Hydro Politics Newsletter
by Hydropolitics Association
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Gaza is calling to humanity

Gaza is a shame of humanity – stop the killing immediately!

Gaza is an urgent call to our humanity. It should deeply outrage us.

Gaza is dying of thirst

Gaza is starving.

Gaza is dying

During last 21 months ,all tragic development in Gaza comes amid the forced displacement of over 90 per cent of the population and a staggering death toll is now more than 60,000 people in Gaza. Only in the last few weeks, the Ministry of Health in Gaza has reported 180 deaths due to malnutrition, including 93 children.

"Seeing children dying of hunger in their parents' arms should shake us out of our complacency," the UN experts said.

"Blocking or delaying aid is not just inhumane – it is a war crime where it is intended to starve civilians and in the context of a well-documented and globally denounced genocide," the UN experts said.

We are feeling ashamed for humanity that

the incredible suffering of the people in Gaza – including continued killings and famine – was not stopped by the international community.

Weaponizing food and water can escalate conflicts, worsen humanitarian crises, and hinder post-war recovery.

Dursun Yıldız -Director

A Landmark Water-Energy Swap Deal in Central Asia

By Eurasianet - Sep 14, 2025,

- **Kyrgyzstan will receive electricity from Kazakhstan and Uzbekistan in exchange for releasing more water from the Toktogul Reservoir.**

- **Kazakhstan will also facilitate Russian electricity deliveries, while Uzbekistan will supply power to southern Kazakhstan in 2026.**

The agreements aim to stabilize energy systems and agricultural productivity as Central Asia faces worsening drought and lower crop yields.

Kazakhstan, Kyrgyzstan, and Uzbekistan have worked out detailed swap arrangements covering water and electricity, aiming to improve agricultural productivity in areas experiencing dry conditions.

Under the key agreement signed at a trilateral meeting in the Kyrgyz resort town of Cholpon-Ata, Kyrgyzstan will receive electricity from Kazakhstan and Uzbekistan; in return, Bishkek will release additional water supplies from the Toktogul Reservoir, local news outlets reported September 7. Astana also agreed to facilitate electricity transmissions to Kyrgyzstan from Russia via the Kazakh power grid, while Uzbekistan pledged to supply up to 900 kWh of power to southern Kazakh areas in 2026 to cover expected shortages there when local power systems get upgrades.

According to Kazakh Energy Minister Yerlan Akkenzhenov, the agreements feature precise delivery timetables. “Work in the water and energy sectors requires maximum precision and strict adherence to schedules,” the inbusiness.kz news outlet quoted the minister as saying, adding the agreements create “the basis for stability of energy systems and water supply for the entire region.”Areas of southern Kazakhstan have grappled with especially arid conditions in 2025, with little rainfall and high temperatures.

In its September update, the GEOGLAM crop monitor notes that “dry conditions continue to negatively impact crop development in most areas” of Central Asia. It notes that Uzbekistan’s wheat yield, for example, is expected to be roughly 10 percent lower this harvest season, compared with the same season in 2024.

The lone area bucking the arid trend in northern Kazakhstan, which is responsible for generating roughly 95 percent of the country’s annual wheat harvest, the crop monitor reports. GEOLOGAM, or the Group on Earth Observations Global Agricultural Monitoring, is an initiative of the G20 grouping of states.

Source: https://oilprice.com/Energy/Energy-General/A-Landmark-Water-Energy-Swap-Deal-in-Central-Asia.html

Hidden Aquifer Could Help Solve The Water Crisis

By Riley Kleemeier

In a first-of-its-kind research expedition, a team extracted thousands of water samples from an unlikely source: a hidden aquifer that is thought to stretch from New Jersey to Maine.

The research expedition is following up on a discovery made nearly 50 years ago, when a U.S. government ship drilled into the seafloor and found fresh water. Now, scientists want to know exactly where the water originated from, and how it can be used to solve the world's growing water scarcity problem.

In early 2023, experts warned that we are facing an unprecedented water crisis, and that global freshwater demand will exceed supplies by 40% by 2030.

While the discovery of this hidden aquifer could be a promising step in combating water scarcity, it will likely take years before the water can be brought to public use. First, it must be determined how to extract the water, who would own it, and whether it's even safe for human consumption.

"The water may contain minerals detrimental to human health since it percolated through layers of sediments," said Jocelyne DiRuggiero, a biologist from Johns Hopkins University.

With the 13,209 gallons of water collected, researchers will now work on sequencing DNA extracted from the samples to identify which microorganisms are present. Dating the water will be critical in determining whether it can be used.

The researchers will plan to meet again after six months of lab analysis to review their findings and decide on next steps. Depending on the results, it's quite possible that this hidden aquifer could be a critical step forward in confronting global water scarcity.

News Feature | September 11, 2025

Bangladesh is first South Asian country to join UN Water Convention, aiming to improve cross-border cooperation

25 June 2025

Bangladesh, a delta country characterized by its extensive transboundary river systems, has become on 20 June 2025 the first South Asian country, and 56th overall, to accede to the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (UN Water Convention).

