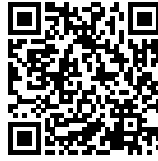




THE OXES AT KHAMU-LAB, LOOKING EAST, NEAR KIROJA-SALEL.
FROM A SKETCH BY CAPTAIN PEARSON, R.E.

THE GEOPOLITICS OF WATER

Posted on April 1, 2023 by Leonid Savin



The factor of hydro-hegemony becomes an important asset in foreign policy disputes.

Water has traditionally been considered one of the most important resources to which proper access must be ensured. It is directly related to food security, i.e., agriculture, but also concerns all types of industry (since water is needed for a variety of production cycles from the creation of semiconductors to the functioning of standard equipment) and power generation.

If access to water begins to be a problem, it automatically leads to negative effects such as migration, epidemics, economic decline and conflict. In this context, the concept of water hegemony emerged in the context of state sovereignty (more precisely, the interrelation of the sovereignties of different states and their national interests). [Hydro-hegemony](#) is hegemony at the river basin level, achieved through water management strategies such as resource grabbing, integration, and containment.

Strategies are implemented through a variety of tactics (e.g., coercion—pressure, treaties, knowledge accumulation, etc.) that are made possible by exploiting existing asymmetries of power in a weak international institutional context.

Political processes, outside the water sector shape, hydro-political relations in a form that varies from the benefits derived from cooperation under hegemonic leadership to the unfair aspects of dominance. The outcome of competition in terms of control over a resource is determined by the form of establishment of hydro-hegemony, as a rule, in favor of the most powerful participant. The establishment of a dominant position in the management of the river system can be seen as an attractive tool for the hegemonic actor, since it allows him to unilaterally set national goals above those of other agents. [In addition](#), unilateral control creates political leverage over downstream countries.

Thus, Zeitoun and Warner have looked at the basins of such rivers as the Jordan, Nile, Euphrates, and Tigris; but this model can be applied to other regions—in Asia, Europe, and the Americas. But there are also cases closer to us. The Rogun hydropower plant in Tajikistan [has caused tensions](#) between Tajikistan and Uzbekistan.

To this day, the problem of water allocation remains acute in Central Asia.

For example, the second largest lake in Asia, [Lake Balkhash](#) in Kazakhstan is directly connected to the [Ili River](#), whose headwaters are in China. The Ili-Balkhash ecosystem covers 413,000 square kilometers—more than Britain, Denmark, Switzerland, Holland and Belgium combined. Previously, due to the consumption of water resources in China itself, aimed at supplying the [Xinjiang Uygur Autonomous Region](#) and the demands of local industry, the level of the river was declining, which was reflected in the rapid [shallowing of the lake](#). In recent years, land development and expansion of rice fields in China have continued, which reflected in the [decline of water in Balkhash](#). We must consider that the lack of water also results in [desertification and loss of soil fertility](#). This is a universal phenomenon. And conflicts similar to the Tajik-Uzbek conflict occur in other regions.

For example, disputes over water resources of the Brahmaputra have long been the cause of political friction between India and China. In April 2010, during Indian Foreign Minister S.M. Krishna's visit to Beijing, the Chinese first designated an area on the Brahmaputra where the initial construction of the [Zangmu Dam](#) in Tibet was to take place. Chinese officials assured India that the projects would proceed as usual and would not create a water shortage downstream. In response to India's subsequent requests for more information on the plans, Chinese Foreign Ministry spokesman [Hong Lei said](#): "China takes a responsible attitude toward transboundary water development. We have a policy that protection goes hand in hand with development, and we take full account of the interests of downstream countries."

Additional information about the dam plan was released in January 2013, as part of China's current five-year energy plan. The plan included proposals to build three medium-sized dams on the [Yarlung Tsangpo River](#). As a result, this increased tensions between the two countries, because India was not consulted before the plan was released and only learned about it from the Chinese press. This forced the Indian government to protest strongly. The conflict between the two countries did not end there. When China completed construction of the 510 MW [Zangmu hydropower plant](#) in Tibet in October 2015, much of the Indian media expressed concern about the dam preventing water from flowing into the downstream Brahmaputra. A Chinese foreign ministry official noted that Zangmu was part of the River Project, so it would not hold back water.

