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THREATS TOWARDS THE HYDROSECURITY OF THE REPUBLIC OF AZERBAIJAN

Annotation

For more than 25 years, the Republic of Azerbaijan suffers from the ecological terrorism committed by Armenia. At present, the terrorist war of Armenia against Azerbaijan is carried out in different ways by passing from the active armed struggle to the "cold terror war" phase. The ecological situation around the Kur-Araz basin in the South Caucasus has been investigated from the political point of view. The study found that the ecological environment of Kur-Araz river basins is in a very dangerous situation. The pollution of transboundary waters has been polluted by exploiting the water basins and rivers in the occupied territories by Armenia. The Sarsang reservoir, which is also the target of Armenia's hydroterror activity and occupation, is a securityoriented provocation of the population in the region. Most of the problems we face today, that is, all the infections and viruses that cause the destruction of humans and living things in general, are caused by environmental pollution. From this point of view, protection of water sources from pollution is always important in maintaining the balance of the ecosystem, as well as the health of the population. Integrated management of water resources in the Republic of Azerbaijan, taking into account the basin principle, as well as unequal distribution and limited water resources in the country, extreme pollution of transboundary waters, imperfect management tools and institutional relations pose new threats to water security.

Keywords: *hydro-terror action, threats of Armenia, contaminated Kur-Aras basin, ecological environment, Sarsang reservoir.*

Annotasiya

Artıq 25 ildən daha çox zamandır ki, Azərbaycan Respublikası qərb qonşusu Ermənistanın törətdiyi ekoloji terrordan əziyyət çəkir. Hazırda Ermənistanın Azərbaycana qarşı apardığı terror müharibəsi aktiv silahlı mübarizə formasından "soyuq terror müharibəsi" fazasına keçərək, müxtəlif üsullarla həyata keçirilir. Cənubi Qafqazda Kür-Araz hövzəsinin ekoloji vəziyyəti siyasi nöqteyi nəzərdən araşdırılmışdır. Aparılan tədqiqatlar təsdiq edir ki, Kür-Araz çaylarının ekologiyası çox təhlükəli vəziyyətdədir. Belə ki, Ermənistanın işğal etdiyi regionlarda mövcud transsərhəd çaylar çirklənməyə məruz qalmışdır. Eləcə də Ermənistan hidro-terror fəaliyyətinin hədəfi olan Sərsəng su anbarı vasitəsilə ətraf regionlarda məskunlaşan əhalinin təhlükəsizliyini təhdid etməkdə davam edir. Dövrümüzdə yaşanan əksər problemlər, yəni insanların, ümumilikdə canlıların məhvinə səbəb olan bütün infeksiyalar, viruslar ekoloji mühitin çirklənməsindən əmələ gəlir. Bu baxımdan, ekosistemin tarazlığının, eyni zamanda əhalinin sağlamlığının qorunmasında su mənbələrinin çirklənmədən mühafizəsi daim aktuallıq kəsb edən bir məsələdir. Azərbaycan Respublikasında su ehtiyatlarının hövzə prinsipi nəzərə alınmaqla inteqrasiyalı idarə edilməsi, eləcə də su ehtiyatlarının ölkə

ərazisində qeyri-bərabər paylanması və məhdud olması, transsərhəd suların ifrat çirklənməsi, idarəetmə vasitələrinin və institusional münasibətlərin mükəmməl olmaması, su təhlükəsizliyinə yeni təhdidlər yaradır.

