The Times of India 29-April-2021

Measure 'free' power to manage it: Build transparent subsidy regime and meter all electricity consumption in agriculture

Vivek Sharma

As part of its efforts to address the legacy of discom losses and their contagion effect on the overall power sector, the Centre is considering a slew of reforms including reducing power subsidies, as envisioned in the proposed Electricity (Amendment) Bill, 2020. The ongoing stir by farmers could upend all this and power for agriculture could continue to be free or near-free (collateral damage as it were) for a while. However, a durable solution will necessarily hinge on a detailed scrutiny of the state of affairs in some of the largest discoms and a blended approach to address the burgeoning problem.

To reiterate, management of electricity consumption by the agri sector will need to ride on its measurement. Some of the steps that can help include universal metering of agricultural connections, subsidy disbursal through direct benefit transfer, and solarisation of agri feeders.

But first, let us consider that free power comes at a huge cost. Free power to agriculture accounted for ~22% of the total electricity sales by state discoms in fiscal 2019, leading to a tariff subsidy burden of ~Rs 1,10,391 crore on state exchequers due to almost zero (Punjab and Tamil Nadu) to very low average billing rates for electricity to agriculture. Interestingly, 11 agrarian states account for ~95% of the total power sales to agri consumers in the country.

As things stand, reporting of sales to agri consumers by discoms is replete with problems. Almost all the states depend on regulatory commission approved methodology to estimate sales to agri category. A review of state-wise tariff orders reveals ~92% of agri consumers in Punjab and more than 35% in Maharashtra, Madhya Pradesh and Gujarat are un-metered.

Discoms generally care little about this anomaly as their subsidy allocation depends on these estimates, whereby overestimation of such sales actually helps them conceal transmission and distribution losses. For the states, though, lack of robust metering and reporting infrastructure for agricultural sales may cause a higher tariff subsidy burden.

62% of irrigation in the country is dependent on groundwater and around 24 million wells with pumps running on free/ subsidised electricity

Second, unmetered power has led to its inefficient usage, depleting groundwater reserves, with implications for food production and climate change. According to the Central Ground Water Board, 62% of irrigation in the country is dependent on groundwater and around 24 million wells with pumps running on free/ subsidised electricity. Average pump size has increased to ~7HP in 2020, up from ~6HP in 2012. In Rajasthan, it has increased from 9HP in 2010 to 13HP in 2019, and in Uttar Pradesh from 8HP to 9HP.

Rapid depletion in groundwater resources has a cascading effect across sectors. It also leads farmers to dig deeper wells and use high-power pumps, both of which require higher investments. In order to recover the investments, farmers tend to take water-intensive cash crops, supported by free electricity supplied by states, leading to further depletion in groundwater.

As per the report of National Ground Water Board, 1,186 units in various states (17%) have been categorised as over-exploited, with groundwater extraction more than 100% of the annually replenishable groundwater recharge. Further, Ground Water Year Book India 2018-19 has reported ~50% decline in ground level in the range of 0-2m over the last decade across major parts of the country.

Besides larger reforms around cropping pattern to address inefficient usage of electricity and avoid overutilisation of groundwater, the government can consider implementing the following measures. One, 100% metering of all agri connections, leveraging technology to promote real-time data acquisition and management of electricity as well as cropping pattern. Two, subsidy distribution through direct benefit transfer, which will reduce wastage and also allow states to better plan and manage the subsidy requirement. Three, dedicated tail-end solar power plants connected to agri feeders; this can help reduce cost of power procurement and network losses for discoms, and bring down the subsidy burden for states in the medium to long term.

Four, IT-enabled rationing of power supply linked to seasonal water availability, weather forecast, and crop requirement to reduce over-extraction of groundwater. And finally, innovative concepts such as cash credit of electricity bill payment linked to reduction in consumption against benchmark; this can incentivise farmers to consume less than their quota by allowing them to retain surplus cash. Clearly, any reform in the power sector including content/ carriage or privatisation will work only if we have metered consumers and transparent subsidy estimate and disbursal in the agriculture sector.

The writer is Senior Director, CRISIL Infrastructure Advisory

Indian Express 29-April-2021

Melting glaciers threaten China plan for dam over Brahmaputra

Beijing: Melting glaciers and barrier lakes could threaten China's plan to build the world's biggest hydroelectric dam over the Brahmaputra River in Tibet, close to the Arunachal Pradesh border, a media report said Wednesday.

