

CENTRAL ASIA TODAY: A NEW WAVE OF WATER AND ENERGY COOPERATION AND PIPELINE ARCHITECTURE

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ABSTRACT

In recent years, Central Asian countries have been demonstrating a readiness to widen their involvement in regional cooperation and interaction in the water, energy and transportation spheres. These trends have remained neglected far too long, which, as could be expected, had a negative impact on the regional economies. Under the pressure of mounting economic problems and the difficult situation, these countries had no choice but to revise their approaches to cooperation. Certain extra-

regional states have developed significant interest in the region's countries; today they want a wider presence there, first and foremost, in the projects targeted at the diversification of supplies of its hydrocarbon reserves to external markets. Generally, the Central Asian countries expected the more extensive pipeline architecture to consolidate their positions; allow to implement their social and economic projects; create new jobs; open new doors to Central Asian oil and gas exporters and radically change the

regional balance of power. In anticipation, they doubled their efforts in extraction and export of hydrocarbons.

These hopes were not justified. Their dependence on extra-regional players as the final consumers or transit territories was not reduced. The new pipelines have, however, destroyed Russia's monopoly on hydrocarbon exports from the region; it was replaced by Iran and China, which relied on the mechanism of price formation and the volumes of oil and gas they bought from the region's countries to put pressure on them. The Central Asian oil and gas exporters continued to widen the pipeline network to somehow reduce their dependence on neighbors.

The Central Asian states are revising their old approaches to the use of water; the confrontation of the 1990s is receding into the past to be replaced with new initiatives: wider bilateral and multilateral cooperation in the use of water resources of the transboundary rivers and coordination of positions. The changed positions are easily explained by the problems inherited from the Soviet past, which were gradually accumu-

lating and swept under the carpet. In the last few decades they grew even more acute: the countries in the upper reaches of the regional rivers can barely survive the acute shortage of energy in winter, while those in the lower reaches are aware of an acute shortage of water in the summer, when it is especially needed for agriculture.

According to different sources, after 2020-2025 the water shortage in the region will become absolute: the total amount of water consumed in the Central Asian countries will reach a level at which industrial enterprises will have no choice but to use less water. This will do nothing good to the regional economy and regional agriculture. Demographic growth and climate change will intensify the negative trends. Glaciers and snow-covered areas have contracted, which threatens the runoff of the Amu Darya and Syr Darya. The current desire to arrive at compromises and take the interests of all countries into account is explained by the problems that are piling up in the water and energy sphere mainly because the use of the transboundary rivers' water remains unregulated.

KEYWORDS: *Central Asia, water resources, energy policy, oil, gas, pipelines, Russia, the U.S., the EU, China.*

Introduction

In the 1990s, the post-Soviet states turned their attention to the energy and water resources of Central Asia; the West, likewise, started looking in that direction.¹ They have become aware of the fact that oil and gas from Central Asia may lower their dependence on the Gulf oil exporters.² On the other hand, inspired by numerous publications about large or even significant hydrocarbon resources, the Central Asian countries started developing their own reserves. Kazakhstan and Turk-

¹ See: G.I. Starchenkov, "Nef't Kaspia i puti ee transportirovki," in: *Musul'manskije strany u granits SNG*, Institute of Oriental Studies RAS, Kraft+, Moscow, 2001, p. 298.

² See: B. Schreiner, "Doc. 9635 Europe and the Development of Energy Resources in the Caspian Sea Region," *Working Papers*, 2003, Ordinary Session (First Part), Documents 9519, 9568 and 9576-9639—Council of Europe: Parliamentary Assembly, Vol. 1, 2003, pp. 303-315.

menistan, which have the biggest oil and gas reserves,³ decided not to wait until the Convention on the Caspian Legal Status comes into force to begin oil and gas extraction.⁴ They needed political support to realize their projects as promptly as possible which could not have been done without Western petrodollars.⁵

Many of the projects planned in the 1990s were implemented in the 21st century: such are the Turkmenistan-Iran gas pipeline (1997, 2010); the oil and gas pipelines between Turkmenistan and China (2009); Kazakhstan and China (2009). The Caspian Pipeline Consortium (CPC) brought Kazakh oil to Russia. The energy corridor, along which the oil from Kazakhstan and Turkmenistan was delivered across the Caspian to Azerbaijan by tankers, was highly appreciated in Central Asia as bringing it closer to the West even if the annual volumes were not that impressive: between 2 and 3 million tons.

