TN parties object to DKS plan to expedite Mekedatu project

Karnataka min regrets no improvement; illegal, says TN

G. BABU JAYAKUMAR
D. SEKAR | DC
CHENNAI, MAY 31

DAM IS BACK

- Karnataka deputy chief minister D.K. Shivkumar, also irrigation minister, directs officials to expedite Mekedatu and Mahadayi projects.
- Regrets no improvement in the project in the last five years despite Rs 1,000 crore allocation.

- TN water resources minister Duraimurugan says dam is envisaged to be built in the 'uncontrolled intermediate catchment' area of Cauvery, over which Tamil Nadu has a right.
- Cauvery River Water Dispute Tribunal and the Supreme Court had not mentioned about Mekedatu in any order.
- Open to discussing the matter with Mr Shivakumar.
- TNCC president K.S. Alagiri, whose party rules Karnataka, says his unit would oppose such a move. PMK, DMDK, and BJP also oppose project

After a long lull, the more-than-a-century old dispute over the sharing of Cauvery river waters reared its head again with Karnataka deputy chief minister D.K. Shivakumar telling his irrigation department officials to expedite the work on implementing the proposed Mekedatu and Mahadayi projects immediately and political leaders in Tamil Nadu reacting angrily to it.

As the news of Mr Shivakumar, who has returned to the Karnataka irrigation ministry after five years, reiterating his determination to go ahead with the old proposal to build a dam across the Cauvery at Mekedatu, located near the inter-state border, for generating electricity and also meeting the water needs of Bengaluru, came in, it evoked widespread condemnation in the state, cutting across party lines.

Tamil Nadu has been opposing the Mekedatu project ever since it was proposed as it feared a reduction in the flow of Cauvery water into the state with Karnataka hoarding more water in the dam and on the ground though permission of the lower riparian state was essential for any undertaking such project.

Water resources minister Duraimurugan, expressing surprise over Mr Shivakumar's enthusiasm in going ahead with the dam construction, told the media on Wednesday there was no need for the new government in Karnataka to rub its neighbouring state the wrong way.

Since the dam is envisaged to be built in the 'uncontrolled intermediate catchment' area of Cauvery, over which Tamil Nadu has a right, the construction would be illegal, Mr Duraimurugan said, adding that the Cauvery River Water Dispute Tribunal or the Supreme Court had not mentioned about Mekedatu in any of their orders. P2

Mekedatu Dam issue raises its head again

CONTINUED FROM PAGE 1

Such a construction, not permitted by any authority, would go against the interest of Tamil Nadu, he said and vowed to fight against any such move through all means. He hoped to meet and discuss the matter with Shivakumar, hoping that he would be patient till then.

Shivakumar, at his meeting with officials in Bengaluru, had regretted that there had been no forward movement on the Mekedatu project ever since he relinquished office in 2018 despite the allocation of a fund to the tune of Rs 1000 crore.

Expressing no surprise over Shivakumar showing interest in speeding up the project, PMK founder S Ramadoss recalled that Karnataka Congress leader had even taken out a rally in favour of Mekedatu at the height of the Coronavirus pandemic to press for the implementation of the project.

Ramadoss said the latest move was condemnable as the Supreme Court had ordered against the construction of a dam across Cauvery and wanted the State government to oppose it legally and politically.

DMDK leader Vijaykanth said Mekedatu would work against the interest of Tamil Nadu farmers and affect their livelihood and called upon the Union Government to not give permission for the project.

TNCC president K S Alagiri, when asked about Karnataka's keenness on the project, said that his party would oppose any such move. There could be no reduction in the share of Cauvery water for Tamil Nadu, he told the media at the party headquarters in Chennai.

BJP State President K Annamalai told the media at Madurai that the TNCC would not fight their Karnataka counterpart in protecting Tamil Nadu's interest but they (Tamil Nadu BJP) would do it. He said they had been opposing any move that went against the State's interest, he said. He wondered if Chief Minister M K Stalin would condemn the Karnataka government's plans.

Shivakumar instructing his officials to also expedite the Mahadayi project could provoke yet another a backlash from the State of Goa, with which Karnataka has been having a dispute over the sharing of the waters of the Mahadayi river that originates in its Belagavi district but runs 45 km in Goan territory as Mandovi.