Açar sözlər: *hidro-terror fəaliyyəti, Ermənistanın hədələri, çirklənmiş Kür-Araz hövzəsi, ekoloji mühit, Sərsəng su anbarı.*

Introduction

Ecological terrorism is one of the concepts that exist in the science of ecology, and it is a deliberate damage with destroying natural resources, flora and fauna by a particular country or individual. Generally, the water-related aspects of the Armenia-Azerbaijan, Nagorno-Karabakh conflict in the international law, as well as the use of fresh water sources and hydrotechnical devices in the conduct of hydrological, hydropower and ecological sabotage actions of the enemy state are not sufficiently studied. The ecological terrorism policy of Armenia against Azerbaijan is quite diverse in terms of its essence and its implementation mechanisms. At the same time, the non-constructive approach shown by international organizations in the Armenian-Azerbaijani Nagorno-Karabakh conflict serves to deteriorate the situation in the region. Armenia, by taking advantage of the dual position of the Organization for Security and Cooperation in Europe (OSCE) Minsk Group for the consensus in the conflict, extends the settlement of the conflict by baseless excuses. By supporting the foreign patrons, official Yerevan is delaying the conclusion of any contract with the regional states on the management, utilization, protection of the transboundary water resources and the determination of the water quota. Armenia brings an excuse on being a legitimate successor of the Union of Soviet Socialist Republics (USSR), while the Union of Soviet Socialist Republics (USSR) continues to lean on the provisions of the USSR's agreements with Turkey in 1924 and with Iran in 1957 [10,p.33-36].

Ecological problems of the Kur-Aras basin

The 3/4 part of the territory of Azerbaijan is located downstream of the Kur river basin. Each year, 350 million cubic meters of water passing through Armenia is polluted with tons of chemical and biological items and flow into the Kur river basin. Moreover, microflora and microfauna in the territory of Azerbaijan along the 43 km of the Araz river were completely destroyed [*5, p.27-38*]. As a result of the direct impact of Armenia's ecological terrorism policy, the level of water pollution in the Araz river has more than the norm. Acidity indicator in the river - ph decreased to 2,4, microflora decreased by 180-200 times. At the same time, valuable fish species have been cut off in the Araz river. It has been determined that 21 species of fishery were destroyed to 16 species in the last 10-15 years [*3,p.152-155*].

Organic contaminants that are neutralized and detected in the Araz river are naturally more than norms. The amount of phenols in the indicated area is 220-1160 times, heavy metal salts (copper, molybdenum, etc.) 36-48 times, nitrogen-

phosphorus salts 26-34 times, chlorides 28 times, oil hydrocarbons 73-113 times higher than the solids. At the same time, high-temperature industrial waste water has a negative impact on the temperature and gas regime of the river. The results of the analysis of samples taken from the bottom of the river indicate that the amount of heavy metals in the Araz river is much higher than normal. The amount of toxic substances in the water is more than 50% above the norm. Therefore, contamination of the Araz river with various toxic wastes threatens the existence of flora and fauna [*9, p.97-100*]. Thus, the main sections of the Araz river flow through Armenia and despite all international pressure, Metsamor Nuclear Power Plant (NPP) operates in the territory of the country and its waste is flowing through the Araz left right, Zengi (Razdan) [*16, p.69,110*]. As well as the terrorist state not joining the 1992 year Convention named "On the use and protection of water flows and international lakes flowing from the borders", it is possible to conclude that the ecological catastrophe is imminent. By the way, there are opinions that, the activity of the Metsamor NPP in the Republic of Turkey, not only in the Republic of Azerbaijan, is a serious threat to the health of the population living in the Igdir region, which is located only 15 km away from the station, especially in the border with Armenia. According to experts, Armenia's Metsamor and Kozladuy nuclear power plants in Bulgaria are the most dangerous enterprises in Europe [1].

The Oxchuchay river, flowing through Shirikan village of Zangilan region, is polluted with chemical contaminants of Qajaran copper-molybdenum, Gafan copper ore-gourning plants and biological polluted waters of Gafan-Qajaran cities (including villages, hospitals, agricultural facilities) located in Armenia. This has turned the river basin into a "dead zone". The 43 kms area of the river falling into the territory of Azerbaijan and 455 km^2 of the catchment area are constantly polluted. As a result, microflora - fauna was destroyed, self-cleaning process was stopped in the river water. The main reason for the pollution of Agstafachay, the right bank of the Kur river, is the discharge of one million cubic meters of waste from Armenia's Ijevan and Dilican settlements, industrial enterprises. Thus, the amount of phenol in the river exceeded the norm 35-45 times. The water reservoir built on it is a serious threat to the population of the North-West region of Azerbaijan [*16, p.69,110*].