Beijing's firmer positions in Central Asia became possible, among other things, due to the pressure on Iran. By introducing sanctions against Iran, the West deprived it of a chance to discuss new projects related to Caspian and Central Asian oil and gas.⁶ Beijing that needed Central Asian hydrocarbons to decrease its dependence on Middle Eastern oil and gas⁷ decided to look closer at Central Asia and its reserves.⁸ As could be expected, it widened its presence in the region's energy sector, primarily in Kazakhstan and Turkmenistan, and demonstrated above average skills in organizing supplies of equipment and services to the oil and gas sector.⁹

The new pipeline structure set up by the Central Asian countries allowed them to diversify oil and gas exports. The extra-regional states, in their turn, were seeking greater involvement in oil and gas exploration, development of newly discovered fields and export of Central Asian and Caspian hydrocarbons¹⁰ even if they knew next to nothing about the Caspian oil and gas.¹¹ This, however, did not decrease the geopolitical and economic rivalry between concerned regional and extra-regional players for access to the local reserves.¹²

The problem of water resources of the transboundary rivers has not disappeared. As independent states, the Central Asian countries have not yet arrived at a multisided consensus; they merely pushed the problem aside until the region has become acutely aware of water shortage. It strongly affects the problem of foodstuffs, economic development and social and political stability. In fact, water and foodstuffs were invariably present on the domestic and foreign policy agenda of the regional countries for the simple reason that they remain an economic constant and an instrument of political pressure on neighboring states.

³ See: V.I. Kaliuzhny, "Vystuplenie na konferentsii 'Neft i gaz Kaspiyskogo i Chernogo morey', Stambul (Turtsia), 27 maia 2003," *Vestnik Kaspia*, No. 3, 2003, pp. 7-12.

⁴ See: I.S. Rozhkov, "Retrospektiva kaspiyskikh sammitov: ot stabilnosti k ptoressu," *Problemy postsovetskogo prostranstva*, Vol. 4, No. 3, 2017, pp. 210-220.

⁵ See: D. Bolekbaeva, I.F. Selivanova, "Osnovnye napravleniia vneshney politiki Kazakhstana (1991-2015 gg.)," in: *Vneshniaia politika novykh nezavisimyykh gosudarstv*: Collection, ed. by B.A. Shmelev, IE RAN, Moscow, 2015, p. 230.

⁶ See: S.A. Mikheev, A.E. Chebotarev, G.S. Kovalev, "Problemy regiona nakanune IV Kaspiyskogo sammita," *Problemy postsovetskogo prostranstva*, No. 2, 2014, pp. 31-69.

⁷ See: I. Pop, "China's Energy Strategy in Central Asia: Interaction with Russia, India and Japan," *UNISCI Discussion Papers*, No. 24, 2010, pp. 200-205.

⁸ See: S. Peyrouse, *Turkmenistan: Strategies of Power, Dilemmas of Development*, Routledge, 2015. 264 pp.

⁹ See: Z.A. Dadabaeva, E.M. Kuzmina, *Protsessy regionalizatsii v Tsentralnoy Azii: problemy i protivorechia*, Institute of Economics, RAS, Moscow, 2014, p. 33.

¹⁰ See: E. Tianlie, "Rol Tsentralnoy Azii v energeticheskoy strategii Kitaia," in: *Tsentralnaia Asia: problemy i perspektivy (vzgliad iz Rossii i Kitaia)*, Collection of articles, ed. by K.A. Kokarev, D.A. Alexandrov, I.Iu. Frolova, Russian Institute of Strategic Studies; Chinese Academy of Contemporary International Relations, Moscow, 2013, p. 145.

¹¹ See: I.S. Zonn, *Kaspiy: illiuzii i realnost*, Korkis, Moscow, 1999, 467 pp.

¹² See: M.P. Amineh, "Impact of the Caspian Energy Supply on the Global Market," *Atlantisch Perspectief*, Vol. 27, No. 7/8, 2003, pp. 27-33.

