

भारत सरकार  
जल शक्ति मंत्रालय  
जल संसाधन नदी विकास एवं गंगा संरक्षण विभाग  
केंद्रीय जल आयोग  
जल प्रणाली अभियांत्रिकी निदेशालय



Government of India  
Ministry of Jal Shakti  
Dept. of Water Resources, RD&GR  
Central Water Commission  
Water System Engineering Directorate

दिनांक: 10.10.2019

**विषय - समाचार पत्रों की कटिंग का प्रस्तुतीकरण।**

जल संसाधन विकास और संबद्ध विषयों से संबंधित समाचार पत्रों की कटिंग को केंद्रीय जल आयोग के अध्यक्ष और सदस्य (कार्य योजना एवं परियोजना / अभिकल्प एवं अनुसंधान / नदी प्रबंध ) के अवलोकन के लिए संलग्न किया गया है। इन समाचारों की कटिंग की सॉफ्ट कॉपी केन्द्रीय जल आयोग की वेबसाइट पर भी अपलोड की जाएगी।

*अक्ष*  
10/10/2019

वरिष्ठ कलाकार

जल प्रणाली अभियांत्रिकी निदेशालय

संलग्नक: उपरोक्त

उप निदेशक, (ज. प्र. आ.) निदे०

*विवेक*  
10/10/2019

निदेशक, (ज. प्र. आ.) निदे०

*उषा*  
10-10-19

सेवा में,

अध्यक्ष, के. ज. आ., नई दिल्ली

**जानकारी हेतु - सभी संबंधित केन्द्रीय जल आयोग की वेबसाइट [www.cwc.gov.in](http://www.cwc.gov.in) पर देखें।**





# Monsoon begins its most delayed retreat in 59 years

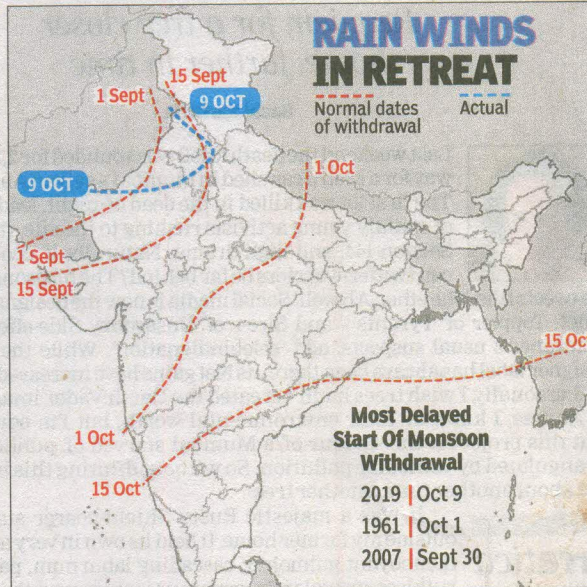
Amit.Bhattacharya  
@timesgroup.com

**New Delhi:** The southwest monsoon finally began its retreat from the country, nearly 40 days later than the normal date, in what is by far the most delayed monsoon withdrawal in met department records going back to 1960.

The India Meteorological Department declared that monsoon had withdrawn from parts of Punjab, Haryana and north Rajasthan on Wednesday. From here on, monsoon is likely to make a swift retreat from north and central India, it said.

The most delayed monsoon withdrawal recorded before this year was in 1961, when the monsoon began its retreat on October 1. This year, active conditions till late in the season, including a low pressure system that came in from Bay of Bengal in September end, kept monsoon going.

IMD said conditions were now becoming ripe for monsoon to further withdraw from more parts of northwest India, including Delhi, during the next two days. In the subsequent two-three days, the rain-bearing



system may retreat from the remaining parts of north-west India as well as central India, the department said.

"With the retreat process having begun, we are likely to see a quick withdrawal of monsoon," said Mrutyunjay Mohapatra, IMD's director general of meteorology. The withdrawal was announced after persistent anti-cyclonic circulation and gradual reduction in moisture — the

two essential conditions for monsoon's retreat — were observed, the IMD said.

"The reversal of wind direction is likely to reduce humidity and lead to a drop temperatures in north India," Mohapatra said. The monsoon typically begins to withdraw from west Rajasthan, retreating incrementally from the north and then central India in a process spread over a month-and-a-half.

THE ECONOMIC TIMES - 10.10.2019

## Monsoon Begins Retreat After Extended Stay

Oct 9 withdrawal marks most delayed departure; season saw many rain records being drowned

Jayashree.Bhosale@timesgroup.com

**Pune:** The monsoon has finally begun withdrawing from north India — the most delayed departure ever — after smashing a series of records for intense rainfall in the season that began with the spectre of drought and ended with floods in many regions.

"In view of the persistence of an anti-cyclonic circulation in the lower tropospheric level over northwest India, gradual reduction in moisture in the

lower and mid-tropospheric levels and reduction in rainfall, southwest monsoon has withdrawn from some parts of Punjab, Haryana and north Rajasthan today," the India Meteorological Department (IMD) said on Wednesday.

The normal date for monsoon withdrawal is September 1. The most delayed withdrawals in the past were in 1961 (October 1) and 2007 (September 30).

The Met department said the monsoon would vacate the remaining parts of northern and central India in the next two days.

