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MACRO PICTURE:

The Power of Water Supply

In Central Asia

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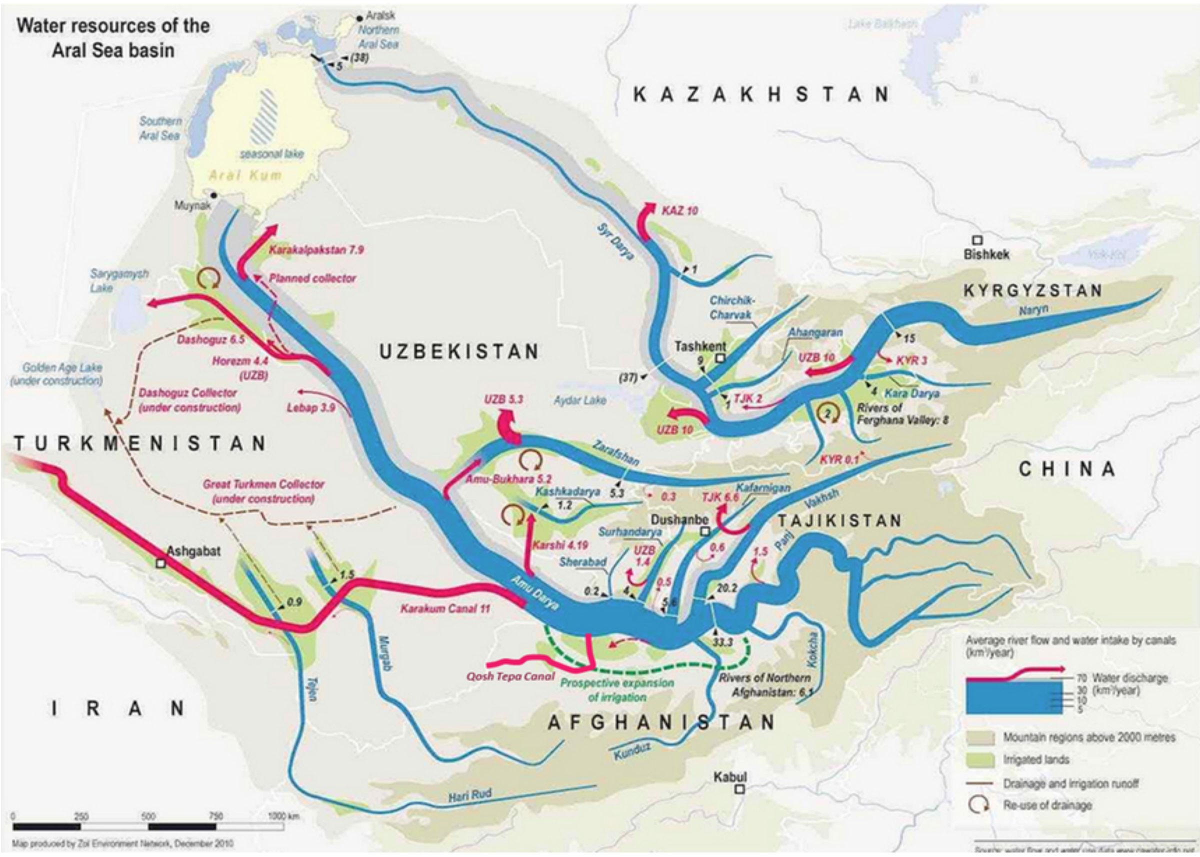
Executive Summary

- Central Asia's stability is centred around water, not fossil fuels or military power. Tajikistan and Kyrgyzstan hold disproportionate leverage in this department as upstream states.
- The Soviets provided the area with a centrally planned system which kept the priorities of the states aligned. Once this disappeared in 1991, cooperation became less attractive and the 5 states began acting in their own best interest.
- There is inherent friction present on both the Amu Darya and the Syr Darya. Upstream hydropower states hold back the water that agricultural downstream states rely upon.
- In the absence of Moscow's in a coordinating role, external powers have entered the contest for influence in the region. The battle is fought with capital rather than troops.
- While Russian investment has stalled, Chinese investment has rushed ahead. This is largely focussed on the downstream states and in many cases in making them less reliant on their downstream neighbours.
- While Western powers are unable to match the sheer scale of China's capital investment, the EU, US, and UK offer more long-term partnerships. This provides the states with cards to play against competing patrons.
- Besides their role in controlling the regions water, projects such as Rogun and Kambarata serve as national symbols of post-Soviet sovereign success.
- Glacial retreat caused by climate change poses a threat to the seasonal cycle which the existing framework relies upon.
- Whether the regions mega-projects lead to lasting regional cooperation rather than competition will depend upon the political agreements that are reached more than the dams themselves.