Energy Independence Imitated

By 2015-2016, the Central Asian countries finally concluded the long period of pipeline construction. The oil and gas pipelines used to export hydrocarbons from the region ended Russia's monopoly as the main transit country and consumer, and brought Central Asian resources to external markets. The new export pipelines, however, did not decrease the Central Asian countries' dependence on their neighbors as the main oil and gas consumers. In 2015, China completed the second and third pipe runs from Turkmenistan to China that brought the potential annual maximum gas import to 55 bcm. Later, having engaged in gas extraction in its own territory, China lost interest in gas from Turkmenistan; construction of the fourth run of the same pipeline (210 km long with an annual capacity of 30 bcm) was postponed. It was expected that it would connect the already operating pipeline system in the Uzbek territory with the stretch of the pipeline under construction in Tajikistan. In March 2017, Uzbekneftegaz and China National Petroleum Corporation (CNPC) decided to postpone the project.¹³ Less than a year later, in February 2018 China, aware of the heightened EU interest in Turkmen resources, made a U-turn. It agreed to lay the Turkmenistan-China pipeline through Tajikistan. According to preliminary calculations, the 400 km long pipeline with the annual capacity of 25-30 bcm will be completed by the end of 2019.

China's lower (and temporary) interest in expanding the capacities of the export pipeline appeared against the background of the revised principles of cooperation of Russia and Iran with Turkmenistan. Throughout the 2010s, the volumes of gas supplies to Russia from Turkmenistan were consistently shrinking; in January 2016 gas supply was discontinued. The demand for Turkmen hydrocarbons on the European market (where it was delivered via the Russian territory for a long time) practically disappeared; the two countries could not agree on the principles of price formation.

The relationship between Turkmenistan and Iran were not cloudless. Turkmenistan had two pipelines at its disposal, built in 1997 and 2010, to deliver gas to Iran, which had been living under Western sanctions since the mid-1990s. It relied on the Turkmen pipelines to resolve the economic problems of its northeastern regions, far removed from Iran's own gas fields in the south. Turkmenistan could supply up to 20 bcm of gas annually; Iran, for its part, did not need that much and exported about 8 bcm. Seen from Ashkhabad, Iran looked like a promising route of hydrocarbon exports; Turkmenistan planned to reach the annual volume of 14 bcm and subsequently construct a pipeline to Europe across the Iranian territory. These plans were never realized: in late 2016 their relationship deteriorated because of the Iranian debt of \$1.8 billion for the gas supplied in 2007-2008. Tehran refused to pay; in January 2017, Ashkhabad cut off gas supplies. Tehran adhered to a hard-line position: it was developing the Yuzhny Pars gas fields and infrastructure required to supply gas to the northeastern regions. Having built a pipeline, highways and railways by 2016, it relies on its own gas inside the country and cut down its need for Turkmen gas to the minimum. In early 2018, their failed attempt to achieve cooperation in the energy sphere left Ashkhabad with only one customer, namely, China. Beijing thus finally resolved a strategically important task: it reduced dependence on Middle Eastern suppliers¹⁴ to become the only customer on the Turkmen gas market.

Ashkhabad's hopes of moving its gas westwards to Europe were also not fulfilled. From time to time, however, the EU resumes the talks about the Trans-Caspian gas pipeline to give Turkmenistan a chance to deliver its gas to Europe. So far, the talks never went beyond political statements due to the unsettled status of the Caspian Sea, as well as because the amount of gas that could be ex-

¹³ See: T. Dadabaev, "'Silk Road' as Foreign Policy Discourse: The Construction of Chinese, Japanese and Korean Engagement Strategies in Central Asia," *Journal of Eurasian Studies*, No. 1, 2018, pp. 30-41.

¹⁴ See: Z.A. Dadabaeva, E.M. Kuzmina, op. cit.

tracted in Turkmenistan in the future remains vague and because Baku and Ashkhabad have entirely different goals. Azerbaijan wants to sell Europe its own hydrocarbon reserves.

This means that in the gas export sphere Turkmenistan depends to the greatest extent on the policies pursued by other states (Russia, Iran and China in the first place). In this context, the new opportunities created by the recently built pipelines did not give the Central Asian states more freedom in the energy sphere.