The IMD had forecast a normal monsoon for 2019 in its long-range forecast in April and June, while private weather forecaster Skymet had predicted below-normal rain. With 110% seasonal rainfall, monsoon 2019 has been classified as 'above normal'.

KS Hosalkar, deputy director general of meteorology, IMD (Mumbai), said the monsoon's progress was hindered by Cyclone Vayu just after its onset in Kerala this year.

Most Rainfall in 25 Years >> 18

### FROM 'DROUGHT' TO DELUGE...

Normal withdrawal date **Sept 1**

Withdrawal in 2019 **Oct 9**

Previous record for late withdrawal

**Oct 1, 1961**



#### WASHING OUT RECORDS

Wettest monsoon in **25 years**

**ABOVE-NORMAL SEASONAL RAIN AFTER 30% SHORTFALL IN JUNE - THE FIRST TIME SINCE 1931**

Sept rainfall **52%** above normal and highest since 1917

Aug + Sept rain **30%** above average, highest since 1983



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and documented at WSE Dte, CWC.

**Assam Tribune, Guwahati** ☒

## Dangerous consequences

The dangers emanating from hydroelectric projects came to the fore on Monday when at least four persons got trapped inside a pump house after a pipeline carrying water to the NEEPCO-run 275-MW Kopili hydel project in Dima Hasao district burst. A large portion of the plant was also inundated due to a rupture in the pipeline that carries 12,000 litres of water per second. In the recent past, there had been a number of instances of sudden aggravation in flood situations in upper Assam following release of excess water from the Ranganadi hydel project. Similarly, dam-induced flood emanating from Bhutan had been causing havoc in several lower Assam areas. All this raises serious questions over the viability of big dams in the region, especially in the upper reaches of the Brahmaputra basin in Arunachal Pradesh. A case in point has been the Lower Subansiri dam under construction – a dam far bigger than any of the existing dams in the region. It is apparent that any accident like the one just experienced in the Kopili project can end up with catastrophic consequences in the downstream areas of Assam. However, dam-induced accident is but one of the issues involved. There are other and even more serious concerns regarding the well-being of a life-giving river and effects on the livelihoods that a river system supports by way of sustaining agriculture and fishery-related practices. By constricting the natural flow of water, dams – especially big dams – are known to cause irreparable damage to river ecosystems.

Environmental scientists and activists have long been decrying the Centre's plan to go ahead with as many as 168 hydroelectric projects in the region on the ground that the basic concerns before initiating such a large-scale intervention on the fragile Himalayan ecology were largely ignored. Indeed, the hurried manner in which the projects are sought to be pushed through without addressing the genuine concerns such as downstream impacts in the form of floods, loss of biodiversity, seismic vulnerability of the region, etc., seems to corroborate the stance of the opponents of big dams. The situation is certainly grave, and calls for a reassessment of the Centre's hydropower policy for the Northeast. The opposition of the scientific community has been that the projects are being cleared without a thorough study on any of the environmental and social concerns and the downstream impacts. This is valid reasoning and brushing it aside would only jeopardize the lives of thousands of people likely to be affected by the dams. A riparian State like Assam stands to be the worst-hit by the projects, and we have already been victims of dam-induced floods several times in the recent past. Making large-scale intervention on the Himalayan ecology could also lead to catastrophic consequences for its rich biodiversity. The way pristine wildlife habitats are disappearing across the planet, protection of a biodiversity hotspot is a concern of not just the Northeast or India but of the entire world.



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and documented at WSE Dte, CWC.

Millennium Post, Delhi ✓

# Unsanitary treatment

**Sarim Ansari and Rahul Mankotia discuss how improper management of wastewater pollutes our sources of water, pressing for comprehensive solutions**

**D**omestic wastewater containing human excreta from urban areas is a major source of pollution of rivers in the country, including the Ganga. The crux of the problem is that cities in India do not safely manage their excreta due to which there is water pollution – a public health crisis.

The national flagship programmes in the past and present mostly focus on building toilets and a sewerage network with sewage treatment plants (STP).

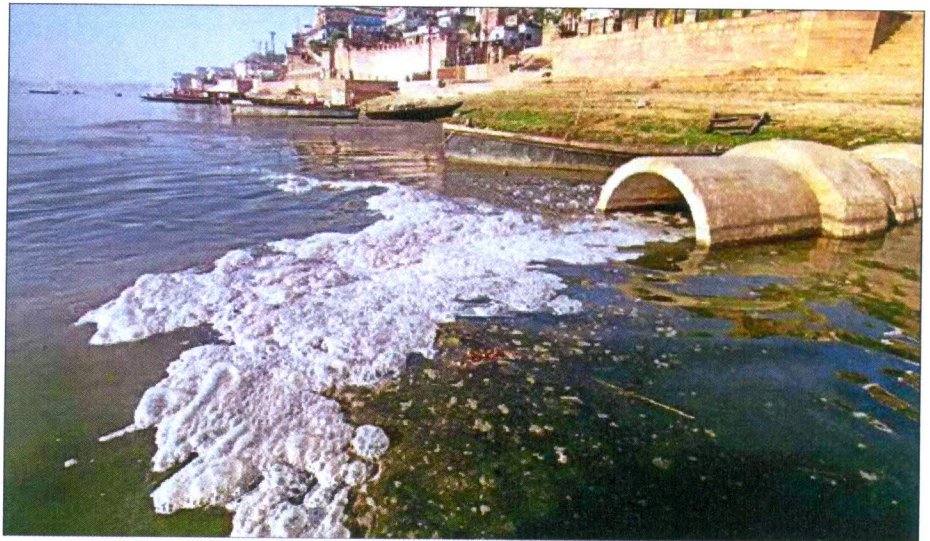
On October 2, 2019, India was declared open-defecation free. Whether the claim is real or not, the fact is over 100 million toilets have been built. Considering that only 28 per cent of the population in the country was connected to a sewerage system (2011 census), the majority of these toilets would be connected to onsite sanitation systems like septic tanks.

