Water disputes in Central Asia
Rising tension threatens regional stability

SUMMARY
After the disintegration of the Soviet Union, water management has caused severe disputes in Central Asia, due to conflicting needs and priorities between the upstream and downstream countries, thus endangering regional stability and security. In terms of distribution of natural resources, the countries in the region are divided into two groups: 'energy-poor but water-rich' upstream countries (Kyrgyzstan and Tajikistan) and 'energy-rich but water-poor' downstream countries (Kazakhstan, Turkmenistan, and Uzbekistan). While the first group is in dire need of water for energy, downstream countries need water for agriculture. As a result, natural resources have emerged not as tools for facilitating regional cooperation but as a source of conflict.

The dispute over Tajikistan’s Rogun Hydropower Plant Project represents a concrete example of the water-energy-food nexus in the region. As tension between energy-deprived Tajikistan and water-starved Uzbekistan grows, water becomes a source of conflict, posing a significant threat to regional stability. Bellicose statements from the leaders of Central Asian states reflect the importance of water-related disputes: Uzbek President Islam Karimov stated that 'water-related problems could spark wars'.

Disagreement on water management has prompted initiatives from inside the region and from international actors, and the European Union is no exception. The EU’s Central Asia Strategy, identified 'environment and water management' as a priority area. The EU has repeatedly stated that water-related disputes pose a major threat to regional security and stability. Recently, the Council Conclusions of June 2015 re-emphasised the critical importance of the issue. Possible acceleration of tension between the Central Asian states may deteriorate stability and security in the region, which already faces various other threats.

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Background

The Soviet Union treated the Central Asian republics – Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan – as one single economic area, with largely administrative internal borders. Central Asia’s role in regional development plans was to produce crops, and water management was planned accordingly. Central Asia’s water resources were managed from Moscow at a regional level based on a barter system creating mutual dependence: the hydropower plants (HPPs) in the upstream states supplied water for the agriculture sector in the downstream states and in turn downstream states provided food and other energy resources, notably gas, to the upstream states. Following the disintegration of the USSR, administrative borders returned to national boundaries and what was once a domestic issue emerged as a source of international conflict.¹

In the first years of their independence, the region's new-born republics tried to continue with a Soviet-style resource-sharing system, to prevent conflicts and complications in water management. In February 1992, five new republics signed the Almaty Agreement which recognised their equal rights and responsibilities in ensuring rational use of water resources and agreed that only joint management actions can solve the region's water problems. With the agreement, the Interstate Commission for Water Coordination in Central Asia (ICWC) was established to set quotas and to facilitate its implementation, with decisions on key issues to be made by consensus of the five states. However, in the late 1990s, the system failed to deal with growing tensions over resources.

Nation-state formation in the region strengthened nationalism in each country; as a result states began to seek self-sufficiency and greater independence. National interests prevailed over the regional perspective and as new states tried to become self-sufficient, the system established in the Soviet era came to an end. Water became a political tool in bilateral relations when Kyrgyzstan cut water supplies to Kazakhstan in 1999, after water-energy swap agreements of 1998 proved ineffective.²

Along with the lack of cooperation in the region, other factors are worth mentioning, such as infrastructural problems: outdated irrigation systems in the region are so inefficient that a significant portion of water does not reach crops. Additionally, unsettled borders create ethnic minority issues, inter-ethnic clashes, and hinder good neighbourly relations. Uneven distribution of resources and capabilities is the most critical issue generating divergence between national policies of the individual states.

In addition, as documented by a World Bank report, climate change poses new risks for already contested water resources. As agriculture is dependent on irrigation, and climate change might cause river inflows to decrease, especially in summer, crop yields are likely to decrease. While water resources and agricultural products are likely to diminish in the medium to long term, demand for food and energy will increase as the population grows. Furthermore, planned massive hydropower plants are likely to alter river levels. The competition for water between the riparian states has intensified in recent years, especially after Tajikistan revived the Rogun HPP project (for its location see Figure 1).