Export Routes Diversified

Despite the realized pipeline projects, in the 2010s the Central Asian countries still want to widen the scope and geography of oil and gas exports. They are inspired by the interest in new export pipelines fanned, to a great extent, by Russia, Iran and China revising the nature of their cooperation with the Central Asian exporters.¹⁵ In the first place, they currently need less hydrocarbon resources than they used to; secondly, their positions are strongly affected by the very different geopolitical context in Central Asia and the relationship between Iran and the West.

It was approximately at the same time that the local states moved on to new big oil and gas fields. Since 2016, Kazakhstan has been developing the Kashagan oil field in hopes of exporting more oil. Turkmenistan is pursuing the same aim at the Galkynysh gas fields. As could be expected, gas and oil exports will be increased¹⁶ which means that the Central Asian countries are pinning big hopes on new pipelines.

In recent years, the Turkmenistan-Afghanistan-Pakistan-India (TAPI) gas pipeline project has moved to the fore as the most promising. In fact, it has been discussed although to no avail since the 1990s. Not discouraged, Turkmenistan has preserved an interest in it and tried, so far without much success, to attract potential investors. The 1,800 km long pipeline, the construction of which will cost \$10 billion, is expected to move 33 bcm of gas a year.

In view of the fact that Iran has lost interest in Turkmen gas and that China became its exclusive client, Ashkhabad looked at TAPI as an alternative to both. In addition, Turkmenistan considers India as a promising consumer of hydrocarbon resources. If realized, TAPI will diversify Turkmen gas exports and lower its dependence on its current partners.

Late in 2015, Turkmenistan launched the TAPI pipeline in its territory. It owns 51% of shares in the consortium set up for this purpose; the rest has been distributed between Afghanistan, Pakistan, India and external investors. The TAPI pipeline will rely on Galkynysh as a source of gas.

It is not that easy to realize the project: before reaching India and Pakistan, the pipeline should pass as far as possible from the unstable Afghanistan; moreover, it is a rival of the Central Asia-China gas pipeline¹⁷ and contradicts the interests of Iran, which wants a pipeline to India via Pakistan (Iran-Pakistan-India) to bypass the insecure Afghanistan.

In February 2018, the construction of the Afghan stretch of TAPI began; the entire stretch will be ready in late 2019. The realization of the Afghan part of the project had been predated by the talks between Ashkhabad and Kabul, the latter promised to ensure the complete safety of the pipeline. If

¹⁵ See: B. Griffith, "Back Yard Politics: Russia's Foreign Policy Toward the Caspian Basin," *The Journal of Post-Soviet Democratization*, Vol. 6, 1998, pp. 426-441.

¹⁶ See: Lu Shanbing, Huang Mengfang, Lu Naxi, *Sopriazhenie stroitelstva EPSHP i EAES: problemy uglubleniya ekonomicheskogo sotrudnichestva mezhdru Kitaem, Rossiej i gosudarstvami Tsentralnoy Azii*, RISI, Moscow, 2016, pp. 119-135.

¹⁷ See: T.S. Guzenkova, N.V. Karpov, D.A. Alexandrov, Ia.A. Amelina, I.V. Ippolitov, V.B. Kashirin, A.I. Kucherenkov, D.S. Popov, A.N. Sytin, K.I. Tasits, S.V. Tikhonova, *Strany SNG i Baltii v globalnoy politike Kitaia*, RISI, Moscow, 2013, p. 40.

realized TAPI will change the regional balance of power: Turkmenistan will acquire additional and greater chances to lower its dependence on China by exporting its gas to other markets.

Moreover, in recent years Turkmenistan has had discussions with the EU in hopes of delivering its gas to Europe. In June 2015, the negotiations between Turkmenistan, Azerbaijan, Turkey and the EU were concluded by setting up a permanent workgroup to devise several options for delivering Turkmen gas to Europe, one of them being a Trans-Caspian underwater gas pipeline. The EU was pursuing its own political interests: it wanted to tighten its grip on Turkmenistan to achieve cooperation in the energy sphere. In July 2017, EU foreign ministers decided that the EU needed a new foreign policy strategy in Central Asia, up to and including sources of energy export, to be formulated not later than the end of 2019. In fact, European countries have already demonstrated much interest in Kazakh and Turkmen gas. According to the Vice President of the European Commission Maroš Šefčovič, this gas will reach Europe via the Southern Gas Corridor.¹⁸