The waste from these toilets would continue to pollute water bodies and would add to the existing public health crisis. Sanitation and public health cannot wait; we cannot continue to pollute our rivers and water bodies which also happened to be our source of drinking water.

In the last four years or so, there is a growing recognition in India of the fact that connecting all households in urban India to a sewerage network is not viable. Retrofitting an entire city with a sewerage system is a tedious job as it not only requires digging-up entire roads of the city but also needs all households to be connected with the system.

The challenge is further exacerbated by the fact that the majority of our cities are unplanned with a large proportion of the population residing in densely populated settlements with narrow lanes.

In a recent conference in Delhi, a senior government official of Odisha equated the construction of sewerage network in a city to open-heart surgery considering the risks,



The amount of sewage entering Ganga exceeds the capacity of treatment plants installed, severely deteriorating its water quality

costs and the time involved. We need alternate solutions to manage our wastewater and excreta.

## Faecal sludge and septage management: A solution

In the absence of a sewerage system, faecal sludge and septage (that is, the waste from onsite sanitation system) need to be safely managed. Safe faecal sludge and septage management (FSSM) includes safe containment of excreta in an onsite sanitation system, routinely emptying and transportation of faecal sludge and septage to a faecal sludge treatment plant (FSTP).

A national FSSM policy was notified in 2017. Many states like Andhra Pradesh, Telangana, Rajasthan, etc., also have an FSSM policy.

Pilot FSTP has been constructed in places like Devanahalli (Karnataka), Warangal (Telangana), Narsapur (Andhra Pradesh), Wai and Sinnar (Maharashtra), and Leh. FSSM as a viable solution for sanitation in urban India has been recognised by the Atal Mission for Rejuvenation and Urban

Transformation (AMRUT), which allowed FSSM as a component of its funding.

The National Mission for Clean Ganga (NMCG) has also recognised the need for FSSM after it sanctioned funds for an FSTP in the city of Chunar in Uttar Pradesh, the first FSTP through its funding.

The NMCG roped in Delhi-based non-profit, Centre for Science and Environment as a knowledge partner for implementing this project. This project is unique as it seeks to address the entire sanitation value chain with components including scheduled emptying of septic tanks, geo-tagging of all the properties with details of onsite sanitation system, including the development of web-based geo-spatial information and management information system (MIS).

The project also aims to re-use the bio-solids and treated wastewater for plantation within the project site. The tendering for the project is under progress. As an interim measure, until the FSTP is commissioned, the

city has implemented deep row entrenchment to safely dispose of the faecal sludge without affecting the water bodies and public health.

States across the country are trying hard to scale-up construction of FSTPs across the urban areas. The state of Odisha is leading this effort; it has already commissioned 10 FSTPs through AMRUT funding and another 26 in the tendering stage.

If we look at the Ganga Basin, Uttar Pradesh already has an FSTP in Jhansi, which was constructed through urban local bodies' initiative.

Uttar Pradesh Jal Nigam has been given the responsibility of scaling-up FSTPs in the state through AMRUT funding. Currently, an FSTP in Unnao is under the trial-run stage, contracts have been awarded for FSTPs in Loni, Raebareilly and Lakhimpur. Tender for FSTPs has been planned for another 52 cities, out of which tenders for six cities are already out.

## Challenges remain

Construction of FSTP is

only a part of the solution. Challenges still remain with regards to the construction of proper septic tanks, which are properly lined and adhering to the Bureau of Indian Standards (BIS) code. These septic tanks need to be regularly emptied that is, every two-three years or else they can become a source of pollution and a public health hazard.

Further, FSSM does not address the issue of greywater that is, the water from bathroom and kitchen, which continues to pollute water bodies and is a public health concern since it is a breeding ground for mosquitoes. Solutions like simplified sewers connected to decentralised wastewater treatment are available, which need mainstreaming.

In order to holistically address the issue of urban sanitation and river pollution, a holistic policy and operational guidelines backed by strong advocacy is the need of the hour in the Ganga Basin.

DOWN TO EARTH  
(The views expressed are strictly personal)

**In a recent conference in Delhi, a senior government official of Odisha equated the construction of sewerage network in a city to open-heart surgery considering the risks, costs and the time involved. We need alternate solutions to manage our wastewater and excreta**



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**Statesman, Delhi**

# India-B'desh ties on even keel?

NAZRUL ISLAM

**D**uring her recent visit to India, Prime Minister Sheikh Hasina met Indian Prime Minister Narendra Modi. At this meeting, a number of agreements were signed, several of which concern shared rivers.