For Bangladesh, a country defined by its rivers and situated in a complex geopolitical region on the frontlines of global climate change, transboundary water management is a lifeline to peace and prosperity. 57 transboundary rivers flow through the country, including the vast Ganges (Padma)-Brahmaputra-Meghna (GBM) river system spanning China, Nepal, Bhutan, India and emptying into the Bay of Bengal in Bangladesh, where it forms one of the largest and most intricate deltas in the world.

Hence why Bangladesh understands the critical need for effective cooperation and dialogue with neighboring countries to ensure sustainable and equitable water management at national and transboundary scales. This imperative is heightened by severe climate change impacts exacerbating droughts in summer and flooding during monsoon season, and increasingly unpredictable water flows. Sea-level rise and salt-water intrusion in the Delta further compound impacts on lives and livelihoods.

Bangladesh, one of the world's 44 Least Developed Countries with a population of over 170 million people, faces significant water-related challenges. Nearly 60% of Bangladesh's population is exposed to high flood risk, more than any other country in the world except the Netherlands. Some 45% are exposed to high fluvial flood risk, the highest proportion in the world. Floods submerge 20–25% of Bangladesh's land area every year on average, and when extreme flood events occur they submerge 55–60% of the country. More than 65 million people still lack access to safely managed sanitation.

UNECE Executive Secretary Tatiana Molcean stated "I welcome Bangladesh as the first country in South Asia to join the UN Water Convention. Faced with climate change impacts and increasing pressure on water resources, more and more states around the world are harnessing the UN Water Convention to strengthen cross-border cooperation. I encourage all governments to make the most of this global treaty and participate in its work".

Bangladesh's Adviser for Environment, Forest and Climate Change, Ms Syeda Rizwana Hasan, highlighted this milestone for the country and the region, "Climate change, population growth, and increasing demand for water highlights the urgency of responsible and cooperative transboundary water management. By learning from international best practices and the UN Water Convention, we can develop policies and strategies that can ensure water security for our people."

The UN Water Convention is an effective global legal and intergovernmental framework and a unique platform within the UN system to support cooperation and sustainable management of shared surface and ground waters. UN Secretary General Antonio Guterres has called upon all UN member states to join and implement the Convention. Bangladesh's accession follows a National Workshop on the UN Water Convention on the 24 March held in Dhaka, the capital.

TIMELINE – How Ethiopia's Grand Renaissance Dam project unfolded

Ethiopia and downstream countries, particularly Egypt, have long-standing dispute over Nile water rights dating back decades

Sadik Kedir ABDU |09.09.2025

ADDIS ABABA, Ethiopia

The Grand Ethiopian Renaissance Dam (GERD), Africa's largest hydroelectric project, rises on the Blue Nile about 40 kilometers (28 miles) from the Sudanese border in Guba, which is around 580 kilometers (360 miles) from Addis Ababa.

The dam is designed to generate over 5,150 megawatts, transforming Ethiopia's power supply and enabling electricity exports across the region.

The idea of a dam on the Blue Nile dates back to pre-1964 studies by US engineers, but regional politics have long shaped the river's governance.

The dispute between Ethiopia and downstream countries, particularly Egypt, began decades ago: in an exchange of letters with Egypt's semi-independent administration, the British government recognized Egypt's "natural and historical right to the waters of the Nile" and agreed that upstream developments should "observe" these rights—a stance Ethiopia has described as a "colonial imposition."

Later, Egypt and Sudan signed a bilateral agreement allocating all of the river's water between the two countries, effectively limiting upstream development for decades. Ethiopia, as an upstream nation, viewed these agreements as restricting its sovereign rights to develop water resources for domestic use.

Political upheaval, wars, and underdevelopment delayed dam projects in Ethiopia until the early 2000s, when the country revived plans as part of a broader effort to harness its rivers and expand electricity access.

The construction of GERD became a national priority under the late Prime Minister Meles Zenawi in 2011, a period coinciding with regional unrest linked to the Arab Spring.

Here is a concise timeline outlining the start of actual dam construction and its completion:

March 2011 - Ethiopia publicly announces plans for a massive new dam, initially called the Millennium Dam, with a budget of around $4.8 billion. Italian contractor Salini Impregilo is awarded the project.

April 2011 - Prime Minister Meles Zenawi lays the cornerstone, renaming the project the Grand Ethiopian Renaissance Dam (GERD).

May 2011- Ethiopia diverts the Blue Nile to allow construction, drawing criticism from Egypt, which warns of potential impacts on its water supply.

May 2012 - Ethiopia, Egypt, and Sudan agree to form an International Panel of Experts (IPoE) to study the dam's impact.

May 2013 - Leaked findings from the IPoE highlight the need for further environmental and safety studies. Disputes sharpen between Egypt and Ethiopia over water security.