Key Picture: Water Resources of the Aral Sea Basin



Source: CAWater-info.net. Note: Map showing the main rivers of Central Asia the Syr Darya and Amu Darya, flow from upstream Kyrgyzstan and Tajikistan (and Afghanistan) towards downstream Kazakhstan, Turkmenistan, and Uzbekistan.

1. The Power of Water

Few regions demonstrate the geopolitical power of water more clearly than Central Asia. The balance of power here is not determined by military strength or fossil fuel reserves, rather by the rivers that run down from the Pamir and Tian Shan mountains. Despite being the two poorest states in the region, control over the waters of the Amu Darya and Syr Darya lies in the hands of Tajikistan and Kyrgyzstan respectively, giving them disproportionate strategic leverage over their downstream neighbours. Water underpins the political economy of the whole region: irrigating agricultural systems, generating hydropower, and sustaining the livelihoods of millions of people in one of Earth's most water-stressed regions. As a result, control over these rivers has become entwined with questions of energy and food security, alongside economic development and regional stability.

2. Legacies of the USSR

During the Soviet period, the tensions surrounding water in Central Asia were managed through a central planning system as opposed to negotiations between sovereign states. During the summer, upstream republics released water, fed by meltwater in the mountains. Uzbekistan could then irrigate the cotton fields so crucial to its economy. In winter, when river flows decreased and hence hydroelectric generation fell, fossil fuels flowed back upstream to fill the energy deficit. The Soviets used water and energy as two halves of a single integrated system. This naturally reduced friction and interstate competition as water releases and energy transfers were coordinated to meet regional rather than national priorities.

The system rewarded cooperation over competition, avoiding each state attempting to make marginal gains to the larger detriment of the whole region. However, when the Soviet Union collapsed in 1991, the planning systems vanished with it and the newly formed Central Asian Republics were left to dispute how water resources should be used, each with their own self-interest in mind. Nothing about the mountains, meltwater or river courses had been altered. However, in the absence of a management framework their political significance did. In the post-Soviet era, water was transformed from an economic resource into a strategic geopolitical asset.

The environmental cost of this was already becoming evident. The Aral Sea was once the fourth largest lake in the world; however, it had been shrinking consistently since the Soviet era as both the Amu Darya and Syr Darya fell under more intense management, diversion, and extraction. By the time the republics gained independence, the once-great lake which had supported both ecosystems and fishing communities for thousands of years was now little more than salt flats. This stands as a cautionary tale of what large-scale water mismanagement can inflict on both people, and the environment.

Following independence, upstream states increasingly sought to hold onto water even during the summer months to increase hydroelectric generation. Meanwhile, downstream states continued to depend on regular flows to feed irrigation both to feed their people and scale the output of cash crops such as cotton which were crucial to their economies. With a lack of an institutional mechanism between the two parties, these contrasting motives are what led to the major tensions in the area.

This dynamic was not restricted to a single river. Across the region, similar relationships developed wherever an upstream hydropower state and a downstream agricultural state met, both demanding the same water resources. The two major rivers in the area - the Amu Darya and the Syr Darya - both illustrate this pattern playing out in an almost identical way.

On the Amu Darya, Tajikistan's focus was on the Rogun Dam, a hydroelectric project which – if completed to its full height – would be the tallest dam in the world. For the Tajik people, Rogun wasn't just a national symbol of control over their natural resources, but also a route out from the energy poverty which plagues the country curbing its industrial ambitions. This project gave Tajikistan a means of exerting control over the river that Uzbekistan so heavily relied on for irrigation. This dam, therefore, represented an existential threat to the cotton industry and agricultural systems which underpinned Uzbekistan's economy.