The Times of India- 01- June-2023

AI chatbots may be fun, but they have a drinking problem

Chatbots like ChatGPT are always drinking. In the course of a typical 20-50-question-long conversation they can down up to 500ml of water to cool their servers. They also have a massive carbon footprint – a result of their insatiable energy hunger. Richa Gandhi looks at the ecological impact of AI's growing use, and some measures to mitigate it

Just like organic life, artificial intelligence (AI) cannot exist without water. It uses water directly to cool its massive server rooms, and indirectly at the power stations that produce electricity for those servers. The total water consumption of AI is called its 'water footprint'.

Popular new AI tools like ChatGPT and BARD fall in the category of 'large language models' and have a huge water footprint. These models are trained on massive language datasets that are hosted on stacks of energy-hungry servers. Their operation produces a lot of heat, and even if the centres are located in a cold climate, cooling becomes necessary.

Servers work best at 10-27 degrees Celsius, and to maintain this temperature range server farms employ large cooling towers. For every unit (kilowatt-hour) of electricity consumed by the servers, cooling towers use a gallon (3.8 litres) of water.

How Cooling Towers Work

Cooling towers work on the same principle as traditional room coolers. When water evaporates, it absorbs heat from its surroundings and reduces the ambient temperature. The water vapour rises inside the cooling tower and is released into the atmosphere. As a result, the water used by data centres is lost and cannot be recycled.

This is doubly problematic because cooling towers at data centres can use only clean fresh water. Say, from rivers and lakes. Seawater is not an option because its high salt content would cause corrosion, damaging sensitive equipment at the data centre.

Carbon/Water Trade-Off

Data centres located in countries such as Sweden and Finland use less water because of the naturally cooler conditions. But in the Asia-Pacific region, where a lot of the AI action is now concentrated, higher ambient temperatures push up the need for water.

A research paper titled "Uncovering and Addressing the Secret Water Footprint of AI Models" points out there's often a trade-off between carbon efficiency and water efficiency. You can generate more solar energy to run servers in the afternoon (so, smaller carbon footprint), but then you need more water for cooling as it is the hottest time of the day.

"AI model developers may want to train their models during the noon time when solar energy is more abundant, but this is also the hottest time of day that leads to the worst water efficiency," the research paper's authors write, citing the example of LaMDA's training in sun-drenched Nevada. LaMDA is Google's AI-based conversation technology.

In other words, adopting renewable energy can sometimes come in the way of water conservation. The challenge, then, is to find a way to balance carbon and water efficiencies through new approaches to sustainable AI.

What Companies Are Doing

Most AI companies have pledged to make their systems sustainable by 2030. One solution, the paper's authors say, could be to run AI model training in different locations at different points in time.

Microsoft says its data centres in Phoenix, Arizona, which hosted the training of GPT-3 and its advanced version ChatGPT4, saved water by using outdoor air to chill servers for most of the year. They otherwise cool through direct evaporation, which uses a fraction of the water required by other, more traditional, water-based cooling systems like cooling towers.

Microsoft further plans to save a million litres of water daily by switching from conventional energy to solar energy from the "Sun Streams 2 Solar Project," operated by its local partner Longroad Energy. Google, meanwhile, uses a mix of air cooling, water cooling, refrigerants, or some combination of them, to reduce its water consumption. The decision is based on hyperlocal conditions, and a data-driven approach to local hydrology, topography, energy, and emissions issues.

Cooling towers at a data centre in the US

NUMBER CRUNCHING

500ml ChatGPT needs to **"drink" up to 500ml of clean fresh water** for a simple conversation of roughly 20-50 questions and answers

7L litres Microsoft's San Francisco data centre is estimated to have used **700,000 litres of clean water to train OpenAI's GPT-3 model.** The training had an additional off-site water footprint of **2.8 million litres due to electricity usage**

3.5mn litres GPT-3 had a combined water footprint of **3.5 million litres in the US**, which would have risen to 4.9 million litres, if trained in the Asia-Pacific

➤ The newly-launched GPT-4 is likely to have a significantly **larger water footprint than GPT-3**

2% Warehouse-scale data centres, where most AI models are trained and deployed, collectively account for **2% of the global electricity usage**

16bn litres Google's self-owned data centres in the US consumed **16 billion litres of fresh water** – 90% of it potable – for on-site cooling in 2021

84mn litres Microsoft's giant data centre complex in North Holland consumed **84 million litres of water in 2021**, at a time of severe water shortages

The Times of India- 01- June-2023

Release 5 tmc ft water to NK, Siddu urges Maha CM

TIMES NEWS NETWORK

Bengaluru/Belagavi: Chief minister Siddaramaiah on Wednesday wrote to his Maharashtra counterpart Eknath Shinde, requesting him to release five tmc feet of water from its reservoirs to Krishna and Bhima rivers to meet the drinking water requirement in North Karnataka districts.