According to press reports, the meeting reached the agreement to "operationalise the Dhulian-Gadagari-Rajshahi-Daulatdia-Aricha Route (to and fro) and include Daudkandi-Sonamura Route (to and fro) under Protocol on Inland Water Transit and Trade." It agreed to "exchange updated data and information and prepare the draft framework on Interim Sharing Agreements for the six rivers, namely Manu, Muhuri, Khowai, Gumti, Dharla, and Dudkumar, and to firm up the draft framework of the interim sharing agreement of Feni River."

At the meeting, the Indian prime minister assured his Bangladeshi counterpart that "his government is working with all stakeholders in India for conclusion of the Agreement (on sharing of Teesta River) soonest possible." Finally, Bangladesh agreed at the meeting to allow India to withdraw 1.82 cusec water from the Feni River.

Clearly, some of these agreements cater to the interests of India. There was hardly any concrete progress toward meeting Bangladesh's concerns regarding shared rivers. This is disappointing when many parts of the country's west adjoining the Padma River are experiencing unprecedented flood, the root cause of which is the Farakka Barrage. India regulates the gates of this barrage in winter in a way that diverts water, causing siltation, encroachment, shallowing, and other harmful morphological changes, which reduce the carrying capacity of the Padma River. As a result, when India opens the floodgates in summer and autumn, severe bank erosion and floods occur. The same is the situation with Teesta and many other shared rivers on which India has built water impounding and diversionary structures.

Both India and Bangladesh should realise that unless this basic problem of diversion of flow and destabilisation of Bangladesh's rivers is addressed, it will be difficult to meet India's need for water routes through Bangladesh to its seven north-eastern states. Maintaining the proposed river routes will require enormous and perpetual dredging, which at some point will become simply untenable. India's plan to divert Brahmaputra water, under its River Linking Project, will aggravate the situation further.

Without this basic realisation, efforts to reach agreements regarding sharing of rivers will not be fruitful. The unpleasant



fact is that the 1996 Ganges Treaty has not increased the winter flow of the Padma River and has not stopped the process of destabilisation of this river.

Similarly, assurances of a Teesta sharing agreement are not of much value, because Bangladesh has been getting such assurances for many years now, and more importantly because, by the time any such agreement may be reached, there will be hardly any flow left of the Teesta River beyond the Gajoldoba Barrage in winter.

Against this backdrop, it is ironic that the only concrete river-related outcome of the Hasina-Modi meeting was Bangladesh's agreement to allow India to withdraw part of the Feni River flow. The quantity is small, but the symbolism is large. It shows that, as far as shared rivers are concerned, India gets what it wants while Bangladesh keeps on pleading.

It is indeed unfortunate that Bangladesh fails to raise the demand for the removal of diversionary structures built by India, when there is an increasing recognition that the Farakka Barrage has failed to achieve its stated goal of desilting Kolkata port and has instead become a problem even for India now, causing upstream flooding in the Indian state of Bihar. As a result, there is growing demand inside India for demolition of the Farakka Barrage. Important figures of the Indian polity - such as Nitish Kumar, the chief minister of Bihar, Rajendra Singh, the "waterman of India", and many others - have been urging for demolition of Farakka Barrage for quite some time now.

On 17 July 2016, Mr Kumar raised his demand formally at the 11th Interstate Council Meeting, chaired by Prime Minister Modi and attended by Union (Central) ministers and the chief ministers of the states. There is a saying that "one has to cry one's own cry!" It is not surprising that Bangladesh is not getting the necessary hearing from India when it hesitates even to cry its own cry.

It is, therefore, high time for

Bangladesh to insist on its rights on the shared rivers. It should sign the 1997 United Nations Convention on the Law of the Non-Navigational Uses of International Watercourses, and use its Articles 7, 20, 21, and 23 to urge India not to cause "significant harm" to Bangladesh through its impounding and diversionary structures, and to "protect and preserve (Bangladesh's) ecosystem" and its "marine environment," including the Sundarbans, by restoring full natural flow of the shared rivers.

Given the experience of Farakka, the idea of constructing a Ganges-Padma Barrage of the usual type inside Bangladesh with India's help does not make much sense. Such a barrage will provide justification for the Farakka Barrage and cause similar downstream and upstream harms as Farakka has already caused.

The governments of both Bangladesh and India should, therefore, seriously consider the "transit in exchange for rivers" formula that Bangladesh Environment Network (BEN) put forward in 2011. Under this formula, India will restore natural flows of Bangladesh's rivers by removing impounding and diversionary structures, while Bangladesh will provide India transit and trans-shipment facilities to its north-eastern states, subject to common international practices.

Unfortunately, governments of Bangladesh have so far been meeting India's demands regarding transit and trans-shipment without getting much in the way of rivers in return. Such an unequal exchange cannot be sustainable in the long run.

It may be hoped that the leaders of both Bangladesh and India will see the merit of the "transit in exchange for rivers" formula as a win-win solution for their respective needs. The goodwill that such a solution will create can then spill over into other areas of cooperation between the two countries.