Water-related disputes in Central Asia

Water resources in the region

Major trans-boundary rivers in the region – and the most important water sources for the Aral Sea Basin – the Amudarya and the Syrdarya, are at the centre of the disputes. The Amudarya, the biggest river in Central Asia in terms of water availability, is formed
by the Panj River in Afghanistan and the Vakhsh River in Tajikistan, continues into Uzbekistan and Turkmenistan and ultimately into Uzbekistan, before emptying into the Aral Sea. The Syrdarya, the longest river in Central Asia, with a length of 3 019 km, has its source in the Tien Shan Mountains in Kyrgyzstan and flows westward toward Uzbekistan through the Fergana Valley, continuing into Tajikistan before it re-enters Uzbekistan and ultimately empties into the Aral Sea.

Figure 1 – Water resources in the Aral Sea Basin

Source: CAWater-Info.

Both rivers' water regime is characterised by a spring-summer flood, largely due to water from melted snow – favourable characteristics for irrigation in downstream countries. Table 1 shows each country's share in the Aral Sea basin.

Table 1 – Surface water resources in the Aral Sea basin (mean annual runoff, km$^3$/year)

<table>
<thead>
<tr>
<th>Country</th>
<th>River Basin</th>
<th>Total Aral Sea Basin</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Syrdarya</td>
<td>Amudarya</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>2 516</td>
<td>—</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>27 542</td>
<td>1 654</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>1 005</td>
<td>58 732</td>
</tr>
<tr>
<td>Turkmenistan</td>
<td>—</td>
<td>1 405</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>5 562</td>
<td>6 791</td>
</tr>
<tr>
<td>Afghanistan and Iran</td>
<td>—</td>
<td>10 814</td>
</tr>
<tr>
<td>Aral Sea basin (total)</td>
<td>36 625</td>
<td>79 396</td>
</tr>
</tbody>
</table>

Source: CAWater-Info

The issues: water, energy and food

Although Central Asia is endowed with enormous energy resources, water distribution has emerged as a source of increasing tension and a major threat to stability and security in the fragile region; entailing multilateral, immediate and comprehensive action. It is argued that 'nowhere in the world is the potential for conflict over resources as strong as
Some observers mention potential 'water wars' in the region or use labels like 'Central Asia's cold war'. Uneven distribution of resources forms the basis of tensions between the Central Asian republics which, in terms of distribution of natural resources, are divided into two groups: 'energy-poor but water-rich' upstream states (Kyrgyzstan and Tajikistan) and 'energy-rich but water-poor' downstream states (Kazakhstan, Turkmenistan, and Uzbekistan). While Kyrgyzstan and Tajikistan, the most impoverished countries in the region, are in dire need of water for energy production, downstream countries need water for the agriculture sector, which constitutes a significant part of gross domestic product (GDP).

All Central Asian countries were integrated via an electricity grid, known as the Central Asia Power System (CAPS), which allowed exchange of power across countries dependent on differences in their respective energy resources and seasonal fluctuations in electricity demand and supply. When Turkmenistan withdrew from CAPS in 2003 (and Uzbekistan and Kazakhstan followed suit in 2009), the upstream states' electricity deficit soared. Although Kyrgyzstan and Tajikistan generate surplus electricity during the summer, they suffer from chronic electricity shortages in winter, mainly as a result of increased heating needs, causing considerable humanitarian concern and posing a threat to security, political stability and economic development in the countries.

Kyrgyzstan and Tajikistan plan to expand their capacity by using their substantial water resources. Kazakhstan, Turkmenistan and in particular Uzbekistan, which rely heavily on water from Kyrgyzstan and Tajikistan, fear that construction of new large-scale hydropower plants will make them more dependent on these two countries, especially for irrigation water. The issue is thus to manage water resources to generate both electricity for upstream countries as well as sufficient water for irrigation in downstream states. Although the issue seems more technical than political, Central Asian states present different solutions, stemming from their different needs and national policies, which inevitably create political friction.

The situation is becoming more critical as a result of the rapidly increasing population in the region, for which the states must find new ways to maintain greater food and energy supplies. Kyrgyzstan and Tajikistan are attempting to reduce their energy deficit with new hydroelectric power plants on major trans-boundary waters. On the other hand, Uzbekistan challenges any project with the potential to decrease the water available for agriculture, the backbone of its economy. Thus, understanding the governments’ positions and possible ramifications of water disputes on regional security require further analysis of the interconnection between water, energy and food.

