



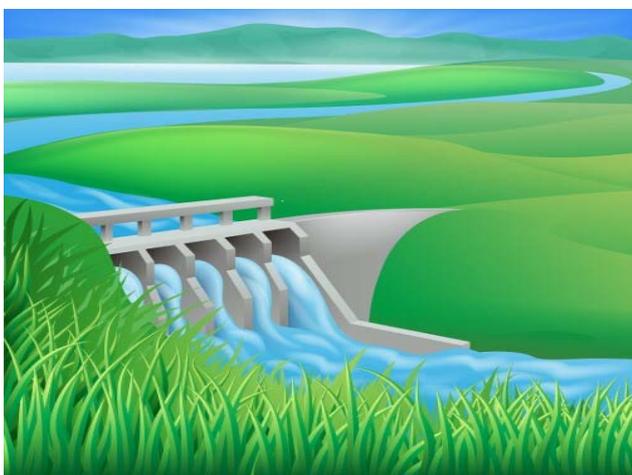
Transboundary water management The Rogun Dam in Tajikistan

SUMMARY *In more than 260 transboundary watercourses around the world, the closely linked issues of energy, water and agriculture cause difficulties. Tensions between energy-starved Tajikistan and cotton-producing Uzbekistan over the planned Rogun hydro-electric dam illustrate the continuing 'water versus energy' debate. At the same time, the scarcity of water resources in Central Asia is often caused by mismanagement.*

The use of transboundary waters can be managed through international multilateral agreements, bilateral agreements or by international customary law.

The Rogun dam's construction will have an impact on the economic development of the countries involved and the region's environment, as well as on diplomatic and trade relations between Tajikistan and Uzbekistan.

The European Union (EU) stresses the importance of regional cooperation on the issues of water, environment and energy in Central Asia. In this regard, the EU is supporting a project to enhance regional cooperation on Environment and Water in Central Asia. The EU initiative complements the work of the World Bank in the region.



In this briefing:

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Background

There are more than 260 transboundary watercourses around the world. Together these account for approximately 80% of global river flows, and provide water to about 40% of the world's population. Countries increasingly face a [choice](#) between using water for agriculture (for example, growing rice or cotton), or to produce energy (for example, generating steam that turns turbines).

Water shortages and access issues in the Central Asian states (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan) have often been caused by mismanagement. The region has the highest per capita water withdrawal in the world, due to inefficient irrigation techniques and infrastructure.

Suffering a near-permanent [energy crisis](#), Tajikistan sees the construction of the Rogun dam, on the Vakhsh River (see map in annex; a tributary of the [Amu Darya River](#)), as a means to energy security and economic growth. It even aspires to become a regional electricity exporter. In Uzbekistan's view, the dam's construction will endanger the supply of water needed for its cotton production. The dam's construction has been halted until a World-Bank-financed environmental [assessment](#) is completed. Meanwhile, the debate is increasingly political, with both countries seeking international support.

As the energy-water linkages in Central Asia are now inseparable from interests of national security, regional stability and economic growth, they need to be addressed through [regional cooperation](#).

Current legal framework

The conservation and management of transboundary waters is generally provided for either in treaty law (multilateral or bilateral agreements) or customary international law. In Tajikistan, the [Water Code](#) applies to water resources situated in the country. The enforcement of environmental protection laws in Tajikistan, however, is assessed as patchy¹.

International conventions

UN [Convention](#) on the law of the non-navigational uses of international watercourses (1997)

This Convention sets out an obligation to use international watercourses in an equitable and reasonable way, to prevent significant harm to other riparian states, i.e. states in which a part of the watercourse is situated. In addition, states have to consult each other and give timely notification if they want to use the watercourse in a new or different way, which may have a significant adverse effect on other states. Currently this Convention is [not in force](#) as only 30 of the required 35 ratifications have been received. Uzbekistan has ratified, but Tajikistan not.

UNECE [Convention](#) on the Protection and Use of Transboundary Watercourses and International Lakes (1992)

The Water Convention is intended to strengthen national measures for the protection and ecologically sound management of transboundary surface

waters and groundwater. Tajikistan has not ratified this convention, but Uzbekistan has.

UNECE [Convention](#) on Environmental Impact Assessment in a Transboundary Context (1991) (Espoo Convention)

The Espoo Convention obliges the parties to assess the environmental impact of certain activities at an early stage of planning, and to notify and consult on any major projects. Neither Tajikistan nor Uzbekistan has ratified it.

International Court of Justice case law

According to the 1997 [judgment](#) in the case of the Gabčíkovo-Nagymaros project involving Hungary and Slovakia, riparian states have a basic right to an equitable and

reasonable share of the resources of an international watercourse, depending on particular circumstances like climate or social and economic needs of the riparian states. Furthermore, one riparian state must not cause "significant harm" to the other.