The proposed dam, which an official said has "no parallel in history", is set to be built in Medog county, where the Brahmaputra Grand Canyon is located.

However, "in 2018, a landslide caused by a melting glacier blocked the upper stream of the Brahmaputra at the Sedongpu Basin in Milin county," the *South China Morning Post* said. It formed a lake, and with the river spilling over, the dam caused by the landslide could collapse at any time.

The Sedongpu lake sits upstream from the planned construction site of the mega dam. With so much water hanging overhead, no construction workers can move in to clear the ground, the report said. **PTI**

Deccan Chronicle 29-April-2021

Hussainsagar lake is not a listed wetland, NGT told

TSS SIDDHARTH DC
HYDERABAD, APRIL 28

Hussainsagar Lake is not a listed wetland. Such a significant statement comes from two officials -R. Sobha and Sunil Sharma - to the National Green Tribunal (NGT) in the Secretariat demolition case.

The two officials filed their responses to a case filed by Member of Parliament A. Revanth Reddy before the National Green Tribunal (NGT. They said Reddy filed the case on vague grounds. The two officials stated that the complaint by the MP has no merit and was based on vague allegations. "These are contrary to the actual facts." They also asked the NGT to dismiss the case or pass further orders.

It has come to light that the definition of a wetland seems to be mired in confusion.

"The state government had earlier listed the Kapra lake in the city and Pakhal lake in Warangal as wetlands. But, within a few hours, the Kapra lake was removed from the list of wetlands. Why is there so much confusion?" asks B.V. Subba Rao, a noted environmentalist here.

For this, he blames the half-baked wetland guidelines released in 2017. "The status of wetlands has to be clarified by the central government. If they are vehemently saying that the wetland rules do not apply to either lake, it goes to show that the rules are being misinterpreted. As per the rules, drinking water reservoirs and sources of irrigation cannot be listed as wetlands," he said.

While the Hussainsagar lake is stuck in this quagmire, the other two reservoirs - Osman Sagar and Himayat Sagar - are considered drinking water sources. Hence, they cannot be considered wetlands.

"These are not cleared as a wetland, because the water use is different. However, the protection of these lakes becomes paramount as there are encroachments around them," said a senior official from the irrigation department.

New Indian Express 29-April-2021

Melting glaciers threaten China's Tibet dam plan

World's biggest hydroelectric project over the Brahmaputra is under threat

STUDY

BEIJING: Melting glaciers and barrier lakes could threaten China's plan to build the world's biggest hydroelectric dam over the Brahmaputra River in Tibet close to the Arunachal Pradesh border, a media report said on Wednesday.

The proposed dam which one Chinese official said has "no parallel in history' will be built in Medog county, where the Brahmaputra Grand Canyon is located. Medog is the last county in Tibet which is located close to the Arunachal Pradesh border.

The plan to build the mega-dam, which is part of China's 14th five-year plan beginning from this year, was approved by China's Parliament, the National People's Congress in March this year. But the engineers are concerned about the threats posed by landslides and barrier lakes to the dam, the Hong Kong-based South China Morning Post reported.

'But an icy obstacle could put a halt to much of the plan. In 2018, a landslide caused by a melting glacier blocked the Yarlung Tsangpo ' the upper stream of the Brahmaputra River ' at the Sedongpu Basin in Milin county," it said.

It formed a lake containing about 600 million cubic metres of water. With the river spilling over the top at present, the dam could collapse at any time, it said. The Sedongpu lake sits just a few dozen kilometres upstream from the planned construction site of the super hydropower plant. With so much water hanging overhead, no construction workers can move in to clear the ground, it said.

To build the big dam, they must get rid of the small dam formed by the landslide first, the report said.

India and Bangladesh, the lower riparian states, have raised concerns over China's plan to build the massive dam on Brahmaputra River. But China has downplayed such anxieties saying it would keep their interests in mind.

As a lower riparian state with considerable established user rights to the waters of the trans-border rivers, the Indian government has consistently conveyed its views and concerns to the Chinese authorities and has urged them to ensure that the interests of downstream states are not harmed by any activities in upstream areas.

Brahmaputra is known as Yarlung Zangbo in Tibet. The river is the longest river in Tibet and its valley in southern Tibet is the world's deepest with a 7,000-m (23,000-ft) drop from the highest mountain peak to the lowest basin.