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## States to bear half the cost of tap water scheme

**HARIKISHAN SHARMA**  
NEW DELHI, OCTOBER 9

STATES, ASIDE from those in the North East and the Himalayan region, will have to bear half the fiscal burden of the Centre's tap water scheme — the Jal Jeevan Mission (JJM) — sources in the ministry said on Wednesday.

According to sources, "The budgetary requirement of the programme over a period of five years, from 2019-20 to 2023-24, is estimated to be about Rs 3.60 lakh crore. The funding pattern will be 50:50 for the Centre and non-Northeast and non-Himalayan states. However, in the case of N-E and Himalayan states, the funding pattern will be 90:10. In Union Territories, the Centre will bear the full cost of the programme."

Based on the funding pattern, the share of states in the total expenditure is estimated to be about Rs 1,80,000 crore over the next five years, sources added.

They added that expenditure under the scheme is expected to be lower during the current financial year and that it will go up gradually subsequently.

### YEAR-WISE FUND REQUIREMENT FOR JAL JEEVAN MISSION

YEAR	FUND (₹ Cr)
2019-20	36,000
2020-21	60,000
2021-22	1,00,000
2022-23	84,000
2023-24	80,000
<b>Total</b>	<b>3,60,000</b>

Source: Ministry of Jal Shakti

JJM's funding pattern is different from that of the Centre's other individual beneficiary-oriented programmes.

JJM sources said that apart from the estimated cost of Rs 3.60 lakh crore, the ministry hopes to get additional resources with a convergence of funds — Rs 1 lakh crore under the MNREGA, Rs 50,000 crore from the 14th and 15th Finance Commission grants and Rs 30,000 crore from State Finance Commission grants to rural local bodies and Corporate Social Responsibility.

HINDU - 10.10.2019

## Plea alleges illegalities in Polavaram

**STAFF REPORTER**  
NEW DELHI

The Delhi High Court on Wednesday asked the Centre to consider as a representation a petition seeking action on complaints alleging large-scale illegalities and mismanagement in the execution of the Polavaram irrigation project in West Godavari district of Andhra Pradesh.

A Bench of Chief Justice D.N. Patel and Justice C. Hari Shankar disposed of the petition.

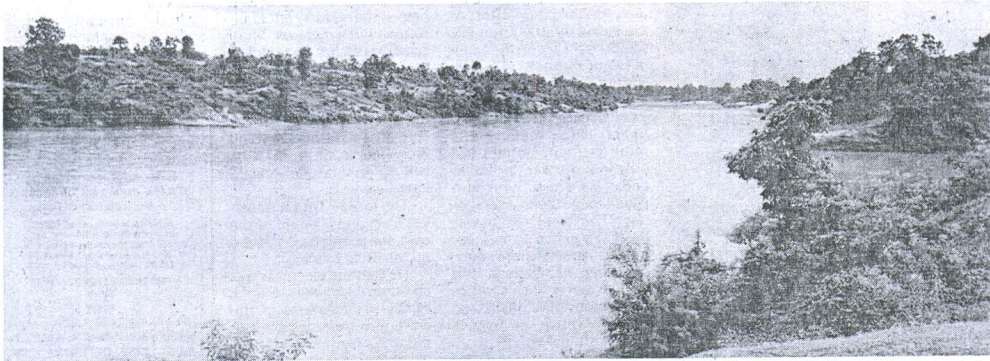
The petition, filed by Pentapati Pullarao, has alleged that the Polavaram Project Authority, instead of assessing the cost independently, allowed the State government to increase it from ₹16,010 crore to ₹57,941 crore.

Mr. Pullarao claimed that he and many other residents who lived near the project area had made complaints against the project to the authorities, but no action was taken till date.



# Water Federalism

ST-10  
A state cannot have autonomous powers even in respect of a river flowing entirely within its territory, because of associated environmental and other consequences in neighbouring states; e.g., independent action by a State may affect the groundwater aquifers across its boundaries



**W**ater is a fundamental gift of nature. The many rivers that flow through the length and breadth of the country are the primary sources of our water. For us Indians, rivers are much more than mere providers of water. They bind us together and entwine our lives, culture, religion, folklore, and our joy, sorrow and love. Lakhs of people who congregate at the Kumbh *melas* believe that a bath in the river would wash away their sins. Rivers are our salvation, but we are guilty of criminal neglect of them. Part of the problem is attitudinal, and part institutional.

Most of our rivers span multiple states, but an efficient federal framework for water management is singularly missing. Rivers and water remain embedded in the multi-layered constitutional entanglements, which make them both Central and State subjects. Entry 56 in the Union List includes the regulation and development of inter-State rivers and river valleys, making them a Central subject, while Entry 17 in the State List gives the state legislative control over "water supplies, irrigation and canals, drainage and embankments, water storage and water power", but subject to the provisions of Entry 56 of the Union List. Besides, Article 262 of the Constitution gives supreme power to Parliament to make law regarding the adjudication of inter-state disputes on river waters, and makes such law non-judicial in any court including the Supreme Court.

Water sector infrastructure in India remains among the most neglected, with inadequate institutional reforms. There is no policy for groundwater storage or management; the major focus of our policy is towards irrigation and flood management, which explains the government programmes like Accelerated Irrigation Benefits Programme, Command Area Development, Flood Management, and National Project for Repair, Renovation and Restoration of Water Bodies directly linked to agriculture, etc. Growing demand, increasing drought, declining groundwater quality and non-availability of safe drinking water continue to plague our water sector.