Examples of bilateral agreements

It is argued that current international water law provides a good foundation for negotiation of bilateral agreements on international watercourses². Examples of such agreements in Asia include that between [India and Pakistan](#), and the Russia-Kazakhstan [agreement on the River Irtysh](#).

The 1960 India-Pakistan agreement concerns the River Indus. Pakistan [has opposed](#) several Indian projects that could have an impact on provision of water to Pakistan, which depends on Indus water flow to maintain its agriculture. The Irtysh agreement provides

The Rogun dam

The **dam** was conceived in the 1960s, and while work began in the 1970s, much of that was destroyed in a landslide in 1993, after work had stopped on the outbreak of civil war. The [project](#) was briefly revived, with Russian support, in the 2000s, but Tajikistan has sought more recently to build it independently. If finished, it could be the tallest dam in the world at 335 m high, with a maximum potential generating capacity of 3 600 MW.

Currently construction is stopped awaiting a World Bank environmental feasibility assessment (expected later in 2013), and due to lack of funding. Various estimates place the construction costs at between US\$2 and 6 billion. Tajikistan has asked the Islamic Development Bank to help fund the project.

for the establishment of a commission to approve the annual water reservoirs regime, allocate water resources and ensure upkeep of joint structures.

During the Soviet period, a [regional water-sharing agreement](#) between the Syr Darya riparian states provided that the Tajik and Kyrgyz republics restrict power generation during winter in return for receiving energy resources from their downstream neighbours. After the collapse of the Soviet Union, the countries concluded an agreement to continue the previous practice, but this no longer requires provision of energy supplies to the upstream countries. In 1998, a separate agreement was reached, under which Kazakhstan and Uzbekistan undertook to pay Tajikistan and Kyrgyzstan for electricity and irrigation. However, this agreement ended in 2002 when Kyrgyzstan raised its asking price for electricity to compensate for rising oil and gas costs. As they are trying to ensure self-sufficiency in water and energy, the riparian states are now pursuing costly solutions, for instance, building reservoirs, instead of maintaining mutual inter-dependence³.

Impact of Rogun dam construction

Tajikistan's energy security

Tajikistan's main export is aluminium, and production takes up nearly 40% of total electricity consumption in the country, causing power cuts for the population. Approximately 70% of Tajik people suffer from extensive shortages of electricity during the winter, estimated at about 2 700 GWh⁴. Upon completing the dam Tajikistan hopes to end these shortages and export electricity to Afghanistan and Pakistan. However, considering the large investment required, and the long construction period, it is suggested that Tajikistan should also pursue smaller projects, consider other renewable energy resources and energy-efficiency projects⁵.

Uzbekistan's agriculture

In Uzbekistan, cotton accounts for some 60% of foreign exchange receipts and provides about 45% of employment. The reservoir could take as long as 18 years to fill and during this period, water flow downstream would be reduced. Therefore, Uzbekistan argues the Rogun dam would significantly reduce the amount of water reaching Uzbekistan.⁶

Environmental

While hydroelectricity is renewable, environmental concerns raised in relation to the Rogun dam include further desertification of the region as well as the risk of flooding and accidents. The risks posed by possible [seismic activity](#) have been found [acceptable](#). However, the full environmental impact will depend on the final plan for the dam's construction, for example the exact height of the structure.

International tensions

Relations are described as constantly strained due to the common rivers, as well as Tajikistan's dependence on Uzbekistan for transit of energy and various goods. In April 2012, Uzbekistan [cut gas deliveries](#) to Tajikistan for two weeks. Earlier, Uzbekistan had been known to stop [rail traffic](#) to Tajikistan, damaging the trading relationship between the countries.

Social consequences

With foreign investment not readily available, the Tajik government has raised funds through a public offering of shares. According to a 2010 UN World Food Programme report, as Tajik citizens [were requested](#) to buy Rogun shares, sometimes under threat of losing their jobs, this campaign (together with other factors such as inflation and seasonal job cuts), [endangered food security](#), especially in poorer rural areas. The practice seems to have been discontinued.

In 2009 the Tajik state began resettling people from the Rogun dam zone, provoking criticism of inadequate

compensation. About 1 600 families were resettled in 2009 and 2010. Currently this programme [has been interrupted](#) until the World Bank assessment is complete.

EU position

The [WECCOOP](#) initiative supports enhanced EU–Central Asia regional cooperation on Environment and Water. It was launched in January 2012 with the aim of safeguarding stability and security in the region. It should also reduce poverty and increase living standards in the context of Millennium Development Goals, and facilitate and promote closer regional cooperation both within Central Asia and between Central Asia and the EU, particularly in the energy, transport, higher education and water-environmental sectors.

This regional dialogue complements and reinforces the EU's bilateral relations with each individual state.

The [EU-Republic of Tajikistan Cooperation Council](#) in 2010 held a discussion on the issues of water, environment and energy. It underlined the importance of regional cooperation and invited the countries to search for a durable settlement regarding water management and energy sharing issues.