While thanking the Shinde government for releasing one tmc ft of water to Krishna in the first fortnight of this month, responding to the Karnataka government's earlier letter, Siddaramaiah requested that Shinde release five tmc ft more — two tmc ft from Warna and Koyna reservoirs to Krishna and three tmc ft from Ujjani reservoir to Bhima — as people and livestock of the region have been facing acute shortage of drinking water.

Belagavi, Vijayapura, Kalaburagi, Yadgir and Raichur districts continue to face shortage as monsoon is yet to arrive. "I request that you direct the authorities concerned to immediately release water from your reservoirs," Siddaramaiah stated in the letter. Every year during summer, the northern districts of Karnataka face drinking water problems owing to the fact that Karnataka gets water from Maharashtra reservoirs. Till 2016, Karnataka used to pay Rs 2 crore for every tmc ft of water released, and Maharashtra would release four-five tmc ft in a phased manner.

But since 2017, the neighbouring state has been insisting on providing equal quantities of water to its villages in Jath taluk from the Tubachi-Babaleshwara lift irrigation project in Karnataka and has stopped charging for the water released.

In 2019, there was a stand-off between the two states, with Maharashtra insisting Karnataka sign the 'water for water' agreement, to which Karnataka was not ready.

The Hindu- 01- June-2023

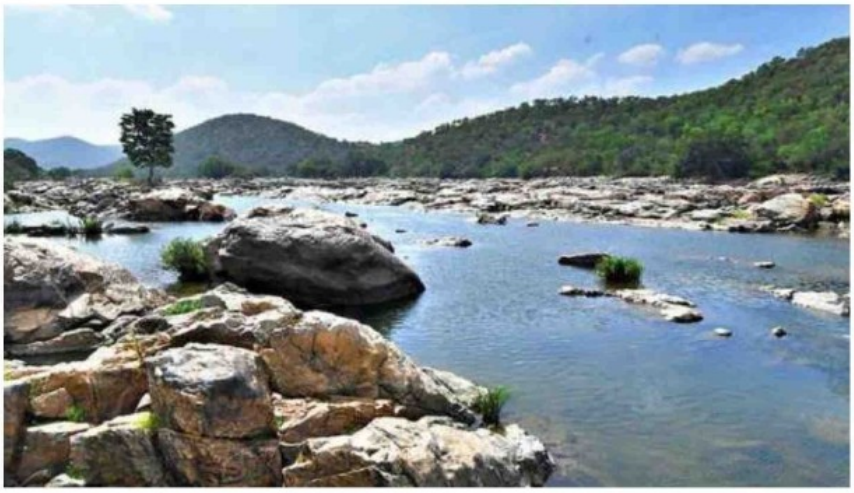
T.N. reiterates opposition to Karnataka's proposal for a dam at Mekedatu

State will oppose the proposal at all levels, says Water Resources Minister Duraimurugan, in response to Karnataka Irrigation Minister D.K. Shivakumar's statement a day earlier

The Hindu Bureau
CHENNAI

A day after Karnataka Deputy Chief Minister D.K. Shivakumar, who also holds the Irrigation portfolio, reportedly said his State was keen on building a dam across the Cauvery at Mekedatu, Tamil Nadu Minister for Water Resources Duraimurugan on Wednesday reiterated that Tamil Nadu would oppose the proposal at all levels.

Mr. Duraimurugan said the proposal for a dam at Mekedatu, in the uncontrolled intermediate catchment, "would affect Tamil Nadu" and was "not welcome". Expressing confidence that he would be able to meet the Karnataka Minister soon, he said the issue could be discussed in detail at the meeting. He hoped Mr. Shivakumar would be patient till then.



Karnataka Deputy Chief Minister D.K. Shivakumar said the State was keen on building a dam at Mekedatu, and ₹1,000 crore had been allocated for the project. FILE PHOTO

Mr. Duraimurugan said he was surprised that Mr. Shivakumar chose to ruffle Tamil Nadu's feathers days after he was sworn in as a Minister.

He said officials may not have given the new Minister complete information on the proposal.

His remarks came in response to media reports on Mr. Shivakumar's statement that Karnataka was keen on a dam at Mekedatu and ₹1,000 crore had been allocated for the project.