As pointed out by Mr Ramaswamy Iyer way back in 1994, Parliament has made little use of Entry 56. Many river authorities

have been established, but not vested with the powers of management. Under the River Board Act of 1956, river boards with only advisory powers were created, instead of River Basin Authorities with complete powers of water management. The Damodar Valley Corporation (DVC) was earlier modelled on the Tennessee Valley Authority, but never functioned as such. In March 1948, the Damodar Valley Corporation Act was passed by Parliament, requiring the Central government and the governments of Bihar and West Bengal to participate jointly in the DVC which was the first multipurpose river valley project of independent India. Today it is almost a defunct organisation, with a huge debt, uncollected dues and various organisational problems. Similarly, the Brahmaputra Board, set up under a Parliamentary Act, was vested with the powers of project execution like a river basin authority, but has remained a weak and ineffective entity with its role limited only to the preparation of a master plan.

By and large, State governments still determine the allocation of river waters, and since rivers flow across different states, disputes are bound to occur in this institutional framework. Inter-state river disputes are adjudicated under the Inter-State Water Disputes Act of 1956, enacted under Article 262,

which includes provisions for the establishment of tribunals to adjudicate where direct negotiations have failed. The result of such arbitration is binding upon the disputing states and there is no appeal against it in any court of law, obviously to avoid protracted litigation and consequent failure to resolve the dispute. In most cases, however, agreements or awards have followed protracted negotiations, like in the case of Krishna, Godavari or Narmada Tribunals. But in many cases, post-award disputes have also arisen, like in the distribution of Ravi-Beas waters among Haryana, Jammu and Kashmir, Rajasthan and Punjab. Even Central intervention has not helped. No unambiguous institutional mechanism for settling inter-state water disputes exists in the country.

It is obvious that a state cannot have autonomous powers even in respect of a river flowing entirely within its territory, because of associated environmental and other consequences in neighbouring states; e.g., independent action by a State may affect the groundwater aquifers across its boundaries. There are also water surplus and water deficit states, but no policy or institutional mechanism for equitable sharing of water resources between states. Thus there has to be a national coordination mechanism, which was why the National Water Resources Council (NWRC) was established in 1983, but it has remained practically a non-starter in this respect. All that it had done was to frame a National Water Policy in 1987, which stated: "Water is a scarce and precious national resource, to be planned, developed and conserved as such, and in an integrated and environmentally sound basis, keeping in view the need of the states." Thus water becomes a national resource only if states give their consent. Right

to life is a fundamental right under Article 21 of the Constitution, and water is fundamental to life. But this implicit fundamental right to water is subject to the state's consent as per this policy, which is an untenable position.

The National Water Policy was reviewed and updated in 2002 and again in

2012, when water was treated as "an economic good" and allowed privatisation of water delivery services. The policy, which abolished the priorities for water allocation of both the 1987 and the 2002 policies, was adopted despite opposition from many states, with major issues like water pollution or exploitation of ground water for commercial purposes left unaddressed. A National Water Board was constituted in 1990 to review the progress of implementation of the National Water Policy for reporting to the NWRC and also for systematic development of the country's water resources, towards which precious little has been done so far. The oldest institution dealing with water in the country is the Central Water Commission (erstwhile Central Waterways, Irrigation and Navi-

gation Commission) dating from the pre-independence days in 1945. It is a technical organisation that coordinates with the states on conservation and utilisation of water resources, flood control, irrigation and dam safety, navigation, drinking water supply, water power development, etc.

The institutional framework of water includes a number of other entities dealing with water, like the Central Ground Water Board, Central Water and Power Research Station, Ganga Flood Control Commission, Farakka Barrage Project, Upper Yamuna River Board, besides a number of statutory bodies like the River Boards in respect of Tungabhadra, Betwa, Brahmaputra, Godavari and Krishna, besides the Narmada Control Authority. There are also autonomous entities like the National Mission for Clean Ganga, National Water Development Agency, National Institute of Hydrology and the North Eastern Regional Institute of Water and Land Management, besides two Central Public Sector Undertakings dealing with water - the National Projects Construction Corporation Limited and the Water & Power Consultancy Services Limited (WAPCOS Ltd.). All these bodies have now been brought under the single Ministry of Jal Shakti which was formed in May 2019 by merging the two erstwhile water ministries - the Ministry of Water Resources, River Development and Ganga Rejuvenation and the Ministry of Drinking Water and Sanitation, for coherence and effective coordination - a move that was long awaited.

The third tiers of the governments, Municipalities and the Panchayats are entirely missing from the picture, where most water usage takes place. They also have to be involved in the management of water. The existing framework needs revisiting to address these issues, including a Constitutional assertion that water is a national resource fundamental to life, which will make it implicit that this resource should be shared equitably and used responsibly with heavy penalties for wastage or negligent preservation and conservation. State and citizens must together share the responsibilities and costs. These challenges can only be addressed through effective horizontal and vertical coordination among governments in a true spirit of cooperative federalism.