There were cases of skin diseases in the body of the people who used the Kondalanchay and Kuruchay water flowing through the territory of Fuzuli and contamination of these rivers by Armenians caused various diseases [*3,* p.145].

Other rivers, flowing from the west to the east, are fed mainly by rains and snow waters are polluted with various waste near Agdam, Asgaran, Khankendi and other settlements. The absence of any information about the current ecological situation of the occupied territories creates a great difficulty. Armenia, which oversees these areas, deliberately conceals the real ecological situation there, and it is only possible to make general judgments about the situation [3, p.158].

Water resources of Kalbajar and Lachin regions, occupied by Armenia are of strategic importance. Armenian statistics predicted that in the future. The population of the so-called “Nagorno-Karabakh Republic” could reach 200,000 people, estimated that annual freshwater demand for agricultural and domestic use would be 365 million m3. This is 59% more than the reserves of Sarsang reservoir. It is no coincidence by officials of Yerevan estimated current situation of Kalbajar and Lachin regions as a result of so-called regime is undermining and the initiative of Azerbaijan on the hydro-state.

Armenian politologist Levon Melik-Shahnazarian proposed the idea of cutting rivers firstly. According to him, the part of Aghstafa, Tovuz, Gazakh, Goranboy, Terter, Barda, Agjabedi, Beylagan, Agdam and Fuzuli regions controlled by the Republic of Azerbaijan depends on the rivers starting from the territories completely controlled by Armenians. Therefore, Armenia should use this "advantage". The Armenian author writes that if at least half of these rivers can be prevented, then Azerbaijan will face severe shortage of water, and the volume of water in Araz and Kura rivers will be sharply reduced [*9, p.59*].

The National Environmental Monitoring Department of the Ministry of Ecology and Natural Resources conducted further monitoring for the first decade of September in 2015 to study pollution of Kur and Araz transboundary rivers. In the first decade of September, water consumption in the Kur River increased by 15 m3 / sec to 124 m^3 / sec in the third decade of august. According to the results of the monitoring, the amount of biogenic substances in the Kur River has exceeded the norm by the impact of wastes and industrial wastewater discharges directly to water bodies from Georgia and Armenia. Specific pollutants in water contain phenols at 4.6 in Shikhli-2, 4.3 in Agstafachay and 3 in Agstafachay water reservoir. According to the results of the monitoring, the phenol crossed on the Araz River in Horadiz 3.3, Shahsevan 2.7, and Bahramtepe - 2.2 times. Copper concentrates in the Kur and Araz rivers have dropped normally within the norm. The oxygen regime of water has changed within the sanitary norms at all points of 6.74-7.43 mg / l. In general, contamination of copper compounds in all three stations of the Araz River is monitored throughout the year [*4, p.27-38*].

Hundreds of diverse mineral-aqued springs in the occupied area occupy 39.6% of the total geological reserves of Azerbaijani mineral waters. The area, especially the Shusha, Lachin and Kalbajar regions, have very large mineral resources. In the Lachin-Kalbajar region 63 springs are divided into Istisu (Kalbajar region) and Ilisu (Lachin region) species. Because of their composition, quality and therapeutic properties, these waters are not left behind by world-famous "Karlovy Vary", "Narzan", "Kislovodsk", and "Jeleznovodsk", even though they are some of their properties. Mineral water in the Kalbajar region differs especially in terms of their favorable gas and chemical composition, high temperatures, and great natural resources. These mineral waters have healing properties for both external and internal diseases. Thus, a large spa and mineral water filling plant was built over the

Istisu spring in the 80s. That plant produced 800,000 liters of water a day. Different internal diseases were treated with Turshsu mineral spring, located 17 km from Shusha city. From the Turshsu mineral spring to the city of Shusha, water was supplied. Intentional pollution of natural water basins such as Big Alagol, Small Alagol, Zalkhagol, Canligol, Garagol, Alagol, Illigli Garagol in the occupied territories also caused additional environmental problems for the Republic of Azerbaijan in the future.