Water-energy-food nexus in Central Asia

Water for energy

The root cause of ongoing water conflicts is the fact that each country has different assets and needs. For instance, while the total surface area of the two smallest countries in Central Asia, Tajikistan and Kyrgyzstan, corresponds to less than 9% of the total area of the region, they are the source of 75% of the water resources of the Aral Sea Basin. However, they have almost no hydrocarbon sources. The comparative advantage of these two countries in water resources and their poor situation in terms of hydrocarbons, determines the source of energy generation. Electricity production by hydropower (HP) accounts for nearly the entire production in Tajikistan and Kyrgyzstan, whereas downstream countries depend highly on hydrocarbons in energy production (see Figure 2).
In addition, Tajikistan and Kyrgyzstan have little arable land. Only 6.1% and 6.6% of their total area, respectively, is suitable for agricultural production. Water-rich but land-poor Tajikistan has emerged as the most impoverished country in the region. The economic situation is so critical that it may jeopardise social and political stability in the country – the result of high food insecurity. According to the World Food Programme, 47% of the Tajik population live on less than US$1.33, and 17% subsist on less than US$0.85 a day. The majority of people spend 60-80% of their income on food in Tajikistan, where three quarters of the population live in rural areas and approximately one third of the population is affected by food insecurity. Furthermore, Tajikistan's high dependence on remittances increases the likelihood of economic fragility. Therefore, Tajikistan's immense water potential appears to be its most precious source for economic development, which is where construction of new HPPs comes into play.

Lacking any other export options, the upstream countries consider water a reliable long-term source for gaining hard currency, rendering the water-energy nexus more critical. As they are planning to export the summer surplus of hydroelectric power to their southern neighbours, Afghanistan and Pakistan, which also face electricity deficits, the construction of new HPPs increases in importance. Considering that Tajikistan currently operates at just 5% of its potential and Kyrgyzstan at about 10%, exporting energy to southern neighbours is to be expected if the project begins operations. Profits from electricity exports can be used to finance new HPP projects, such as the Rogun HPP, which still lacks funding. However, the more upstream states show enthusiasm for such projects, the more objections from Uzbekistan are heard as a result of the indispensable role of water for agriculture in Central Asia, where the arid climate renders rain-fed agriculture almost impossible. As major river basins are shared by more than two countries, agriculture is one of the chief factors that exacerbate tensions.

**Water for agriculture**

Agriculture constitutes a significant share in the economies of the region's countries. World Bank data demonstrate that Tajikistan's agriculture sector accounted for 26.6% of GDP in 2012. As Kazakhstan and Turkmenistan export hydrocarbons, agriculture's share in these economies was relatively small at 4.7% and 14.5% respectively. In Uzbekistan and Kyrgyzstan, agriculture amounted to almost one fifth of total GDP.

As seen in Figure 3, distribution of water withdrawal for the largest water-consuming sector, agriculture, accounts for 87.2% in the region. Uzbekistan consumes 56 km$^3$ of water per year which is almost 45% of the total volume of the region, 124 km$^3$. This amount is relatively high; twice the total consumption of the second biggest consumer, Turkmenistan. In terms of distribution by sector, Uzbekistan's agriculture sector accounts for 90%, while industrial use is barely 2.7%. The total water consumption of the upstream countries, Kyrgyzstan and Tajikistan, accounts for only 15.6% – almost one third of Uzbekistan's consumption.
After the Soviet Union's break-up, agricultural policies changed to meet new conditions. The Uzbek government, for instance, mandated a reduction in cotton production and an increase in that of wheat. The share of irrigated agriculture for cotton decreased from 45% to 25% between 1990 and 1998, while the area under cereals increased from 12% to 50%, and wheat became the dominant crop in the region. The chief rationale behind this shift was – along with increasing food security through crop differentiation – to decrease irrigation needs, as wheat requires less than half as much water as crops such as cotton. However, producing more wheat instead of cotton did not alter the important role of water. On the contrary, high population growth adds further stress to water resources.

The interconnection between water, energy and food explains why the most energy-deprived country, Tajikistan, has been pushing for increased hydropower at the expense of irrigation in the most water-dependent country, Uzbekistan. Therefore, the issue at stake consists simultaneously of access to water, energy and food security. As pointed out by Paul Sullivan of the US National Defense University, ‘whenever water security is involved energy security and food security are not far behind. Any proper policy development regarding water needs to be seen within the energy-water-food nexus. The energy-water-food nexus is intimately connected with economic security, human security, national security of a country, and indeed international security – and potential threats to international peace’.