Kazakhstan and Azerbaijan responded promptly: in December 2017, they set up two workgroups to organize the potential delivery of Kazakh oil and gas via Azerbaijan to external markets. It should be said, however, that the plans of Kazakhstan and Turkmenistan concerning gas delivery are unlikely to be realized any time soon: Russia and Iran are dead set against the Trans-Caspian project, which makes its realization hardly possible.¹⁹ As soon as Iran disentangled from the Western sanctions in the 1990s, it has radically changed its energy policy, in Central Asia among other places. Today it intends to become one of the biggest gas suppliers to the West (Europe) and the East (China) by pushing the Caspian states to the side. It plans to export up to 80 bcm of gas a year starting with 2021; this will make it the biggest rival of Turkmenistan and Azerbaijan. This also means that it will hardly agree to become a transit territory for Kazakh and Turkmen gas.

Kazakhstan is no less ambitious when it comes to oil exports. Commercial oil extraction at Kashagan began in late 2016. It is expected that several years later commercial volumes will reach 13 million tons of oil and 9 bcm of gas, and that Kazakhstan will export more oil along the Western Kazakhstan-China pipeline.²⁰ Starting in 2014, despite the developed pipeline infrastructure, the volumes of Kazakh oil exports to China have been gradually shrinking. The total volume of extracted oil may remain at the same level because the oil from the Kashagan oil fields will fill the gap left by the smaller amounts from the old oil fields. This happened in 2017, when the volume of extracted oil grew to attain the figure of 86.2 million tons.

While building up oil extraction, Kazakhstan expects to sell more gas to China.²¹ In October 2017, having built the 1,475 km long Beyneu-Bozoy-Shymkent pipeline, Kazakhstan started selling its gas to China; it hopes to bring the volume up to 5 bcm by late 2018. If the positive dynamics continues, it stands a good chance to become a rival of Turkmenistan and Uzbekistan in a few years.

This means that the Central Asian countries have entered a new period of consistent diversification of export routes. In recent years, Turkmenistan, which has the biggest gas reserves, has been exporting about 30 bcm of gas mainly to China. Uzbekistan and Kazakhstan each supply China with 10 bcm of gas. The annual capacity of the pipeline allows Turkmenistan to build up the volume of its export to China by a maximum of 5 bcm. On the other hand, it cannot export its hydrocarbon resources along other routes. Hence the intensified regional rivalry over oil and gas exports and higher tension in the relationship between Central Asian states.

¹⁸ See: A. Muminov, "Evropa zhdet gaz iz kazakhstana," *Kapital*, 1 March, 2018, p. 10.

¹⁹ See: R. Sokolsky, T. Charlick-Paley, "Caspian Oil and Energy Security," in: *NATO and Caspian Security: A Mission Too Far?* RAND Corporation, 1999, pp. 69-80.

²⁰ See: D. Bolekbaeva, I.F. Selivanova, op. cit.

²¹ See: M. Elemensov, "Kazakhstan s 2017 goda planiruet eksportirovat gaz v Kitay," *Liter* (Kazakhstan), 20 February, 2017.

Mounting Water Deficit

The situation in the sphere of water supply is no less dramatic. Despite all previous agreements there is no mechanism of joint management of the transboundary rivers' water resources: approaches to the problems of water supply differ from country to country, making integrated management of the water and energy complex impossible. There is no unambiguous legislation related to the use of hydro-resources of the transboundary rivers; no efficient mechanism of water distribution, management of water resources or conflict settlement; the level of information exchange related to the quality of water and its use is unacceptably low. This makes it harder to arrive at mutually advantageous solutions that are inevitably replaced with political statements and empty declarations. In September 2015, President of Kazakhstan Nursultan Nazarbayev called on the Central Asian countries to arrive at an agreement and build up long-term relationships.²² Today, the water-related situation is fraught with interstate conflicts. The countries on the river shores are more interested in dividing the advantages created by access to water, rather than in dividing the water, which makes it much harder to arrive at a pattern of its joint use.²³

In the absence of consistent access to the water resources of transboundary rivers, the relationships between the region's states are balancing on the edge of a conflict. In recent years, for example, the Syr Darya has barely reached the center of the Uzbek territory, its western areas being practically deprived of water. According to expert opinion, in 15 to 20 years the region's water resources will shrink by at least one-third. According to the U.N., by 2040 the annual runoff of Kyrgyzstan will drop to 19 cu km against the 2006 figure of 55 cu km. In the next 10 to 15 years the region might need 40% more water that will inevitably affect the region's conflict potential.

