-year period. This includes the evaluation of Azerbaijan possibly having experienced supply-induced, demand-driven and structural water scarcity, which – among other factors linked to the conflict with Armenia – is also closely tied to Azerbaijan’s heavy dependence on water for irrigation. On this regard, it has to be remarked that Azerbaijan’s population currently amounts to more than 10 million people, half of whom resides in rural areas and therefore almost exclusively relies on agriculture.

Future challenges and possible solutions

In light of the above-described situation, current and future challenges for Azerbaijan exist. As water represents both a common vital resource and a security challenge for South Caucasian countries, the most important (and at the same time most demanding) goal should be the building and the maintenance of good relations among co-riparian States, with a view to maintain and secure a long-term access to shared waters. This undoubtedly requires a constructive and cooperative approach, which will be even more fundamental during the current phase of negotiation of a peace agreement between Armenia and Azerbaijan. Possibly, water issues could be discussed and included in an eventual memorandum of understanding to be signed on the margins of the peace treaty in the next future.

Said possibility would understandably pass through the consideration of current power unbalances and existing difficulties of both Armenia and Azerbaijan. Indeed, if on the one hand Azerbaijan finds itself in a geographically unfavorable position as recalled multiple times during this analysis, on the other hand Armenia was eventually defeated in the Second Karabakh War and after September 2023, which spurred its internal political and economic difficulties and resulted in the loss of the

³⁴ I. Karimli, Azerbaijan’s Karabakh region to “Go Green”, *Caspian News*, 19 May 2022. Available from: <https://caspiannews.com/news-detail/azerbaijans-karabakh-region-to-go-green-2022-5-18-0/> (accessed 27 February 2024).

occupied territories. Therefore, the interlocutor with which Azerbaijan has to discuss water security issues in the region appears to be profoundly different than in the previous decades. These elements would evidently play a role in a possible future bilateral negotiation of a shared management between Armenia and Azerbaijan.

When it comes to solutions, the prospect of including a third Country serving as a mediator for the discussions on water security issues has also been advanced by part of the scholarly as well as by the political community. The 2020 proposal of Turkish President Recep Tayyip Erdoğan of establishing a 3+3 country-regional economic platform as a successful solution for South Caucasus represents a case in point. In particular, President Erdoğan called for the creation of a negotiation format which did not only include Armenia, Azerbaijan and Georgia, but also their neighboring countries – namely Russia, Türkiye and Iran as a way to reach peace and prosperity in the Caucasus.³⁵ Nonetheless, this arrangement proved to have internal structural weaknesses, as showed by Georgia's absence in the first session of the 3+3 group held in Moscow on 10 December 2021, on the ground of Russia's presence and the missed recognition of Tbilisi's territorial integrity.

Further solutions may include the presence of the international community as a means to strengthen bilateral and multilateral cooperation between riparian countries in South Caucasus. As a matter of fact, international organizations such as the United Nations could serve as the basis for a joint implementation of common global norms for water management and efficient policies aimed at granting water security.

Conclusions and recommendations

As described in the present analysis, water security plays a fundamental role in security dynamics of both Azerbaijan and generally South Caucasus. Even though water issues *per se* are not likely to trigger large-scale violence, the risk of increasing existing tensions over resources with cascade effects for stability in the region persists.

Against this background, it appears reasonable to affirm that the resolution of water security problems should find a central place in peace discussions between Armenia

³⁵ E. Javakhishvili, The “3+3” Platform for Regional Cooperation: conflicting foreign policy preferences, *Caucasus Analytical Digest*, n. 128, 2022, pp. 3-6.

and Azerbaijan, as a way to develop a common ground upon which it will be possible to establish a joint and cooperative management of water resources in South Caucasus. This would undoubtedly bring significant benefits for the whole region from the economic, social, environmental and eventually political point of view. In this regard, finding a middle ground among countries should become a priority, so as to lay the foundations for common prosperity in the region.

Eventually, difficulties stemming from climate change are similarly worth mentioning. On this point, the next COP29 hosted by Azerbaijan can in all likelihood become a fruitful and enriching environment in which issues linked to possible disruption of water resources and reduction in long-term water reserves could be discussed among interested countries.