Impact on regional security and stability

In recent years, tensions have mounted, especially over the proposed Rogun HPP in Tajikistan, sparking protest from the downstream states, particularly Uzbekistan, which object to the project on the grounds that it would severely harm Uzbekistan’s agricultural sector, which is critical for its economy. A significant part of the water conflicts in the region now concern the Rogun project's safety, its economic and financial viability, and impact on downstream states. The Rogun Dam project's long history and its possible ramifications on the overall political, socio-economic, environmental and security situation in the region provide a useful case study for understanding the ongoing disputes over water resources in Central Asia.

The Rogun Dam: a major source of recent tensions

Construction started on the Rogun Dam in 1982, as part of the Soviet plans for integrated economic development in Central Asia. The construction process halted in 1991, during the break-up of the Soviet Union and the ensuing civil war in Tajikistan. In October 2004,
construction plans were revived during Russian President Vladimir Putin’s visit to Dushanbe, when the Russian company RUSAL agreed to invest roughly US$2 billion on construction of the dam, along with modernising the state-owned Tajik Aluminium Plant (TALCO) – which consumes 40% of electricity in Tajikistan and accounts for nearly half of Tajikistan’s export revenues – and the building of another aluminium smelter nearby.

However, a disagreement on the height and capacity of the Rogun Dam caused the cancellation of the deal by the Tajik government in 2007. RUSAL wanted to build a 285 metre-high dam, with an annual power-generating capacity of 2 400 megawatts (MW) as opposed to the original Tajik government project, which envisioned a 355 metre-high dam that would generate 3 600 MW per year. If the government's project is successful, Rogun will be the world's highest dam. Considering the dam to be a symbol of national sovereignty, Tajikistan sought another solution, including financing through pushing Tajik citizens to buy shares in the plant. Indeed, President Emomali Rahmon has repeatedly stated that the dam is of 'life or death importance'.

Figure 4 – Rogun Dam, on the Vakhs river

Upon the formal request of Tajikistan, the World Bank agreed to carry out a Techno-Economic Assessment Study and an Environmental and Social Impact Assessment study in October 2007, with a view to pointing out the potential benefits and risks of the Rogun project. The studies covered technical, economic, social, and environmental factors, within the context of a least-cost electricity generation expansion plan to meet Tajikistan's energy demand.

During the assessment process, five rounds of consultations with all the riparian states were conducted to incorporate the interests of the concerned countries into the final reports. The World Bank assessed the three possible dam heights (335, 300 and 265 metres) with three generating capacities, construction costs and socio-economic impacts and gave the green light for the project in June 2014, sparking protest from Uzbekistan on the grounds that the assessment 'lacked international standards of independence, impartiality, objectiveness, and transparency'.

Along with the environmental and social impacts, the project’s high investment cost is another source of concern. The project cost is estimated, depending on the height, to be around US$3-5 billion over 10 to 13 years, an amount which is almost half of Tajikistan’s GDP. Actual sources of financing for the project are unclear. According to the World Bank, an international consortium combining government self-financing, equity participation from riparian countries and a number of foreign loans appears the most convenient financing solution.

Social, economic and political impacts of the Rogun project and its ramifications on regional security and stability have become more important than its technical feasibility. Thus, discussions around the project have concentrated on the politics of the issue, rather than its technicalities. Consequently, a significant part of current bilateral relations in the region is dedicated to such issues as water allocation, water usage, water cut-off and controversy over the construction of HPPs.
Strained Tajik-Uzbek relations

Tajik-Uzbek relations have frequently been marked by tension. Tajikistan has often been irritated with what it perceives as Uzbek attempts to establish Uzbekistan as the regional power. The first signs of a bilateral thaw appeared during President Islam Karimov's official visit to Tajikistan in June 2000. The two countries demonstrated their willingness to resolve many outstanding issues, including differences over the delineation of their 1300 km common border. However, resumption of Islamist insurgent activity in August 2000 impeded rapprochement efforts.