Indeed, there is no water retention under this project, but there is silt retention, and this has a serious impact on downstream fertility. Technically, the project builds a dam to divert water from the river into the tunnel. The dam typically diverts 70 to 90 percent of the water, depending on the environmental permit obtained. This silt-laden water is first diverted to a sump so the silt can settle to the bottom,

because the silt breaks the edges of the turbine blades. Then the silt-cleansed water is conveyed through a long tunnel, at the end of which it falls vertically onto the turbine blades. The rotation of the turbine generates electricity. The water is then diverted back into the river. Thus, the water itself is not retained, but the silt settles to the bottom of the first reservoir and is flushed into the riverbed just downstream of the dam wall. The question is, is the force of the water that flows out of the dam enough to carry much of this silt downstream? [In most cases it is not.](#)

Because it is the silt that restores soil fertility downstream, this issue becomes crucial.

The Himalayas are the youngest mountain range in the world, and the rivers flowing down from them replenish soil fertility in some of the oldest cultivated regions on earth in all of Asia. The [Ganges-Brahmaputra-Meghna Delta](#) consists almost entirely of this silt. There are controversial issues in Thailand as well. There are plans to build several dams on the Mekong in the region, such as [Pak Beng](#) and [Luang Prabang](#), but some believe they are unnecessary for the Thai electricity system. Thai civil society and people in Thailand have also questioned the possibility of buying more electricity from neighboring countries, including from the [Mekong River dams](#) in Pak Beng and Luang Prabang. Since last year, every household has felt their electricity bills increase every month. [They ask](#), "While we have a huge energy reserve, [an electricity surplus of] more than 50%, why are you buying more?"—since the main costs are borne by taxpayers. Environmentalists are also sounding the alarm because they believe that the natural balance will be disrupted.

As for Russia, the situation with the division of water resources differs depending on where the border runs. For example, there are about 450 rivers, streams and lakes on the Russian-Finnish border (Russia-Greater Russia, over 1,200 km). For the most part, their course is directed towards Russia, and among the larger rivers are [the Vuoksi](#), the [Hiitolanjoki](#) and the [Tuloma](#). The total flow volume is 780 cubic meters per second. There are four hydroelectric power stations on the Vuoksa, two in Finland and two in Russia. The [Russian-Finnish Commission on the Use of Boundary Waters](#) deals with the regulation of water flows. Given the fact that the upper reaches of the rivers are in Finland, theoretically Helsinki has a better chance of hydro-hegemony than Moscow.

With regard to Kazakhstan, Russia has a balanced position, since the [Ural River](#) flows from Russia, and [Tobol](#), [Ishim](#) and [Irtysh](#) from Kazakhstan. There have been no problems with the water resources of these rivers between the countries. However, since the upper reaches of the Irtysh are in China, this has caused trilateral disputes and Beijing has been reluctant to respond to Russian and Kazakh requests to

regulate the use and protection of water resources. But with respect to Ukraine, Russia has a serious advantage because it controls the upper reaches of the main tributaries of the [Dnieper](#)—the major rivers [Desna](#), [Psel](#), [Seim](#), and [Voskla](#). It should be added that allied Belarus controls the [Pripyat](#) and Dnieper rivers.

Potentially, Russia can use its strategic position, and not only from the position of geo-economics, but also from the theater of military operations.

In particular, unmanned surface and underwater vehicles can be launched into these rivers to collect intelligence. Such models are in service with the U.S. military, and some of them are made in the form of fish for external camouflage. Ideally, the use of such vehicles could create a reliable network of sensors to obtain operational information (e.g., on the movement of equipment across bridges or activity near special-purpose facilities that are in close proximity to river banks). If the need for such activity persists, such a hydro-hegemonic asset could become a useful tool in confronting the enemy.

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Featured: *The Oxus at Khami-e-Ab, Looking East, Near Khoja-Saleh*, print, from a sketch by Captain Peacocke, *Illustrated London News*, 1885.