AMMK founder T.T.V. Dhinakaran demanded that the DMK government take legal steps against Karnataka's proposal. Stating that Mr. Duraimurugan's condemnation of Karnataka's plan was not enough, he sought the Chief Minister's intervention.

Millennium Post- 01- June-2023

Government plans to shift irrigation via canal systems instead of groundwater

DHIRENDRA KUMAR

NEW DELHI: In a major move aimed at making available water to every arable land, the Ministry of Jal Shakti is working on a comprehensive micro irrigation project to provide water to every agricultural land through canal systems instead of using groundwater. As per a senior official, the ministry is also mulling a policy shift to control solar pumps and ground water extraction, which would be limited to communities only.

The initiative in this regard has been taken after going through a well-thought process to meet the sustainable development goals (SDGs) and reduce dependency on ground water, which is being exploited at the expense of ecosystems. Given that agricultural production and water management are equally important and need to be addressed in a best feasible manner to meet the future food production requirements, which are likely to be doubled in the future while the water cycle will be likely disturbed by climate change, a senior official of the ministry said.

"The micro irrigation's dream of India has to be developed on canal water. The micro irrigation target of 70 Mha will have a crop water requirement of 500 BCM whereas utilisable ground water is only 240 BCM. Using groundwater is a hydrogeological disaster in waiting," the official said.

Raising a pertinent concern about the misuse of solar pumps used for ground water exploitation, the official said: "It has been found that a majority of solar pumps never get switched off, which result into over exploitation of groundwater." The Jal Shakti Ministry is working on a concept note to consider recasting the flagship Pradhan Mantri Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) into a smart irrigation infrastructure providing scheme, the official said.

"The objective behind it is to improve the water use efficiency and saving around 50 BCM water in India which is almost equal to the food basket reservoirs in the country that provide 55 BCM water," the official said.

Mint- 01- June-2023

Nearly 55% of farm land getting irrigation: NITI Aayog's Chand

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NEW DELHI

More than half of India's cultivated land now has access to assured irrigation, led by an expansion in micro-projects that use water more efficiently. In 2022-23, of the 210 million hectares of gross sown area, about 115 million hectares, or nearly 55%, had irrigation access, up from 47.8% in 2013-14, according to state-run think-tank Niti Aayog member Ramesh Chand.

The increase in irrigation cover has been attributed to a massive expansion of land under agriculture, especially in the dryland farm zones of Telangana, Gujarat, Madhya Pradesh and Karnataka and a moderate increase in Uttar Pradesh, Chand told *Mint*. This is expected to help curb the rising impact of dry summers and patchy monsoons, which are partly linked to the climate crisis.

Agriculture accounts for about 80% of India's available water use of 700 billion cubic metres annually. The monsoon rainfall in June-September, which waters the kharif or summer-sown crops, plays a crucial role in farm production. Agriculture accounts for about 18% of the national economy and is the largest employer.

Agriculture accounts for about 80% of India's annual water use. HT

Since the inception of the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) in July 2015, the cultivated area under irrigation has been increasing by 1% each year. States are making more investments than the Centre to make the scheme fruitful, Chand added.

With the aim of "Har Khet Ko Paani", PMSKY is being implemented to expand the cultivated area with assured irrigation, reduce wastage of water and improve water use efficiency. PMKSY focuses not only on creating sources for assured irrigation, but also on creating protective irrigation by harnessing rainwater at micro level through "Jal Sanchay" and "Jal Sinchan". Micro irrigation is also incentivized through subsidy to ensure "Per drop-More crop".

In 2018-19 financial year, a ₹500 billion worth micro-irrigation fund (MIF) was created with the National Bank for Agriculture and Rural Development (NABARD) to help states mobilise resources. Under the fund, central assistance worth ₹127 billion has been released to states, out of which ₹118 billion was utilised in the financial year ended March.

The increase in irrigated area has been driven by five programmes and projects other than PMKSY. These are the Accelerated Irrigation Benefit Programme (AIBP), Har Khet Ko Paani-Surface Minor Irrigation, PMKSY-groundwater projects, special package for Maharashtra, Rajasthan and Srihind feeder and Shahpur-Kandi project.