The incursion of militants into Uzbekistan over the Uzbek-Tajik border marked the beginning of openly unfriendly relations. Uzbekistan unilaterally placed landmines in border areas. Although this action was aimed at stopping the militants from entering Uzbekistan, ordinary residents of the border area were the main victims. Furthermore, in the same year, the two states introduced a visa regime. Bilateral relations became further strained when Tajikistan revived the Rogun HPP project. Uzbekistan's objections to the Rogun project can be summarised as follows:

- Uzbek agriculture is totally dependent on the availability of irrigation water, and the potential exploitation of Rogun would create a shortage of water in irrigation season.
- The water deficit will cost US$600 million each year in the agriculture sector alone, and reduce the country's GDP by 2%, while 340 000 people will lose their jobs.
- Salinity will increase in the river, thus ruining the quality of groundwater.
- The Rogun site is seismically unstable, increasing technological and environmental risks since the failure of such a dam would lead to disaster.
- Desertification in the Aral Sea basin will increase.
- Tajikistan's winter electricity deficit is over-emphasised: it is only about 500-600 MW and could be resolved with alternatives such as building many small-size plants.
- Rogun will become a political and economic tool for pressure on Uzbekistan.

Developments related to the project suggest that Tajikistan might intend to use Rogun as a political tool. Indeed, once Rogun starts to operate, Dushanbe will have diplomatic leverage over Uzbekistan, which controls nearly all transport and energy grids connected to Tajikistan. Uzbekistan, Tajikistan's only gas supplier, has regularly suspended deliveries amid complaints of non-payment, with increasing frequency since the revival of the Rogun project. For instance, Uzbekistan cut off gas deliveries to Tajikistan in early 2012, saying no contract had been signed for 2012. Gas deliveries resumed when a three-month contract was signed but were again cut off on 1 April 2012 for another 15 days, until a new deal was signed. Hence, Dushanbe is inclined to use water leverage against Tashkent, in order not to face a similar energy crisis.

The controversial Rogun project is not the only source of friction between these two states, however. Other, hidden, reasons trigger acute water disputes. The two countries have long been at odds over their partly un-demarcated borders. While Uzbekistan has claims to Tajikistan's city of Khojand, which is predominantly Uzbek, Tajikistan has claims to Uzbekistan's cities of Bukhara and Samarkand. Tajik strongholds before their incorporation into the Soviet Union. In a statement regarding Bukhara and Samarkand, President Rahmon stated that 'they will take these cities from Uzbekistan'. The substantial decrease in the bilateral trade volume from US$300 million in 2007 to US$2.1 million in 2014 demonstrates the extent to which relations have become strained in recent years.
Increasing clashes at the borders

Regional level tensions have erupted between Tajikistan and Kyrgyzstan on the one hand and Uzbekistan on the other. However, conflict is not limited to an 'upstream versus downstream' dichotomy. Tensions among the upstream countries are also common. At the local level, water conflict in Central Asia is manifested in clashes at borderlines between residents of the Fergana Valley, the most densely populated region of Central Asia, where Kyrgyzstan, Tajikistan, and Uzbekistan meet.

Efforts to define the borders have failed to date, particularly in the Fergana Valley, which is home to several enclaves. It is widely believed that unsettled borders in the region are a major reason for conflict. The artificial borders, which do not respect ethnic and historical lines, expose Central Asian states to frequent clashes. Decreasing water supplies and pastureland further increase the risk of low-level conflict. A series of incidents point up the potential for conflict: When Tajik border guards shot and killed an Uzbek counterpart in November 2011, Uzbekistan built up military hardware just outside Tajik territory. Four days after the shooting, a mysterious blast at a bridge in Uzbekistan closed the major rail route to southern Tajikistan and even endangered humanitarian aid to Tajikistan. While Uzbekistan blamed a terrorist attack, some speculate that the Uzbeks committed the sabotage themselves to expand their de facto economic blockade of Tajikistan. The row between the two states over Rogun intensified in September 2012, when Uzbek President Karimov warned that 'deterioration of water problems could result in serious confrontation, even in wars.'

Kyrgyz-Uzbek relations are also far from safe from conflict. On the contrary, ethnic conflicts between these ethnicities go back to 1990, when plans to build a cotton processing plant on an Uzbek-dominated collective farm initiated a riot in Osh – a city in Kyrgyzstan where the Uzbek population constitutes the majority – which ended in some 300 deaths. Inter-ethnic tensions reached a climax in June 2010, when violence between Uzbeks and Kyrgyz, again in Osh, left at least 418 people dead. Frequent clashes including border shootings with casualties on the Kyrgyz-Uzbek borders continue to occur. For instance, Uzbek border guards shot and killed a Kyrgyz citizen on 13 November 2014, near a disputed segment of the Kyrgyz-Uzbek border.