Despite their divergent interests, in 2017-2018 the Central Asian countries were gradually revising their approaches to water issues. In 2016, the new Uzbekistan authorities formulated new initiatives designed to tune up regional cooperation. All Central Asian countries are gradually becoming more aware that regional cooperation is the only answer to scarcity of water. The states and international organizations have already formulated certain initiatives designed to deal with the water problem. In early 2017, the Regional Center for Preventive Diplomacy for Central Asia drafted a convention on water distribution in Central Asia. It was sent to the governments of four countries: Kyrgyzstan, Kazakhstan, Tajikistan and Uzbekistan and initiated the movement towards multilateral cooperation in the sphere of water resources.

Later, in November 2017 the conference dedicated to the conclusion of the EU project "Promotion of Dialog for Conflict Prevention Related to Water Nexus in Central Asia. Central Asia Water Nexus Cooperation" deemed it necessary to point out that in the absence of a dialog on the problems of management of transboundary water resources regional rivalry may intensify. Approximately the same was said early in 2018 at a meeting of the Board of the International Fund for Saving the Aral Sea. It was emphasized that rational and efficient use of water resources, supply of pure drinking water and environmental protection are the most important tasks. The shortage of water resources negatively affects the economic development of Central Asian countries.²⁴

So far, no distribution mechanisms for the water resources of transboundary rivers have been created. It should be said, however, that a dialog on the water issue is a political breakthrough after twenty years, during which no agreements were reached and the nature of interstate relations re-

²² See: N.A. Nazarbayev, *Era nezavisimosti*, KAZaknarat, Almaty, 2017, p. 467.

²³ See: S. Zhiltsov, A. Bimenova, "Central Asian Politics Regarding Water Use of Transboundary Rivers," *Central Asia and the Caucasus*, Vol. 16, Issue 1, 2015, pp. 78-87.

²⁴ See: M.L. Pikulina, "Problema transgranichnykh vodnykh resursov v Tsentralnoy Azii," *Kazakhstan-Spektr*, No. 1, 2013, pp. 31-42.

mained the same. This dialog may lay the foundation for the final settlement of the problem in the future.

The Role of the Foreign Factor

Very soon the relatively peaceful interaction between the Central Asian countries regarding water sphere may come to an end mainly because of the influence of the neighboring states that may radically change the talks unfolding in the region. Afghanistan is one of the potential key partners in the future agreements on managing transboundary water resources. Since 1979, when the armed conflict caused by the introduction of Soviet troops ensued, it has been practically excluded from an active discussion of the region's water problems and their possible settlements. Meanwhile, the country may play a decisive role by claiming its share of water in the Amu Darya basin.

In recent years, it has been using about 2 cu km of the total 9 cu km of the annual runoff of the Panj, which, together with the Surkhob, that has its source in Tajikistan, form the Amu Darya in Afghanistan's territory. According to the 1946 treaty between the Soviet Union and Afghanistan, the latter acquired the right to use up to 9 cu km of the Panj water. In 1958, it was replaced with a new treaty on the use of the Amu Darya water. In post-Soviet times, cooperation between the independent Central Asian republics and Afghanistan and coordination in the Amu Darya basin were practically abandoned.

If and when the fighting in Afghanistan is discontinued and the situation becomes relatively normalized, the country will need considerably more water from the Amu Darya and Panj to develop its agriculture, which will negatively affect the countries in the lower reaches of both rivers.

In April 2009, despite the difficult political situation and being practically excluded from the discussions of the future of water use, Afghanistan passed the Water Law on the integrated management of water resources. So far, the country has been sorting out its water needs in agriculture, energy production and the housing and utilities sector.