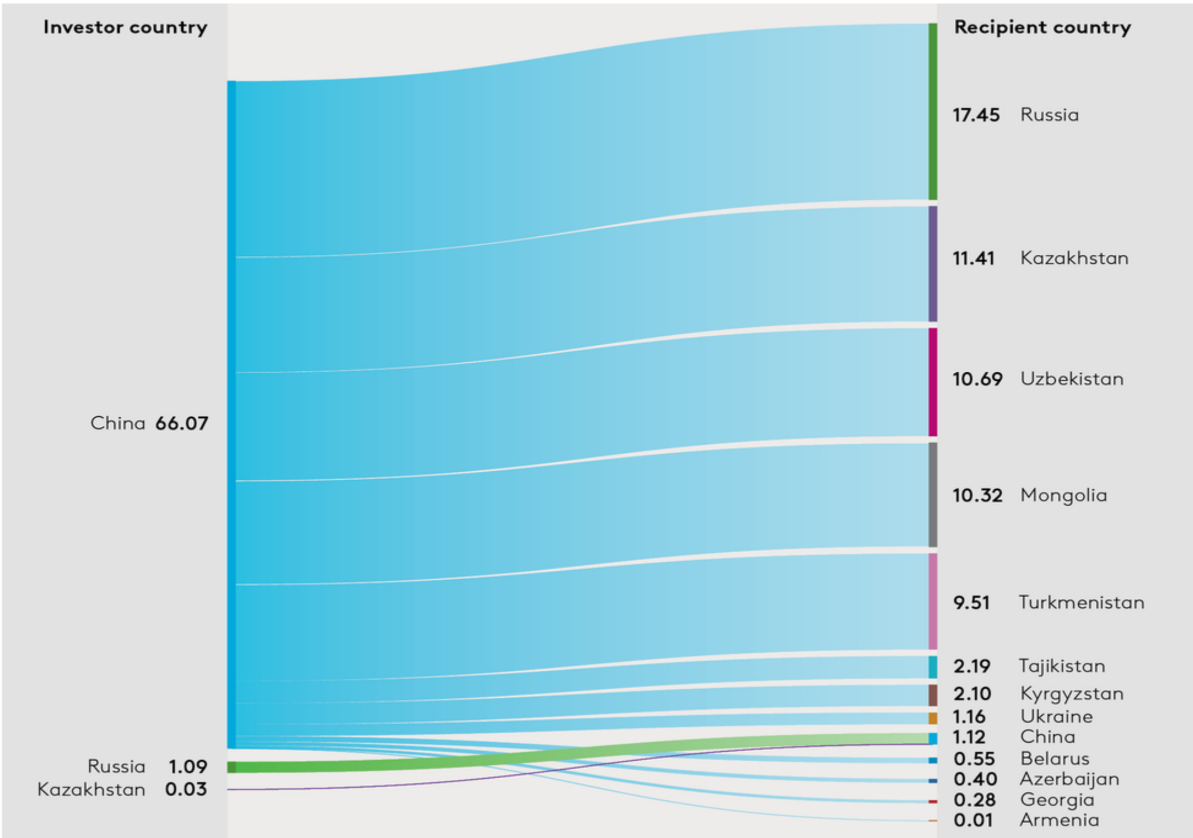
Similarly, on the Syr Darya, a parallel being dilemma was playing out centred around Kyrgyzstan's Toktogul reservoir. As the authorities in Bishkek increasingly prioritised electricity generation, they held back water during the summer months which was when Uzbek and Kazakh farmers downstream needed it most. Water was released in the winter, when hydropower was really needed; however, this was when it was agriculturally ineffective and due to a lack of communication, flooding downstream was common.

The seasonal coordination which had once been organised by Moscow had now vanished, leaving behind a source of indefinite friction between the states, each attempting to optimise for its own needs at the expense of its neighbours. The geography remained the same. What had changed was that water had been transformed from a centrally managed asset into a sovereign one, with five parties all vying for their own control. The rivers still flowed. Rather, the states that depended on them were drifting apart.

3. International Influence

It didn't take long for this to be recognised beyond the region's borders. The power vacuum left by Moscow's retreat has not stayed empty. Whereas Soviet central planning used to have the final say, the five sovereign states are now able to compete for external patrons who fund the infrastructure which gives them influence over their neighbours. Rather than the troops, this contest is fought primarily with capital (**Figure 1**). Funding a dam, pipeline, or an irrigation system buys a tangible foothold which is far more permanent than any diplomatic agreement. Central Asia's water has become something that the world's major powers now consider worth competing for.