**GOVIND BHATTACHARJEE**  
The writer is a commentator.  
Opinions are personal



Hindustan Times (New Delhi)  
The Statesman (New Delhi)  
The Times of India (New Delhi)  
The Indian Express (New Delhi)  
The Hindu (Delhi)  
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and documented at WSE Dte, CWC.

# Indo-Pak tension may hit Chenab project

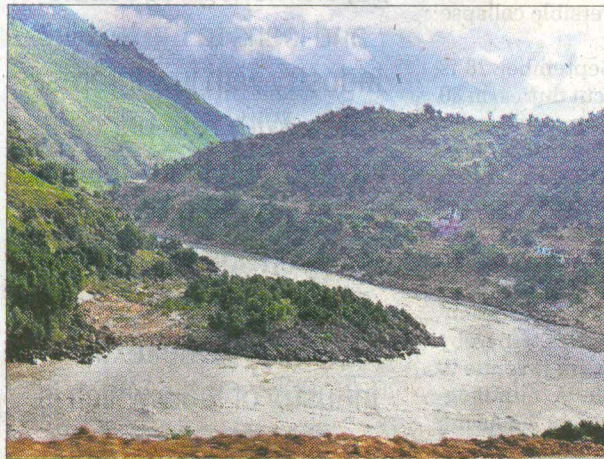
**SUMIT HAKHOO**  
TRIBUNE NEWS SERVICE

JAMMU, OCTOBER 9

The India-Pakistan hostility is likely to cast a shadow on the ambitious Chenab water diversion project as Japanese International Cooperation Agency (JICA) and the Centre are yet to reach an agreement to fund the scheme, which aims at ending the perennial water crisis facing nearly three million people in J&K.

The project, first conceptualised in the late 1980s, and a detailed project report (DPR) formulated in 2008, is pending with the Department of Economic Affairs, which comes under the Union Ministry of Finance, for the last two years.

After the 2016 Uri terror attack, the Prime Minister Narendra Modi-led Centre had announced speedy clearance and funding for the project and other schemes on western rivers (Chenab,



The Chenab water diversion project was first conceptualised in the late 1980s. TRIBUNE FILE PHOTO

Indus and Jhelum) and eastern ones (Sutlej, Ravi and Beas) covered under the Indus Water Treaty, 1960.

Sources said the Centre had decided to approach JICA for funding the scheme after Asian Development Bank declined to finance it.

"There is no clarity regarding the reasons for the delay in getting funds from JICA.

Technically, there is no problem in the plan but the reason for the reason can be clarified only by the Centre," said a senior Public Health Engineering Department official.

If completed, 500 million gallons daily (MGD) were to be diverted from the river at Akhnoor in the Jammu division for the augmentation of the existing drinking water

supply system in southern districts of J&K. In Phase-I, 250 million litres a day (MLD) will cover a population of 25 lakh by 2031 and in Phase-II, 250 MLD will meet requirements of 37 lakh people in 2046.

"It was one of the priority projects. It has to be seen how the scheme gets funds post revocation of Article 370, as earlier, when Asian Development Bank was approached, China and Pakistan had raised objections," said a senior administrative officer involved in the project formulation during the previous NC-Congress government.

Bachan Lal Bhagat, Director, Economic Reconstruction Agency, said, "We have information that a meeting will be held soon to discuss the funding issues. We have been asked to provide details." Bhagat, however, did not share any further information about the reason for the delay.



Hindustan Times (New Delhi)  
The Statesman (New Delhi)  
The Times of India (New Delhi)  
The Indian Express (New Delhi)  
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and documented at WSE Dte, CWC.

# Post-immersions, Yamuna ghats cleaner, but waste management still a challenge HT-10

**Soumya Pillai and Vatsala Shrangi**  
htreporters@hindustantimes.com

**NEW DELHI:** Durga idols and puja decorations lying on the banks of the Yamuna — a sight common after immersions on Vijaya Dashami — was nowhere to be seen this year. However, even though no complaints of idol immersion in the Yamuna were reported this time, the task of managing waste at artificial ponds turned out to be a major challenge.

This was the first time that the Delhi government, on the recommendation of the National Green Tribunal (NGT), had prohibited immersion of idols in the Yamuna. Senior Delhi government officials said that even though the artificial ponds for immersions was dug up by them, the local municipalities will be responsible for managing the waste collected at these spots.

On Wednesday, the three municipalities began clearing the debris and plastic waste from around the artificial ponds in their areas. Senior officials managing the exercise said that while the cleaning of neighbourhood ponds has already begun, the cleaning of larger venues — such as Kalindi Kunj and Astha Kunj near Nehru Place — will take a few days.

"We are waiting for the remains to dry and then they will be cleared completely in a day or



■ Devotees immerse an idol of goddess Durga in an artificial pond at CR Park on Tuesday.

AMAL KS/ HT PHOTO

two," an east Delhi municipal corporation (EDMC) official said.

The official added that no orders have been given to them on handling the waste any differently.

"We will manage the waste collected like we handle all solid waste," he said.

Though the Delhi Pollution Control Committee (DPCC) does not have a record of the number of idols immersed into the Yamuna river every year, Delhi police records show that there are nearly 500 Durga puja pandals that are setup in the city

every year, which add harmful material such as plaster of Paris (POP), paint, plastic and metal into the river water.