Occupied Sarsang water reservoir

The end of the 20th and early 21st century in the humanity's history have been characterized by increasing number of natural processes and risk of damage to ecological systems. Larger ecological objects during such ecological events are more dangerous than accidents and crises. Water reservoirs, dams, tunnels, canals, etc. installations include these facilities and all of these objects are built together with power plants in different forms. During ten, one hundred and even thousands of years exploited water reservoirs exposed to various wear. The developed countries in Europe always keep these facilities up-to-date with technological equipment. For example, 50% of the items in England were built 80 years ago, in Spain, 10 points have been operating for over 1600 years. The Reynfelden hydroelectric power station built in 1880 on the River Rhine in Germany is still being exploited. It also has 4,000 years experience in the construction of dams and water resource management in China [*14, p.64*].

World statistics indicate that the increased demand for potable water and the likelihood of damage to hydraulic bumps as a result of hydrocarbons has increased. Thus, the tendency to increase the probability of accidents in hydraulic mills is accelerating after 30-40 years of operation.

The development of irrigation agriculture in the Republic of Azerbaijan, which is considered as a dry region, is an important issue for the city and villages to supply water. Small Caucasus Mountains, currently under occupation of Armenia, are of great importance for the formation of water resources of the Republic of Azerbaijan. All the rivers deriving their source from these mountains, especially Tartar, Hakari, Khachinchay, Kondalanchay and others, which are the right sides of the Kura, bring plenty of water to the flat areas themselves. There have been created artificial lakes and irrigation canals on some of them. One of such complexes used for irrigation and electricity generation is the Tartar Hydrocomplex. The Tartar River's begining in Kalbajar region and passes through the territory of Agdere, Tartar and Barda and flows into the Kur river [*13, p.64*]. Tutqu, Lev and Ayrim are the left rivers of the Tartar river. The altitude difference between the source and the flow is 3117 m. The Sarsang reservoir was built on the Tartar River in 1976 on the octaves known as the Garia bridges between the people. There are 3 bridges in Agdere region. The first bridge remained in the Sarsang valley where the present water reservoir was built. That bridge was built in such a safe location that it was planned to construct a corridor in the 1970s, just

as the bridge was built. Because in this section and in the area, the right and left coast of the Tartar River consisted of rocky cliffs and favorable geographical location, which could be traced in the future [*8, p.97-100*].

The Sarsang reservoir was created by the capital investment allocated to the Azerbaijan Soviet Sosialist Republic (SSR). Its total water capacity is 560 million m^3 and the height of the dam is 125 m. Sarsang water reservoir is the highest water reservoir in the country due to its height. Sarsang reservoir is currently in the occupied Agdere region [*11, p.21-26*]. Sarsang reservoir provided irrigation water to nearly 100,000 hectares of land in 6 districts of the republic (Terter, Agdam, Barda, Goranboy, Yevlakh and Agjabedi). Regularly preventive maintenance work has been carried out by Azerbaijani specialists on the safety of the item. The ecological and technical crisis in the water reservoir is still continuing because of the fault of the separatist Armenia. The use of this water is extremely dangerous for the population of the nearby villages [*6, p.112-118*].

Armenians, who are not content with this, even try to damage the population by exploding a mine in the territory of Azerbaijan. In the winter monthes, 85-90 percent of the annual water supply damages deliberately, causing another environmental tension, floods. For this reason, there will be any natural cataclysm, earthquake, and so on. The destruction of the dam, the humanitarian and ecological disaster of the region.