The Statesman 29-April-2021

Melting glaciers threaten China's plan to dam the Brahmaputra in Tibet

PRESS TRUST OF INDIA
BEIJING, 28 APRIL

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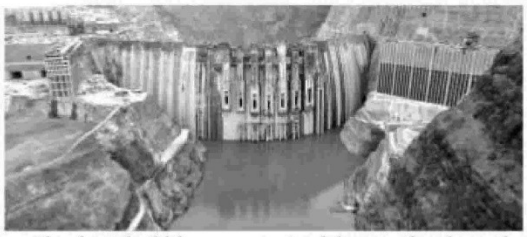

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Rashtriya Sahara 29-April-2021

ब्रह्मपुत्र नदी पर बांध की चीन की योजना पर पिघलते ग्लेशियर से खतरा

■ बीजिंग (भाषा)।

अरूणाचल प्रदेश की सीमा के नजदीक तिब्बत में ब्रह्मपुत्र नदी के ऊपर दुनिया का सबसे बड़ा जल विद्युत बांध बनाने की चीन की योजना को पिघलते ग्लेशियर से खतरा हो सकता है। यह जानकारी बुधवार को मीडिया में आई खबरों में दी गई।

चीन के एक अधिकारी ने कहा कि मेडोग काउंटी में प्रस्तावित बांध बनेगा और 'इतिहास में इस तरह का कोई दूसरा बांध नहीं होगा', जहां ब्रह्मपुत्र ग्रैंड केनयन स्थित है। मेडोग तिब्बत का अंतिम काउंटी है जो अरूणाचल प्रदेश की सीमा के पास स्थित है। इस बड़े बांध को बनाने की योजना इस वर्ष से है जो चीन के 14वें पंचवर्षीय योजना का हिस्सा है। इसे पिछले वर्ष मार्च में चीन की संसद नेशनल पीपुल्स कांग्रेस ने मंजूरी दी थी। हांगकांग के 'साउथ चाइना मॉर्निंग पोस्ट' ने खबर दी कि इंजीनियर बांध को भूस्खलन और बैरियर लेक (कृत्रिम जलाशय) से खतरे को लेकर चिंतित हैं। इसने कहा, ''योजना में ग्लेशियर बाधा डाल सकते हैं। 2018 में पिघलते ग्लेशियर के कारण हुए एक भूस्खलन से मिलिन काउंटी में सेडोंगपू बेसिन के पास यारलुंग सेंगपो (ब्रह्मपुत्र नदी की ऊपरी धारा) बाधित हो गई थी।''

Dainik Jagran 29-April-2021

चीन की ब्रह्मपुत्र पर बांध योजना पर संकट के बादल

बीजिंग, प्रेट्र: अरुणाचल प्रदेश की सीमा के नजदीक तिब्बत में ब्रह्मपुत्र नदी पर दुनिया का सबसे बड़ा हाइड्रोइलेक्ट्रिक बांध बनाने की योजना पर पानी फिरता नजर आ रहा है। भारत पहले ही इस परियोजना के खिलाफ रहा है। लेकिन अब ग्लेशियरों के लगातार पिघलने से और उन इलाकों में पानी का रास्ता अवरुद्ध होने से बनी प्राकृतिक झीलों के कारण चीन को इस योजना में अब भारी खतरा नजर आ रहा है।

मीडिया रिपोर्ट में बुधवार को बताया गया कि अरुणाचल की सीमा से लगी तिब्बत की आखिरी काउंटी में प्रस्तावित इस बांध का दुनिया के इतिहास में दूसरा कोई नहीं होगा।

ग्लेशियरों के लगातार पिघलने और उन इलाकों में झीलों के कारण चीन को इस योजना के क्रियान्वयन में भारी खतरा नजर आ रहा

ब्रह्मपुत्र के ग्रैंड कैनियोन में स्थित मीडॉग काउंटी में एक महाविशाल बांध बनाने की योजना को चीन ने अपनी 14वीं पंचवर्षीय योजना का हिस्सा बनाया है। इस योजना को इसी साल से शुरू किया जाना था। हांगकांग के साउथ चाइना मार्निंग पोस्ट अखबार के मुताबिक इस प्रोजेक्ट पर काम करने वाले इंजीनियर परेशान हैं कि भूस्खलन और चट्टान टूटने से झीलें बनते जाने के कारण बांध को भारी नुकसान हो सकता है।