

The New Great Game In The Himalayas

China's territorial disputes are as much about dominating important rivers as occupying land

AD Singh



In 2005, the World Bank published a report 'India's Water Economy: Turbulent Times Ahead'. Tucked in the report was the statistic that India could store 30 days of rainfall in its dams or 200 cubic metres (cum) per person. Again in 2012, in an answer to a Parliament question, GoI stated that the per capita water storage capacity in the country stood at 209 cum – essentially unchanged from the previous figure.

However, the reply also stated the figure for China – 416 cum. With nearly 98,000 dams/water storage structures of various kinds, China today has the largest network of water storage assets in the world. Contrary to India, it has consistently invested in creating freshwater storage capacity.

India's water challenge

China's requirement of freshwater is huge. By cross-subsidising production over environmental costs, Beijing wants to leapfrog to an industrialised economy before the environmental costs become too great. Essentially they have exported water in a large way and would be facing the consequences in future.

- Some independent sources estimate that nearly 60% of their freshwater sources are contaminated to some degree.
- The water in the main artery of the Brahmaputra river system, the Siang, turns dirty and grey when the stream enters India from Tibet.
- The reasons for such high levels of pollution in the Siang can only be ascertained when data is shared by China.

Hidden reason for China's border disputes

With huge deposits of rare earth minerals, China wants to maximise the benefits to monopolise emerging green technologies – be it zero-emission vehicles or chip making. However, such industries require huge amounts of freshwater. With the US bent on restricting chip manufacturing technologies, the Chinese Communist Party's



Zhangmu Dam, Tibet. Photo provided by author

foremost goal is to build a domestic chip industry.

It is estimated that a large chip fabrication facility can use in excess of 10 million gallons of ultra pure water per day – equivalent to domestic consumption of a quarter million families. Similarly, extraction of rare earth minerals requires huge amounts of freshwater. Both are essential to the future of the communist party and their vision of *Pax Sinica*.

And therein lies the conundrum: Why is China involved in border disputes with almost all its neighbours? The answer is that it is not only land that China covets – it is freshwater or rather control over the future use of freshwater.

Most of the major rivers of South Asia originate in the Tibetan plateau. This is the 'Third Pole' for water with nearly 46,000 glaciers. Nearly half that water, i.e. 48%, runs directly into India.

- According to the Chinese Academy of Sciences, the Tibetan glaciers are melting at the rate of 7% annually and two-thirds of the glaciers on the plateau will be gone by 2050.
- The International Centre for Integrated Mountain Development has revealed alarming details on the sustainability of the Himalayan ecology.
- According to their findings, the current trend of

melting suggests that Ganga, Indus, Brahmaputra and other rivers across the northern India plains could most likely become seasonal rivers in the near future.

Weaponising water

After years of outright denial, Indian satellites confirmed the existence of the Zhangmu dam on the Brahmaputra at the Great Bend from where the river takes a sharp U-turn, forming the world's deepest gorge, an area reported to have hydropower potential of 38,000 MW.

China has dammed almost every major river on the Tibetan plateau, including the Mekong, Salween, Brahmaputra, Yangtze, Yellow, Indus, Sutlej, Shweli and Karnali. It has unveiled plans to dam the rivers that still remain free flowing, such as the Arun and the Subansiri. There is frenzied dam building in China bordering on the paranoid.

- In the years 2000 and 2005, the Pareechu Lake burst in Tibet, causing heavy destruction of livelihoods, infrastructure and socio-economic assets downstream, particularly in Kinnaur and Shimla districts of Himachal Pradesh.
- By denying timely data to India, CCP may well be weaponising a tool for coercion.
- In 2017 during the height of the Doklam crisis, in violation of two legally binding bilateral accords, China refused to supply hydrological data to India, underscoring how it was weaponising the sharing of water.
- It stated that this was due to some technical problems with monitoring equipment. However, sources confirmed that the equivalent data continued to be provided to Bangladesh.

CCP has plans to occupy all important watersheds in the Himalayas to justify water transfer schemes and its right to use waters emanating from these watersheds. Doklam, Galwan are well-planned moves towards a creeping acquisition of territories and the high points of the Himalayan watersheds. There is a hidden war already on and we need to take our heads out of the sand to recognise it.