Due to the occupation of the Sarsang reservoir only 100,000 hectares of irrigation water in irrigated agriculture has had an irreversible damage to this region of the Azerbaijan Republic. At present he has been in a state of emergency for over 25 years due to lack of technical maintenance. That is why, the Sarsang reservoir remains in the occupied territories causing serious problems for the 138,000 population of Nagorno-Karabakh, located in its low-relief, supplying 400,000 people in the Lower Garabagh region with drinking water and it should be noted that, if a dangerous situation arises, the destruction of the dam can only destroy the territory and population within one hour. [*12, p.21-26*].

As a result of the impossibility of using the Sarsang water reservoir, the calculation of the damage to the economy of the country is possible by 2 approaches: electricity generation and irrigation of cultivated lands.

In response to such inhuman and aggressive acts that are contrary to all international law and norms. A delegation of the Association for the Advancement of Civil Society in Azerbaijan in may, 2013 started to inform the international community about the project "Sarsang-Humanitarian Disaster Prevention". The intense activity of the Association in numerous meetings and conferences resulted in the mobilization of European circles into the region's monitoring processes in 2015. Delegation of the Civil Society Development Assistance Association of Azerbaijan (ACSDA) made substantiated statements on this issue. Representatives of the Association have informed the world community that the Sarsang reservoir, which has been under the care for more than 20 years, is in an emergency condition.

Therefore, this reservoir is likely to break through natural disasters, technical and predictable provocative reasons [*15*].

As a result of the above mentioned reasons, the Sarsang reservoir has now become a major threat to the Republic of Azerbaijan. This danger is getting more realistic over time. Along with the ecological crisis and biological diversity, as a result of provocation, technogenic or natural disaster, it is likely that massive destruction of 400,000 civilians residing in the untouched surrounding areas of the Republic of Azerbaijan and re-creating humanitarian crisis in the region. Through consistent meetings held by the Association, the the Parliament Assambly of Council of Europe (PACE) Committee of Ministers sent a resolution to the Bureau on 1 September 2013 to approve the proposal of the resolution "On the humanitarian disaster which could create a hazardous situation for the Sarsang reservoir in the occupied Azerbaijani territories". The Committee of Representatives also recommended the Bureau to submit a draft resolution to the Committee on Social Affairs, Health and Sustainable Development to be appointed as rapporteur. The final decision of the Committee also noted that all types of chemicals and pollutants of water entering Azerbaijan from Armenia were many times higher than normal, and the growing and spreading of various diseases among the Azerbaijani population living in watercourses should be regarded as an ecological terrorist act by Armenia.

Unfortunately, despite the aggressor Armenia, which has not yet been ratified by international law as an aggressor, continues to violate the legal regime and international law by keeping one-fourth of the territory of Azerbaijan, especially the Sarsang reservoir. Officials of the neighboring state claiming that the falsified statements of the Azerbaijani side on the environmental tragedy in the Sarsang reservoir were false but did not hesitate to prevent the European authorities from monitoring the borders of the European Union by justifying their refusal from international obligations. In spite of the obstacles created by the opposite side, the resolution of the Parliament Assambly of Council of Europe (PACE) winter session (January 26, 2016) was adopted by the majority of members of Parliament of the Bosnian (MP) Meltsa Markovic "The deliberate deprivation of the inhabitants of the frontline regions of Azerbaijan" [*2, p.3*].

Conclusion

Armenia's terrorist policy against hydrosphere of the Republic of Azerbaijan as well as is a serious threat to humanity. The pollution of the Kur and Araz rivers, the destruction of the occupied mineral springs of the Republic of Azerbaijan, the destruction of forest areas, and the illegal acquisition of mineral and raw material resources have become Armenian state policy. It should be noted unambiguously that the problem with the Sarsang reservoir can not be viewed as a separate problem. This problem was caused by the armed aggression of Armenia against Azerbaijan and the occupation of Nagorno-Karabakh and other territories by Armenia. Thus, long-term solution to this problem can not be achieved without the

liberation of Azerbaijani territories from occupation. Just as the world community demonstrates respect and objectivity to international norms, the fact of occupation must be abandoned and the Sarsang water reservoir should be rebuilt in accordance with the modern requirements after appropriate restoration and reconstruction.

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