Tensions between Kyrgyz and Tajiks also arise along the borders of Fergana Valley, in the provinces of Batken, in Kyrgyzstan, and Soghd, in Tajikistan. Clashes over land rights and water resources along the largely un-delimited border with Tajikistan grow increasingly vicious. As Kyrgyz leave the Batken province for Bishkek or abroad, Tajiks buy properties in that region. The more Tajiks settle, the more the conflict escalates, turning Batken into a flashpoint. Water plays a significant role, evidenced by the fact that tensions increase when irrigation begins in spring.

One major reason behind these incidents is the fact that only 73% of the Kyrgyz-Uzbek borderline, and slightly more than half of the Kyrgyz-Tajik, and 86% of the Tajik-Uzbek border has been delimited. Since the territories of these countries are not clearly defined, challenging claims on lands and thus natural resources are frequent on each side. Coupled with inefficient border controls, the region's undefined borders encourage human, drugs and arms trafficking.
Stabilisation of Afghanistan after NATO withdrawal
Central Asia's strategic importance has increased in the wake of the war in Afghanistan. Located on the northern borders of unstable Afghanistan, the security and stability of Central Asia are closely related to that of the former, and vice versa. Therefore, border management between Afghanistan and its northern neighbours is of critical importance to tackling threats such as radicalisation and terrorism. Since Tajik and Turkmen minorities in Afghanistan constitute a large portion of the population, spill-over effects from each side would be considerable. Eventually, water management problems may have a direct impact on the stability of Afghanistan and thus the whole region. That possibility is one of the reasons for the US assertion that the Central Asia-South Asia Power Transmission Project (CASA-1000), which aims to export summer electricity surpluses from Tajikistan and Kyrgyzstan to Pakistan and Afghanistan, would bring stability and prosperity.

Challenges to regime stability
Short of financial resources to invest in new hydropower projects, the Kyrgyz government decided to increase energy and hot water tariffs, from 1 January 2010. Tariffs rocketed; heating costs increased by 400%, electricity by 170% and hot water costs more than doubled. The price hikes were one cause of the discontent that ignited anti-government protests, which ended in the ousting of then-President Kurmanbek Bakiyev in April 2010.

As a result of the weak economic situation of the states in the region, both Russia and China can increase their visibility in the region. Investing billions on hydropower projects appears to be one of their tools to gain political and military power in the region. Kyrgyzstan reached a deal with Russia in February 2009 on a US$2.15 billion package, including a US$150 million grant. Russia pledged to finance the long-awaited Kambarata-1 project (see Figure 1 for its location) to the level of US$1.7 billion, in exchange for the closure of the US airbase at Manas. Although the Kyrgyz parliament approved its closure in February 2009, the decision was reversed when the Kyrgyz government agreed to a new contract, increasing the annual rent from US$17 million to US$60 million in June 2009.15 The US airbase actually continued in operation for one year after the loan was agreed with Russia. Concerned about this lingering US presence in the country, Russia suspended the loan in February 2010. Russia's withdrawal of support to the Kyrgyz government also opened the way for President Bakiyev's overthrow in April 2010. This example also demonstrates that water-related disputes have the potential to impact indirectly on Russia's already strained relations with Western powers.

EU: security destabilisation concerns
Engagement with Central Asia on water issues
In June 2007, the European Council adopted the Strategy for Central Asia with a view to enhancing the EU's engagement with the region. Environment and water management, regarded as a decisive aspect of energy cooperation with Central Asia, was acknowledged as a priority area in the strategy. The EU recognises that there are conflicting needs for water access and use between the upstream and downstream countries, and the plans of Kyrgyzstan and Tajikistan to expand upstream reservoir capacity and hydroelectric power generation are a source of concern for the downstream countries. To help alleviate the problem, the EU actively promotes efficient and economic use of resources. Several initiatives and projects have been launched to tackle these issues. For instance, the EU-Central Asia Water and Environment Cooperation Platform, aiming to facilitate enhanced regional cooperation both between the EU and Central Asia and within Central Asia.
The EU: Water disputes, a serious security threat
The EU Central Asia Strategy noted that 'hydropower production and distribution are crucial to promoting stability and prosperity in Central Asia and beyond, including Afghanistan and Pakistan'. The EU maintained this position after the adoption of the strategy, with increased stress on the security destabilisation water management may provoke. The 2008 review of the strategy stated that 'water management is the most sensitive environmental issue in Central Asia, which, if not addressed, could develop into a serious security threat for the entire region in the medium term'.