Figure 1: Investment Flows Between China And Eurasian Countries



Source: EDB MMI database.

Russia is an obvious player, given its historical position as the region's central planner and mediator. However, this position has been consistently weakening. According to figures from the EDB, over the last decade Russian investment into Central Asia stands at $20 billion, a figure which President Putin himself admitted was "rather modest". The decline since 2022 has been particularly evident, largely due to Russia's full-scale invasion of Ukraine diverting capital and attention away from the region. With slowing investment, Moscow is left relying on soft power in the form of language, migration, and existing agreements in order to retain influence. Russia has not left Central Asia. However, for the first time since the dissolution of the USSR, it is no longer the primary external power in the area.

That mantle has now been handed over to Beijing, which has taken over as the primary source of FDI into the region. Over the last decade Chinese investment into Central Asia totals around $35 billion, dwarfing Moscow's figure. Moreover, growth is still accelerating despite waning FDI flows elsewhere. As the world's largest energy importer, China has invested heavily into the region's oil and gas sector while also steadily pushing capital into hydropower and other sources of clean energy. Hence, China is directly funding the very infrastructure at the centre of these regional conflicts. Additionally, this investment is not spread evenly. Close to 90% is into Kazakhstan, Uzbekistan, and Turkmenistan alone leaving the two poorest states in the region, Tajikistan and Kyrgyzstan, with relatively little funding despite controlling the water itself.

Figure 2: A Photograph Showing the Rogun Dam Project Under Construction

Source: www.capari.com

Chinese FDI into Uzbekistan alone has grown fivefold in the last five years being aimed largely at energy infrastructure such as solar power and transmission. This is the very infrastructure that will allow Uzbekistan to depend less on the seasonal flows that are still under the control of upstream states. This leaves Tajikistan and Kyrgyzstan in a precarious position. Despite being the two states which have control over the region's water, they have the least external capital which would allow them to convert this control into effective leverage. Meanwhile, their downstream rivals are being funded into a position where even the existing dependency is being greatly diminished.

That imbalance is where Western Powers have tried to gain some control. The USA, EU, and UK are unable to match the scale of China; however, they come with different offerings. More subtle governance standards, development bank financing, and the offer of long-term diplomatic partnership replaces the brute force of raw capital. This recognises Tajikistan and Kyrgyzstan as worthwhile investments - something that China largely glosses over. In many cases, Western Interests in the region are explicitly aimed at offsetting Russian and Chinese influence. This motive hands the states a source of leverage as they are able to use the threat of investment from China and Russia to force the hand of Western Powers. Tajikistan employed this tactic in reverse in the 2000s, using the threat of closer ties with the West to gain more favourable terms in its agreement with Russia concerning military basing rights. However, this is an increasingly time-sensitive issue. Projects such as the Rogun Dam which offer prime FDI opportunities will not remain under construction indefinitely and, once they are finished, the offer of capital support carries much less weight.

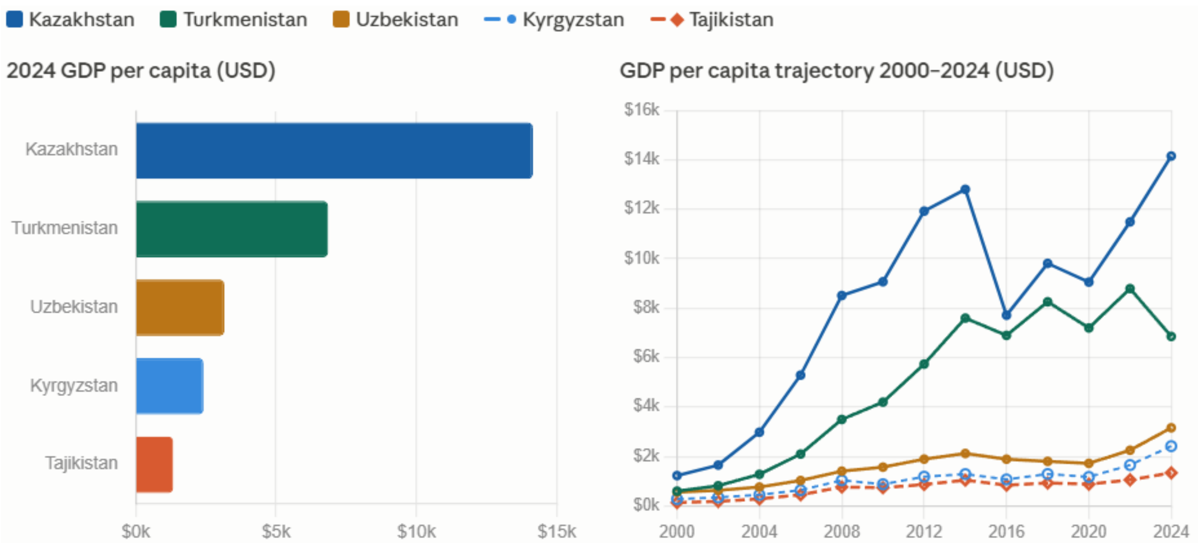
A key point which unites all these external powers is that none of them are trying to directly solve the region's water concerns themselves. Rather, they fund the dams, pipelines, and grid systems which allow the countries to bargain amongst themselves. Projects such as Rogun and Toktogul therefore have evolved. They are no longer projects of purely domestic or even regional significance, instead they offer an arena for the global fight over influence over Central Asia to be played out.