March 2015 - Ethiopia, Egypt, and Sudan sign a Declaration of Principles in Khartoum, pledging cooperation and peaceful settlement of disputes over GERD.

2017 - Negotiations stall as Egypt and Ethiopia clash over technical studies and data-sharing on the dam's operation.

November 2019 - US and World Bank officials begin mediating talks in Washington, DC, but no binding agreement is reached.

July 2020 - Ethiopia announces the first filling of the reservoir during heavy rains. Egypt and Sudan protest and bring the issue before the UN Security Council.

April 2021 - Talks resume but fail to resolve disagreements over binding water release guarantees.

July 2021 - Ethiopia completes the second filling of the dam, further straining ties with Egypt and Sudan.

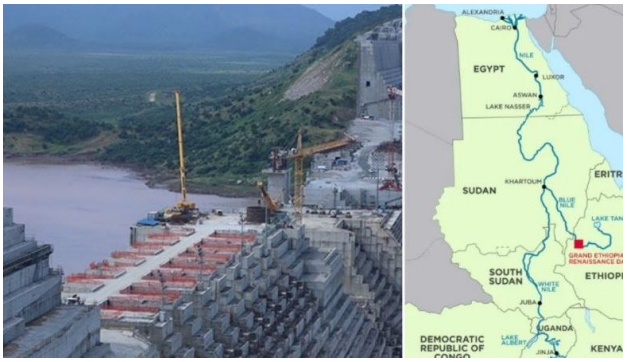
February 2022 - The first turbine begins producing electricity, supplying 375 MW to Ethiopia's grid.

August 2022 - A second turbine becomes operational, and Ethiopia confirms a third filling of the reservoir.

September 2023 - Ethiopia carries out the fourth filling, raising the water level to around 625 meters. Egypt lodges formal protests.

October 2024 - Ethiopia declares the fifth and final filling completed, achieving full reservoir capacity. Talks with Egypt and Sudan remain stalled.

July 2025 - Authorities announce construction is finished and plan an official inauguration.



September 2025 - Prime Minister Ably Ahmed inaugurates GERD, marking full operation with a total capacity of around 5,150 MW, despite unresolved disputes with Egypt and Sudan.

Source: https://www.aa.com.tr/en/africa/timeline-how-ethiopia-s-grand-renaissance-dam-project-unfolded/3682220

Kazakhstan, Kyrgyzstan, and Uzbekistan Agree on Joint Water and Energy Measures

9 September 2025

Kazakhstan, Kyrgyzstan, and Uzbekistan have reached a landmark agreement on coordinated water and energy management, signaling a deepening commitment to cross-border cooperation amid growing seasonal and climate-related challenges.

The agreement was formalized on September 7 in Cholpon-Ata, Kyrgyzstan, during a meeting of energy ministers and water management authorities from the three countries. The protocols define mutual obligations for water releases and electricity exchanges, with the goal of balancing the region's energy needs and preserving critical water resources.

Under the terms of the agreement, Kyrgyzstan will release water from the Toktogul Hydroelectric Power Plant (HPP) reservoir to downstream Kazakhstan and Uzbekistan. In return, Kyrgyzstan will receive electricity from both countries through spring 2026.

According to the Kyrgyz Ministry of Energy, the arrangement is designed to optimize the use of water stored in Toktogul and to secure reliable electricity supplies for Kyrgyzstan during the 2025-2026 autumn-winter period.

Regional Power Transit Agreements

The protocols also include provisions for cross-border electricity transit: from Russia to Kyrgyzstan via Kazakhstan's grid, and from Turkmenistan to Kyrgyzstan through Uzbekistan's transmission network.

The Toktogul HPP, situated on the Naryn River, a major tributary of the Syr Darya, is Kyrgyzstan's largest power facility, generating roughly 40% of the country's electricity. It serves a dual function: providing domestic energy and regulating water flows that are essential for irrigation in downstream Kazakhstan and Uzbekistan.

In winter, Kyrgyzstan often increases power output from Toktogul to meet heating demand, but this can significantly lower reservoir levels, jeopardizing irrigation supplies the following spring. The new agreement is intended to reduce this risk by enabling Kazakhstan and Uzbekistan to supply electricity during peak winter months, allowing Kyrgyzstan to conserve water. Kazakhstan's Ministry of Energy emphasized that the trilateral deal is crucial to maintaining water levels in Toktogul and ensuring sufficient irrigation for southern Kazakhstan during the next growing season.

Broader Regional Energy Cooperation

Separately, Kazakhstan and Uzbekistan signed an agreement for the supply of approximately 900 million kilowatt-hours of electricity between March and December 2026. The electricity is expected to cover anticipated shortages in Kazakhstan's southern power grid and further underscores the growing interdependence of Central Asia's energy and water systems.

Sergey Kwan

Source: https://timesca.com/kazakhstan-kyrgyzstan-and-uzbekistan-agree-on-joint-water-and-energy-measures/

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Where people live in harmony with nature

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