Amar Ujala- 01- June-2023

अटल भूजल योजना पर कार्यशाला और एनएलएसी की बैठक संपन्न

नई दिल्ली (वि)। अटल भूजल योजना की राष्ट्रीय स्तर की संचालन समिति (एनएलएससी) की चौथी बैठक और कार्यशाला सचिव, जल संसाधन विभाग, नदी विकास एवं गंगा संरक्षण मंत्रालय, जल शक्ति मंत्रालय की अध्यक्षता में हुई। कार्यशाला में सतत भूजल प्रबंधन पर सर्वोत्तम प्रथाओं पर चर्चा हुई। बैठक में विशेष सचिव, संयुक्त सचिव, विश्व बैंक के साउथ एशिया के वाटर प्रैक्टिस मैनेजर, समिति के सदस्यों और उन सात राज्यों के वरिष्ठ अधिकारियों ने भाग लिया, जहां योजना लागू है। अटल भूजल योजना (अटल जल) अप्रैल, 2020 से 80 जिलों के 229 प्रशासनिक ब्लॉकों/तालुकों की 8220 पानी की कमी वाली ग्राम पंचायतों में चल रही है।

Dainik Bhaskar- 01- June-2023

विश्व पर्यावरण दिवस पर मंथन करेंगे सीएम

SYL का पानी वाया हिमाचल हरियाणा में लाने पर होगी बैठक

भास्कर न्यूज | चंडीगढ़

हिमाचल प्रदेश और हरियाणा के बीच सिंचाई की परियोजना, बिजली पर सैस लगाने के मुद्दे, एसवाईएल का पानी हिमाचल के रास्ते हरियाणा में लाने सहित कई बड़े मुद्दों को लेकर दोनों राज्यों के सीएम के बीच पांच जून यानी विश्व पर्यावरण दिवस के अवसर पर बैठक होगी। बैठक में दोनों प्रदेशों के सिंचाई विभाग के अलावा अन्य विभागों के आला अधिकारी भी शिरकत करेंगे। यह मीटिंग वीडियो कांफ्रेंस के जरिए होगी।

मुख्यमंत्री मनोहर लाल ने कहा कि हिमाचल के मुख्यमंत्री के साथ उनकी 5 जून को विभिन्न मुद्दों पर बैठक होगी।

हरियाणा में 14 मिलियन एकड़ फीट पानी की कमी

हरियाणा में यमुना नदी से पानी की पूर्ति होती है। सतलुज-रावी-ब्यास का पानी भाखड़ा डैम के माध्यम से हमें मिलता है। 3.5 एमएएफ पानी एसवाईएल के कारण हमें नहीं मिल पा रहा है। वर्तमान में हरियाणा में पानी की उपलब्धता 20 एमएएफ है, जबकि मांग 34 एमएएफ है। 14 एमएएफ पानी की कमी है। अधिकांश पानी सिंचाई के लिए उपयोग किया जाता है। उद्योगों तथा घरों में भी पीने के अलावा अन्य कार्यों में पानी की अधिकतर खपत होती है। लेकिन पानी बहुत ही सीमित मात्रा में है।

Rajasthan Patrika- 01- June-2023

ग्रामीणों से किया संवाद, अधिकारियों के साथ बैठक

जल शक्ति मंत्रालय की टीम ने जानी राजस्थान में जीवन मिशन की प्रगति

पत्रिका ब्यूरो
patrika.com

नई दिल्ली। जल शक्ति मंत्रालय के दल ने जयपुर व आसपास के इलाकों का दौरा कर प्रदेश में राष्ट्रीय जल जीवन मिशन की प्रगति का जायजा लिया। दिल्ली से गए अधिकारियों ने ग्रामीणों के साथ संवाद करने के साथ जल संसाधन विभाग के अधिकारियों के साथ चर्चा की और मिशन की ओर से राज्य में करवाए जा रहे प्रशिक्षण कार्यक्रमों का मूल्यांकन किया।

राज्य सरकार के अधिकारियों व यूनिसेफ राजस्थान के साथ एक मीटिंग में राष्ट्रीय टीम ने राजस्थान में जेजेएम की वर्तमान स्थिति व उसके लिए आवश्यक क्षमता निर्माण के प्रयासों की समीक्षा की। इस दौरान राज्य के अधिकारियों के साझा दृष्टिकोण और फील्ड विजिट के अनुभवों के आधार पर टीम ने बेहतर कार्यवाही की योजना बनाने के लिए सुझाव दिए। टीम ने राजस्थान पेयजल विभाग के संयुक्त सचिव के साथ जेजेएम के सफल क्रियान्वयन की रणनीति पर चर्चा की। बैठक में कुछ महत्वपूर्ण निर्णय भी लिए गए।