4. Water as an Icon of Sovereignty

Besides being a conduit for foreign capital to flow into the region, Central Asia's rivers carry another, softer kind of power. Both for governments in the area as well as for the population living there, these projects are evidence of national purpose and success. A clear demonstration that these young, poor states can still control their own future

The Rogun Dam (**Figure 2**) itself is the perfect example of an infrastructure project turned national icon. Tajik politicians frequently use it in speeches as evidence that Tajikistan is capable of controlling its own resources and its destiny. It serves as a demonstration to the world that even the poorest of the Soviet republics can complete the tallest dam in the world, regardless of the poverty and conflict it may face. Similar rhetoric surrounds the Kyrgyz Kambarata project hailing the dam as a cornerstone of sovereignty; something that will continue to guide *national* development into the future.

Figure 3: Economic Performance Of Key Countries in the Region



Source: World Bank Development Indicators (NY.GDP.PCAP.CD), 2024 figures. All values current USD. Note: In 2024, Tajikistan had a GDP per capita of $1,341 which was 10.6x less than Kazakhstan. The economy has still not recovered to its pre-independence level in 1991. Remittances account for around 48% of GDP, the highest in the region.

Further downstream, comparable ideas are expressed within Kazakhstan with the partial recovery of the Northern Aral Sea being recognised as a national victory (**Figure 3**). This is evidence that decades of Soviet-era exploitation and mismanagement can begin to be undone. Uzbekistan tells a similar story through the lens of a different resource. Under President Shavkat Mirziyoyev, efforts have been made to break away from the country's role as the region's cotton basket as it was assigned under Soviet control. Movement away from cotton in pursuit of crop diversification alongside modernisation of irrigation systems and reductions in usage of forced labour paints a picture of a developing country seeking to distance itself from its historical role and a moral break from the past.

5. The Rivers That Remain

Fundamentally, neither the Amu Darya nor the Syr Darya has changed since the Soviet Union collapsed in 1991. Yet the implications of the water that they carry have had three major overhauls. Under the Soviets water was a resource expended to maximise economic output, coordinated for the benefit of a single planned system. Independence caused water to become a sovereign asset, a source of the region's most persistent conflicts. Now, it has taken on a third role: that of a foothold for foreign powers competing to steer the region's future, and a means by which each of the states can present their own image of national success.

None of this resolves the inherent conflict between upstream and downstream states. In reality, global warming driving glacial retreat across the Pamir and Tian Shan ranges is likely to upset the annual cycle which the entire system relies on. Whether or not the progress that has been made represented by mega-projects such as Rogun and Toktogul becomes the basis upon which a new era of success can be built is not so much dependent upon the engineering of the projects as of the political framework surrounding them. Whether Tajikistan and Uzbekistan, Kyrgyzstan and Kazakhstan can manufacture the agreements that were once imposed by Moscow will determine the next chapter for Central Asia.

What is undeniable is that water will remain at the centre of whatever agreements are reached. It will remain the region's defining asset. Central Asia has no shortage of oil, gas, or minerals to export across the world – but it is the rivers that will continue to determine the region's stability long into the future.