China likewise figures prominently in the Central Asia water management context. Its water policy is closely connected with the future development of the Xinjiang Uyghur Autonomous Region (XUAR) with annual water resources of about 26.3 cu km, sufficient for the local population of 20 million. To settle the region's political problems and develop its economy China plans to move from 60 to 100 million people to make it a regional center and a trade hub. This determines China's position on the transboundary Central Asian rivers. Irrigated agriculture, cattle breeding and oil and gas industry will require a new lease of life under the Great Discovery and Development of the Western Regions program, adopted in 1999 and Great Development of the West of China up to 2050 program, adopted two year later.²⁵

Greater population will need more water for personal consumption and the economy. The Chinese have already decreased the flow of the Black Irtysh to Kazakhstan and Russia. The Decision on the acceleration of the reforms in water economy adopted in 2011 by the C.C. C.P.C. and the State Council of the PRC was intended to deal with the water problems: up to 2021 the state will invest \$62 billion annually in the water economy and irrigation, which means that even more water will be taken from the transboundary Black Irtysh. Thirteen new small and medium water reservoirs and one hydropower station Qiaobate are being built in XUAR on the Irtysh.

China's active use of the water of transboundary rivers will negatively affect the environment and make it harder for the countries in the lower reaches to cope with economic and social problems.

²⁵ See: M. Gliants, "Kitayskaia initsiativa 'odin poias—odin put': chto mozhnet sdelat 'brand'," *Problemy postsovetskogo prostranstva*, Vol. 4, No. 1, 2017, pp. 8-19.

In fact, the greater amount of water taken from the Black Irtysh has already lowered the inflow into Lake Zaysan and the water level in the Satpaev Irtysh-Karaganda canal. Central Kazakhstan, which uses its water, has already become aware of this reality. If China continues moving in the same direction, it will greatly endanger the future of Lake Balkhash by tipping its environmental balance. In view of the fact that the total volume of water resources of the Irtysh is about 9 cu km, the planned volume of water use by China will be catastrophic for the economies and environmental situation in Kazakhstan and Russia.

This means that the talks between the countries in the upper and lower reaches of transboundary rivers are much more important than simple registration of the volumes of water intake and figures of energy production. They should arrive at coordinated decisions and take economic development as well as social and environmental issues into account. The environmental situation causes a lot of concern in all the countries. This is the only way to address the accumulated contradictions and lay the foundations for sustainable development.²⁶

Conclusion

The Central Asian countries do not let the hydrocarbon and water resources of their region out of sight. They pin their hopes on oil and gas exports and reliable and sustainable access to water resources that are indispensable for the region's development and consolidation of their political institutions. So far, however, no breakthroughs in dealing with regional problems should be expected since the region and, therefore, its oil and gas are far removed from the external markets.²⁷

The region has already left behind the first stage of geopolitical rivalry for access to hydrocarbon resources and the routes by which additional volumes of oil and gas will be delivered to the markets.²⁸ They have chosen the eastern route to China. The first pipeline projects that targeted Europe were not realized for objective reasons, while Russia preserved its control over part of the exported oil and gas. Kazakhstan and Turkmenistan, with the region's biggest hydrocarbon resources, were not discouraged: not only have they widened the geography of their pipeline routes,²⁹ but also increased their number.

In 2016-2018, an interest in Central Asian hydrocarbon resources increased: the local countries and their neighbors found themselves involved in the discussions and realization of new export routes with a view of consolidating their positions in the region. At the same time, the recent dynamics of oil and gas extraction and the objective economic and technological problems posed by the extraction of hydrocarbons and their export give little hope that extraction and export will be rapidly developing.

The Central Asian countries are no less concerned about the water resources of transboundary rivers. In fact, the problem of water resources has come to the fore: on the one hand, the river systems and the internal seas (the Aral and the Caspian) unify the region; on the other, the water deficit and

²⁶ See: N.K. Kipshakbaev, "Vodnomu sotrudnichestvu stran Tsentralnoy Azii—20 let: opyt proshlogo i problemy budushchego," *Vodnoe khozyaystvo Kazakhstana*, No. 2 (52), 2013, pp. 15-20.

²⁷ See: R. Manning, "The Myth of the Caspian Great Game and the 'New Persian Gulf,'" *The Brown Journal of World Affairs*, Vol. VII, 2000, pp. 15-33.

²⁸ See: F. Umbach, S. Raszewski, "Strategic Perspectives for Bilateral Energy Cooperation between the EU and Kazakhstan Geo-Economic and Geopolitical Dimensions in Competition with Russia and China's Central Asia Policies," *Konrad-Adenauer-Stiftung*, 2016, 70 pp.