राष्ट्रीय टीम में जल एवं स्वच्छता विभाग के अवर सचिव संतोष कुमार, मिशन के विशेषज्ञ आशुतोष त्रिपुरारी सिंह व केपीएमजी के सलाहकार विकास धनकर शामिल थे।

Rajasthan Patrika- 01- June-2023

संकट की आहट

हरियाणा व हिमाचल में एमओयू के बाद हो रहा बांध का निर्माण

श्रीगंगानगर-हनुमानगढ़ की 65 हजार एकड़ भूमि पर खतरा

सरस्वती की तरह घग्घर भी प्रदेश की विलुप्त नदी बन जाएगी

मंगेश कौशिक
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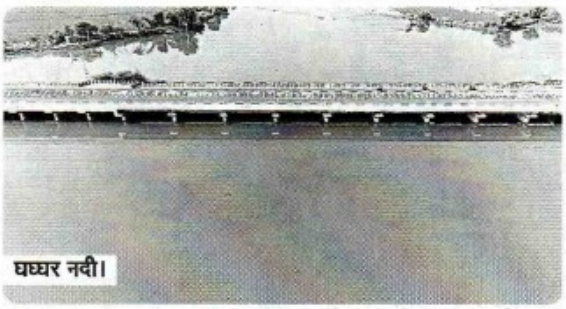
श्रीगंगानगर. सरस्वती की तरह घग्घर नदी भी प्रदेश की विलुप्त नदी बन जाएगी। हरियाणा और हिमाचल प्रदेश की सरकारों के बीच हुए एक समझौते के बाद यह आशंका व्यक्त की गई है। इस समझौते के तहत हिमाचल प्रदेश में एक बांध बनाया जाएगा, जिसमें संग्रहित होने वाले पानी का उपयोग केवल हरियाणा और हिमाचल ही कर सकेंगे। अभी जो पानी घग्घर के नदी माध्यम से हरियाणा होते हुए राजस्थान में प्रवेश कर श्रीगंगानगर व हनुमानगढ़ जिलों की हजारों एकड़ भूमि को सिंचित करता है, उस पर हिमाचल और हरियाणा का नियंत्रण हो जाएगा और इन दोनों जिलों को एक बूंद भी पानी नहीं मिलेगा। घग्घर का पानी राजस्थान में भी आता है, लेकिन समझौता करते समय दोनों राज्यों ने राजस्थान की राय तक नहीं ली।



घग्घर नदी।

शिवालिक की पहाड़ियों से निकलने वाली बरसाती घग्घर नदी हिमाचल, पंजाब और हरियाणा होते हुए राजस्थान के हनुमानगढ़ जिले में प्रवेश करती है और श्रीगंगानगर जिले में बहती हुई भारत-पाक अंतरराष्ट्रीय सीमा को पार कर पाकिस्तान में प्रवेश कर जाती है। हिमाचल में बांध बनने के बाद घग्घर का पानी नियंत्रित हो जाएगा।

राजस्थान की उदासीनता

हरियाणा वर्ष 2002-03 में जब ओटू बांध का निर्माण कर रहा था, तब श्रीगंगानगर व हनुमानगढ़ के किसानों ने विरोध मार्च निकाला। राज्य सरकार ने तब आपत्ति दर्ज करवा कर्तव्य की इतिश्री कर ली। राजस्थान, पंजाब व हरियाणा के बीच घग्घर के पानी के बंटवारे को लेकर सही पैरवी नहीं की गई।

घग्घर नदी :कुछ तथ्य

- 1955 से पहले घग्घर में बाढ़ का पानी कम समय के लिए मामूली मात्रा में आता था।
- 1958 के बाद पानी की मात्रा एवं अवधि बढ़ती गई।
- 1962 में घग्घर का पानी पहली बार अनूपगढ़ के निकट भारत-पाक अंतरराष्ट्रीय सीमा तक गया।
- 1964 में पानी सीमा पार कर पाकिस्तान में गया।

हरियाणा ने ओटू बांध की जलग्रहण क्षमता बढ़ाने के लिए इसका पुनर्निर्माण शुरू किया है। सरस्वती नदी को पुनर्जीवित करने के नाम पर हिमाचल में बने रहे बांध से राजस्थान में घग्घर का अस्तित्व समाप्त हो जाएगा। - **कुलदीप विश्नोई,** मुख्य अभियंता (सेवानिवृत्त) जल संसाधन विभाग