The 2010 review of the strategy reiterated that 'cross-boundary water resources or border management pose a threat to regional security and need urgent solutions'. The review also pointed out that reinforced efforts will be needed in the water and energy areas, recognising that tensions between upstream and downstream states present a major challenge for the region and the EU in terms of developing cooperation with and within the region.

The 2012 review also stressed the destabilisation effect of the water management disputes, recognising that tensions over water management continue to hamper attempts to find long-term solutions that would benefit the region more broadly; and climate change, to which the region is particularly vulnerable, could aggravate these tensions. The review document states that the EU made a significant contribution and comprehensively addressed environmental and water issues, given the first ever EU-Central Asia Joint Communiqué issued in November 2009. While 'facilitating sustainable and equitable water management' is identified as one of the priorities of EU engagement in the region, 'disputes over water that carry conflict potential' is highlighted as one of the threats to security and stability facing Central Asian states.

The European Parliament followed with a resolution on 12 September 2012, stressing that 'the exploitation and management of natural resources with regard to, in particular, water are still a matter of contention in the region, and a source of instability, tension and potential conflict'. Similarly, the 2015 Council conclusions on the Strategy, adopted in June 2015, repeat that water and border disputes threaten regional stability.

Main references
A. Khamzayeva (et.al), Water Resources Management In Central Asia: Regional And International Issues At Stake, CIDOB Asia, No. 25, November 2009.


Food and Agriculture Organization (FAO), Irrigation in Central Asia in Figures, Water Reports No. 39, 2013.


Endnotes


4. Tajikistan faces a winter shortage of some 2.5 billion kWh whereas the summer surplus is around 3-5 billion kWh and annual electricity generation is 16.5 billion kWh.

5. When Tajikistan faced its harshest winter for 25 years in 2008, the energy shortage was coupled with food shortages. The UN estimated that over half a million Tajiks faced food insecurity, where at least 260,000 needed immediate food aid. Except for the capital Dushanbe, where people were supplied with electricity for ten hours a day, the country could receive electricity for only four hours, and some districts were in total blackout. For more information, see: 'UN Urges Food Aid, As Anger Mounts Over Energy Crisis', RFE/RL, 18 February 2008.

6. Remittances, mainly from workers living in Russia, account for a large portion of both Kyrgyzstan’s and Tajikistan’s economy. According to World Bank data, in 2014, remittances received in Kyrgyzstan and Tajikistan were 30.3 per cent and 41.7 per cent of GDP, respectively. However, due to the downturn in the Russian economy, remittances decreased in the last two years and are expected to fall in 2015. For more detail, see: Remittances to Central Asia Fall Sharply, as Expected, Eurasianet, 21 April 2015.

7. For more information regarding the hydropower potentials of regional countries and for an analysis on water-energy nexus in Amudarya Basin, see: S. Babow, *The Water-Energy Nexus in the Amu Darya River Basin: The Need for Sustainable Solutions to a Regional Problem*, Global Energy Network Institute, September 2012.

8. The CASA-1000 project, which is designed to transmit Tajikistan and Kyrgyzstan’s electricity to Afghanistan and Pakistan, provides a concrete example of upstream states’ ambitions to become energy exporters. For more information, see: CASA-1000 Project Moves Forward despite Security Risks, Eurasia Daily Monitor, 7 October 2013.


11. Following the World Bank’s completion of its assessment, Uzbekistan’s First Deputy Prime-Minister and Finance Minister Rustam Azimov put forward Uzbekistan’s position and objections to the Rogun HPP. For more detail, see: Uzbekistan: Rogun Hydropower Project threatens to whole region, UzDaily, 2 August 2014.


13. The IWPR reported that, as of September 2012, 76 people have been killed and 81 injured along Tajikistan’s northern border, Landmines Still a Threat on Tajik-Uzbek Border, Institute for War & Peace Reporting, 12 September 2012.