The writer is member of Rajya Sabha and on Parliament's Consultative Committee on Defence

The Indian Express- 01- February-2023

EXPLAINED SCIENCE, TECHNOLOGY & CLIMATE CHANGE

Assessing the case for amending India-Pak Indus Waters Treaty



AMITABH SINHA

THERE ARE two ways to look at India's recent notice to Pakistan on the Indus Waters Treaty, which governs the sharing of six rivers flowing through the two countries.

It can be viewed as India's counter measure to Pakistan's repeated objections to every irrigation or power project on the Indian side of the Indus basin. This would imply that if Pakistan drops its obstructionist approach, India might not insist on amending the Treaty.

Alternatively, this can be seen as the beginning of something more significant. India

could be serious about making amendments to the Treaty and might have just set the ball rolling with the notice, served on January 25.

While it is premature to hazard a guess on the eventual outcome of the move, the renegotiation of the Indus Waters Treaty is not as radical an idea as it might appear. In fact, it is not a new idea at all.

Several reasons to renegotiate

Calls for amending or renegotiating the Indus Waters Treaty have been made for more than two decades now on both sides. Despite being awarded nearly 80 per cent of the water flow in these rivers, Pakistan has always maintained that it has been treated unfairly, arguing that it should have been allotted some share of the Ravi, Sutlej, and Beas rivers as well. The Treaty gave India full rights over the waters of these three 'Eastern' rivers, while most of the flows in the three 'Western' rivers — Jhelum, Chenab and Indus — were meant for Pakistan. The Western rivers have far greater volumes flowing in them.

But this is not the only reason why Pakistani voices want the Treaty renegotiated. Experts on both sides agree that there have been significant changes since the Treaty came into being in 1960, and it needs to be updated. The impacts of climate change and the advancement in water storage and management technologies are cited as some of the most compelling reasons to renegotiate.

Climate change concerns bother Pakistan more. One of the consequences of climate change has been a decrease in the overall flows in the Indus river system. The decline thus far is just about 5 per cent from 1960, but is expected to worsen rapidly.

On the other hand, Pakistan's population has increased six to seven times since Independence, and is still growing at a fast pace. That means increased demand for water, and thus increased dependence on these rivers.

Considering new technologies

The Indus Waters Treaty is very prescriptive in what can or cannot be done on the

rivers by India, the upper riparian state. But today's dams or reservoirs are very different from the ones in the 1960s. Whenever India has tried to use newer designs and technologies, Pakistan has objected, like with the Baglihar dam.

The dispute over the Baglihar dam had to be referred to a neutral expert who ruled in favour of India, arguing that the new technology, even if not fully in accordance with the Treaty, would prolong the life of the project, and was therefore in everyone's interest. Making the Treaty non-prescriptive on design and technology could also help mitigate the adverse impacts of climate change on water availability in the Indus river system.

Other reasons include the need for joint management, greater flexibility in utilisation of waters, and adoption of basin-wise approach in the management of the river waters. Some Pakistani voices also hope that a renegotiation of the Treaty would allow China to become a party, which would then neutralise India's advantage. The Indus basin ex-

tends to China and Afghanistan as well.

Weaponising the waters

These reasons notwithstanding, it would be naïve to assume that India's proposal to modify the Treaty is driven by anything other than strategic interest. Despite its reputation as one of the most successful water-sharing agreements between countries, the Indus Waters Treaty has kept both India and Pakistan dissatisfied for six decades.

In his authoritative book *Indus Basin Uninterrupted: A History of Territory and Politics from Alexander to Nehru*, Uttam Kumar Sinha, Senior Fellow at the Manohar Parrikar Institute of Defence Studies and Analyses, detailed the objections raised by several leaders, including Atal Bihari Vajpayee, when the Treaty was brought for ratification by Jawaharlal Nehru in 1960. Nehru was castigated for "yielding to Pakistan's wishes" and agreeing to "concessions after concessions". However, the Treaty has been largely absent from public discourse after that — unlike in

Pakistan, where its perceived injustice is part of everyday conversations.