²⁹ See: A. Cohen, "Caspian Gas, TANAP and TAP in Europe's Energy Security," *Istituto Affari Internazionali—IAI Working Papers*, 14 April, 2014, 17 pp.

the desire of each country to use it in its own interests and to the maximum extent add tension and stir up interstate conflicts.³⁰

For more than 25 years of post-Soviet development, the Central Asian states have failed to suppress contradictions related to water use and arrive at a mechanism of taking into account the interests of all states, even opposing ones. So far, they have formulated their ideas and are discussing payments for water or bartering in gas and water (Uzbekistan-Kyrgyzstan and Tajikistan) and in water and energy (Tajikistan-Kazakhstan), etc. No final decisions have been reached: it is not particularly easy to weigh the value of fuel and energy resources and water, which each of the region's countries still hopes to exchange.³¹ The contradictions inherited from the past do nothing good to interstate relations.³²

While the countries tread cautiously when it comes to the elimination of water-related contradictions, the situation is gradually going from bad to worse. All the known directions of the rational use of Central Asian water resources are limited technologically and economically. It is for many years now that the Central Asian countries have been trying to arrive at an agreement on the ways and means of sharing water resources. About 40% of the region's drinking water is found in Kyrgyzstan. It uses a third of the annual runoff of transboundary rivers to meet the requirements of its 5-million population and the 6% of lands that can be used for agricultural purposes. The rest is consumed by Kazakhstan, Uzbekistan and partly by Turkmenistan.

So far, however, the Central Asian countries are not ready to set up efficient water management mechanisms. This has been amply demonstrated at the informal summit of five Central Asian countries in March 2018. The water-related problems had developed into one of the burning regional issues, yet the Central Asian leaders did not go beyond political statements and carefully avoided specific decisions. President of Kazakhstan Nazarbayev said, in particular, that the Amu Darya and Syr Darya should not become an object of political haggling, and that the use of hydropower objects, water and electric energy should be used in the interests of all states.³³

This makes the energy and water problems potential sources of interstate conflicts; each of the Central Asian countries acts unilaterally, pushing aside the interests of its neighbors and still hopes to address the problems independently. In fact, the conditions on which water resources are being divided and the electric energy used should be revised.

The Central Asian countries should abandon the idea of pricing the water and energy resources, since it makes it next to impossible to formulate the mechanism of joint use. They should take into account the indirect losses caused by the decision to close or limit access to water and energy resources. We have in mind a supra-state structure in which all countries should be represented with the right to elaborate and offer a concerted water- and electric power-related policy and assess the advantages and losses of each side. This calls for concerted and balanced management of the water and energy resources based on calculations of each country's requirements for water and electric power and the ways and means by which compromises can be achieved. Indeed, no compromises are possible if the countries refuse to take into account the interests of their partners. This means that a Convention on the Use of Water and Energy Resources of Central Asia should be approved and ad-

³⁰ See: Kh.M. Mukhabbatov, "Vodnye problemy Tadzhikestana i problemy vodopolzovania v Tsentralnoy Azii," *Problemy postsovetskogo prostranstva*, No. 3, 2016, pp. 29-45.

³¹ See: B. Auelbaev, T. Erzhanov, "Politika stran Tsentralnoy Azii i vodno-energeticheskie problemy regiona," *Analytic* (Kazakhstan), No. 3, 2009, pp. 13-18.

³² See: B.R. Syrlybaeva, "Upravlenie vodnymi resursami kak faktor obespechenia bezopasnosti Tsentralnoaziatskogo regiona," in: *Aktualnye problemy bezopasnosti i sotrudnichestva v Kaspiysko-Tsentralnoaziatskom regione: materialy XI Ezhegodnoy Almatinskoy konferentsii (g. Almaty, 20 iunia 2013 g.)*, KISI, Almaty, 2013, pp. 119-148.

³³ See: N.A. Nazarbayev, "V vodnom voprose ne dolzhno byt politicheskogo torga," available at [http://www.inform.kz/ru/v-vodnom-voprose-ne-dolzhno-byt-politicheskogo-torga-nursultan-nazarbaev_a3185780], 17 March, 2018.

opted, otherwise, interstate relations will never improve, and the region's sustainable development will remain a dream.