The EU [is contributing](#) €2 million to a World-Bank-managed Multi-donor Trust Fund (MDTF) for Tajikistan. The MDTF focuses on achieving a modern regulatory framework for the Tajik energy sector, and promoting coherent policies at regional level.

On 22 July 2013, the Council adopted [conclusions](#) on 'EU water diplomacy', which highlight Central Asia as a key area of concern. The Council calls on the High Representative and the Commission to work

closely with the countries concerned to 'facilitate sustainable and collaborative solutions'.

European Parliament

The European Parliament in a [resolution](#) of 17 September 2009 urged Tajikistan to exploit its potential for hydroelectric power generation but also to consider the concerns of downstream countries with particular attention to the energy dispute between Tajikistan and Uzbekistan.

Main references

[Water Conflict and Cooperation in Central Asia](#) / Weinthal, E., UNDP Human Development Report 2006, 36 p.

[Avoiding Water Wars: Water Scarcity and Central Asia's growing Importance for Stability in Afganistan and Pakistan](#) / US Senate Committee on foreign relations, 2011

[Beyond International Water Law: Successfully Negotiating Mutual Gains Agreements for International Watercourses](#) / Grzybowski, A. et al, Global Business & Development Law Journal, Vol 22, pp 139-154

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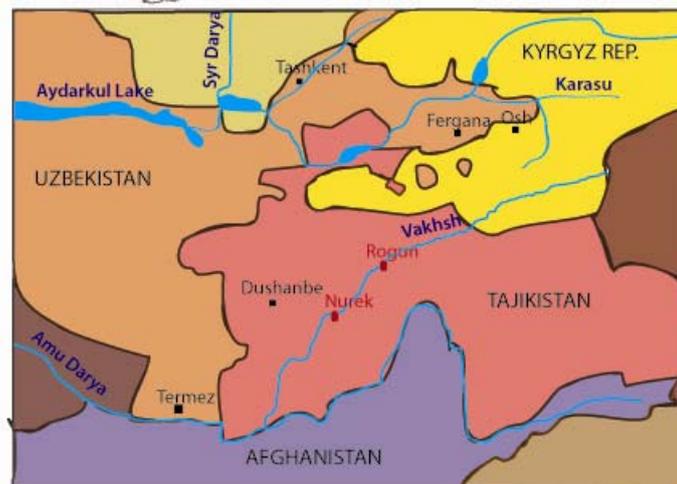
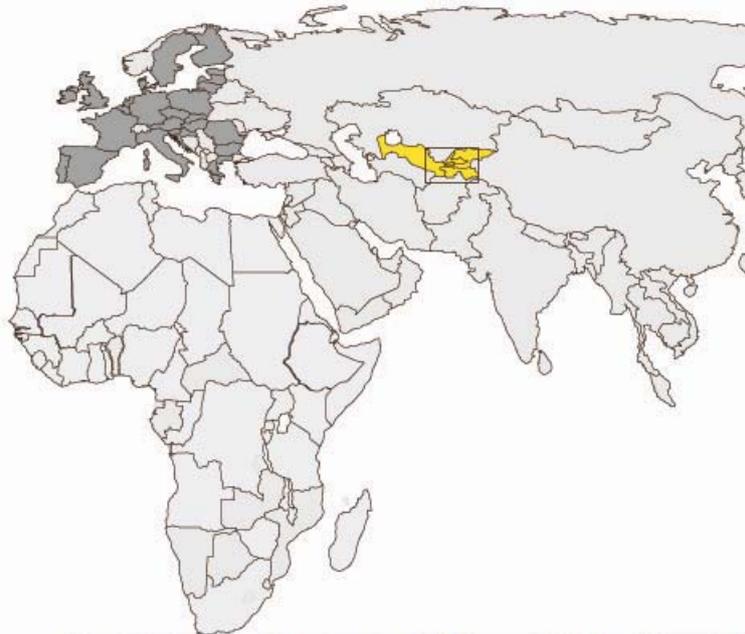
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Annex



Endnotes

- ¹ IHS Global Insight Country Intelligence report on Tajikistan, current as of 17 July 2013, p 26.
- ² [Beyond International Water Law: Successfully Negotiating Mutual Gains Agreements for International Watercourses](#) / Grzybowski, Alex et al, Global Business & Development Law Journal, 2010, p.154.
- ³ [Water Conflict and Cooperation in Central Asia](#) / Weinthal, Erika, UNDP Human Development Report 2006, p 14.
- ⁴ [Tajikistan's Winter Energy Crisis: Electricity Supply and Demand Alternatives](#) / Report, World Bank, November, 2012, p 84.
- ⁵ [Central Asia Regional Risk Assessment: Responding to Water, Energy, and Food Insecurity](#) / UNDP, 2009, p 14.
- ⁶ [Avoiding Water Wars: Water scarcity and Central Asia's growing Importance for Stability in Afghanistan and Pakistan](#) / US Senate Committee on foreign relations, 2011, p 9.