However, the September 2016 Uri attack changed things in India, triggering a public clamour for weaponising the Treaty. Being the upper riparian state, India has a distinct advantage, with an entirely one-sided power to inflict damage. Indian governments until then had resisted the temptation to use the Treaty as a strategic tool against Pakistan. But in the aftermath of the attack, Prime Minister Narendra Modi's "blood and water cannot flow together" remark, and the temporary suspension of routine meetings of Indus Commissioners, signalled a departure. The recent notice to Pakistan is another step in the same direction.

In a way, this is another Balakot moment. The notice is a message to Pakistan that India would be unpredictable in its dealings with it, and would not shy away from escalation. Considering Pakistan's desperate dependence on the Indus basin rivers, this in itself could be extremely unsettling.

Millennium Post- 01- February-2023

Agri sector records 4.6% growth in last 6 years: Economic Survey

India has emerged as net exporter of agricultural products in 2021-22

DHIRENDRA KUMAR

NEW DELHI: The Economic Survey of India, which was tabled in the Parliament on Tuesday, has presented a very promising picture of growth in agriculture and the allied sector as the survey has stated that the agriculture sector has been witnessing a robust growth with an average annual growth rate of 4.6 per cent over the last six years.

In terms of access to agricultural credit, the government has set a target of Rs 18.5 lakh crore in agricultural credit flow in 2022-23. In 2021-22, it was about 13 per cent more than the target of Rs 16.5 lakh crore.

As per the Survey, India has emerged as the net exporter of agricultural products, with exports in 2021-22 touching a record USD 50.2 billion.

"With its solid forward



REPRESENTATIONAL IMAGE

linkages, the agriculture and allied activities sector significantly contributed to the country's overall growth and development by ensuring food security," it said, adding that the sector grew by 3 per cent in 2021-22 compared to 3.3 per cent in 2020-21 and in 2020-21, exports of agriculture and allied products from India grew by 18 per cent over the previ-

ous year.

The Economic Survey has attributed the sector's growth and buoyancy to the "measures taken by the government to augment crop and livestock productivity, ensure certainty of returns to the farmers through price support (Minimum Support Price) and promotion of crop diversification."

It further stated that income

In terms of access to agricultural credit, the government has set a target of Rs 18.5 lakh crore in agricultural credit flow in 2022-23

support to farmers through the Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) and the promotion of allied activities has led to diversification in sources of farmers' income by improving their resilience to weather shocks.

The survey has also listed the number of steps taken by the government in line with the recommendations of the Committee on Doubling of Farmers Income.

Though the government

has constituted a jumbo committee on MSP guarantee and recommendations of the panel is yet to come in this regard, the Survey has stated that the government has been increasing the MSP for all 22 Kharif, Rabi and other commercial crops with a margin of at least 50 per cent over the all-India weighted average cost of production since the agricultural year 2018-19.

Given nutritional requirements and changing dietary patterns and to achieve self-sufficiency in pulses and oilseeds production, the government has fixed relatively higher MSP for pulses and oilseeds, it said.

The survey has also noted that India has the highest number of organic farmers in the world at 44.3 lakh, and 59.1 lakh ha area has been brought under organic farming by 2021-22.

The Hindu- 01- February-2023

Jawai dam set to quench thirst of villagers

The Hindu Bureau

JAIPUR

The historic Jawai dam, built by the erstwhile rulers of the Jodhpur princely State in Pali district in 1946, is set to quench the thirst of the villagers in the Jaitaran Assembly constituency with plans being formulated for drinking water supply. The water supply from the dam is proposed to be started for 38 villages by May this year.

The villagers have also been demanding the release of water in the Jawai river, a tributary of the Luni river, which will help increase the groundwater level in over 180 villages in the region. The stoppage of the river's natural flow by the dam has adversely affected irrigation activities in the area measuring 2.7 lakh hectares.

The Jawai dam is the biggest dam constructed in western Rajasthan with a capacity of 7,887.5 million

cubic feet and covering 414.05 sq. km of cultivable command area, while its catchment area comprises 720 sq. km. The announcement for the release of water for drinking was made in the House on Monday.

120 villages in scheme

Public Health Engineering Minister Mahesh Joshi said that four of the villages, where drinking water was proposed to be supplied, were situated in the forest area, leading to their exclu-

sion from the scheme. About 120 villages had already been included in the Jawai pipeline cluster project and 83 of them were getting water supply, he said.

Mr. Joshi said the Jawai Dam Water Reservation Committee had decided to reserve 3,000 mcft of water, against the demand for 3,551 mcft, for the villages and towns dependent on the Jawai pipeline project for the period from October 2022 to October 2023.

The Morning Standard- 01- February-2023

TN to SC: Direct K'taka to not transfer water drawn from Cauvery, tributaries

SHRUTI KAKKAR @ New Delhi

TAMIL Nadu government has approached Supreme Court seeking to direct state of Karnataka and Bangalore Water Supply and Sewerage Board to not transfer the non-consumptive use of the water, drawn from Cauvery Basin / Cauvery River and its tributaries for drinking water supply to Bangalore City, to the adjoining Pennaiyar river basin.

While seeking to also direct Karnataka government to comply with SCs ruling on Cauvery issue dated February 16, 2018, the state has further sought for returning the 80% water drawn from Cauvery river for providing drinking water to Bangalore city as regenerated flow after treatment.

State has also sought for directing the CWMA to monitor the quantum of water drawn

for meeting the drinking water supply requirements of Bangalore Metropolitan City from Cauvery River and quality and quantity of non-consumptive use of drinking water drawn.

“It is the bounden duty of Karnataka and its instrumentality, namely, Bangalore Water Supply and Sewerage Board, to

ensure that 80% of the flows drawn from Cauvery River and its tributaries for meeting the drinking water needs of Bangalore city, is returned to the Cauvery

river system. The additional allocation made by this

Hon'ble Court is only 4.75 TMC as consumptive use and the regenerated flows from the drinking water supply out of the drawal of 23.75 TMC, i.e. 80% of the water diverted for drinking use, is required to be returned to the Cauvery river system,” the application states.



Dainik Jagran- 01- February-2023

चिंताजनक स्थिति

कुछ ही दिनों के अंतराल पर यमुना नदी के पानी में अमोनिया की मात्रा का फिर से बढ़ जाना चिंताजनक है। कुछ दिनों से यह समस्या लगातार बनी हुई है और परेशानी का सबब बन रही है। एक साथ तीन-तीन जल शोधन संयंत्रों से 10 से 15 प्रतिशत तक कम जलापूर्ति हो रही है। हालांकि, दिल्ली और हरियाणा सरकार की ओर से आरोप-प्रत्यारोप चलता रहता है, आपस में पत्राचार भी किया जा रहा है, लेकिन दोनों एक-दूसरे को कठघरे में खड़ा कर पल्ला झाड़ लेते हैं। समस्या का स्थायी समाधान नहीं किया जा रहा है।

यमुना नदी के पानी में अमोनिया का स्तर बढ़ने की समस्या नई नहीं है। ऐसा हर वर्ष होता है। पिछले वर्ष दिसंबर और उससे पिछले वर्ष अप्रैल में भी अमोनिया की मात्रा बढ़ने की समस्या हुई थी। तब भी जल बोर्ड ने हरियाणा को पत्र लिखा था। पिछले वर्ष मई से जून के पहले सप्ताह के बीच जल बोर्ड ने हरियाणा सरकार को सात बार पत्र लिखे थे। फिर भी समस्या हल होता नहीं दिख रहा है। अभी ठंड

का मौसम है, तो जलसंकट ज्यादा दिख है। गर्मी का मौसम शुरू होगा, तो पानी की मांग बढ़ेगी। ऐसे में यदि अमोनिया की समस्या पैदा हुई, तो जलसंकट गहरा सकता है। इसलिए समस्या का तत्काल हल निकाला जाना चाहिए। हालांकि, पिछले दिनों यह बात भी सामने आई थी कि जल बोर्ड के अधिकारी यमुना में अमोनिया की समस्या के निदान का विकल्प तलाश रहे हैं। इसे भी जल्द अमल में लाया जाना चाहिए। साथ ही हरियाणा के इलाकों में कहीं यमुना में गंदा पानी गिराया जा रहा है, तो उस पर भी रोक लगनी चाहिए। साथ ही समस्या का स्थायी हल निकाला जाना चाहिए, ताकि बार-बार ऐसी परेशानी पैदा न हो।

यमुना के पानी में
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संकट पैदा न हो