Ravi Agarwal, director, Toxics Link, an NGO working in waste management, said that the initiative of not allowing idol immersion in the Yamuna was a welcome initiative but a lot needs to be done in the area of waste management.

"What is commendable is that there is a start. Plaster of Paris takes months to dissolve and turns the water chalky. Plus, heavy metals like lead and mercury go up manifold when toxic



■ Government officials said local municipalities will be responsible for managing the waste collected at these spots.

AMAL KS/HT

paints used on the idols are dunked in rivers and ponds. This is poisonous for fishes and other aqua fauna," he said.

He added that a comprehensive plan of waste management will go a long way in helping the government agencies reap full benefits of this initiative.

Delhi government officials said that in the last 24 hours no violations had been reported.

"The immersion of Durga idols was smooth and there was proper coordination. We have not received any complaints or violations in this regard. We have rather received all the

cooperation from the puja samitis in bringing the idols to the sites. This has set a good example for years to come and will certainly help keep the river clean in terms of immersing idols and puja offerings," said a senior Delhi government official, associated with the arrangement.

Another officer looking after operations in southeast Delhi, which has Kalindi Kunj — one of the major idol immersion sites — under its jurisdiction, said, "We have not come across any violations as such. The immersions were conducted in a smooth and eco-friendly manner."



News item/letter/article/editorial published on 10.10.2019 in the following newspaper

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## The day after



Despite a ban on disposal of plastic and other waste materials in the Yamuna, the riverbank presented a grim picture on Wednesday. ■ R.V. MOORTHY #10



कायलाना-तख्तसागर में लगातार घट रहा लेवल **RR-10/10**

# 70 दिन की नहरबंदी ने बजा दी खतरे की घंटी



पत्रिका

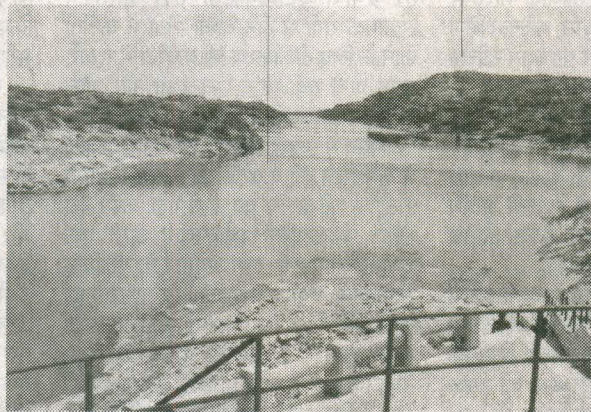
ग्राउंड  
रिपोर्ट

**अभी प्रतिदिन 2-3  
एमसीएफटी पानी लेना  
पड़ रहा जलस्रोतों से  
अभी केनाल व  
जलस्रोत मिलाकर 35-  
40 दिन का ही पानी  
संचित करने के साधन**

पत्रिका न्यूज नेटवर्क  
patrika.com

**जोधपुर.** अभी मानसून की विदाई पूरी तरह से हुई नहीं है कि अगले वर्ष गर्मी में होने वाली नहरबंदी ने होश उड़ाने शुरू कर दिए हैं। इस बार इंदिरा गांधी नहर में 70 दिन की सबसे बड़ी नहरबंदी की योजना बन रही है। पिछले साल भी यह प्रस्तावित थी। लेकिन किन्हीं कारणों से टल गई। अब एक बार फिर इस पर मंथन हो रहा है। इसी बात से पेयजल विभाग के होश उड़ गए हैं। पहले से ही निश्चित पानी से कम मिल रहा है और उस कारण से शहर के प्रमुख जलाशयों में पानी का लेवल भी लगातार कम हो रहा है। इसी कारण मानसून के बाद पहला शटडाउन लेना पड़ रहा है।

आइजीएनपी से राजीव गांधी लिफ्ट केनाल को मिलने वाले 270 क्यूसेक पानी की बजाय अभी 250-260 क्यूसेक के बीच ही मिल रहा है। इसमें भी ग्रामीण क्षेत्र में ज्यादा खपत होने के कारण शहरी जलापूर्ति के लिए पानी की कमी को कायलाना-तख्तसागर जैसे जलाशयों से पानी लेकर काम चलाया जा रहा है। प्रतिदिन करीब 2 से 3 एमसीएफटी तक पानी इन जलाशयों से लिया जा रहा है। ऐसे में अगली नहरबंदी से पहले ही संकट खड़ा हो गया है। 24 घंटे का शटडाउन लेकर 15 एमसीएफटी पानी बचाया जाएगा।



**70 दिन के लिए तैयार नहीं अभी जोधपुर**

आइजीएनपी में फिलहाल साल में एक बार 30-40 दिन की नहरबंदी होती है। उसके लिए पानी केनाल व जलाशयों में स्टोर किया जाता है। इनमें अधिकतम 40-50 दिन तक ही पानी स्टोर करने की व्यवस्था है। यदि

केनाल का तीसरा चरण का काम होता है तो 70 दिन की नहरबंदी में जोधपुर को पानी पिलाने जितना पेयजल स्टोर किया जा सकता है। लेकिन यह प्रोजेक्ट फिलहाल केन्द्र सरकार के स्तर पर अटका है।

## फैक्ट फाइल

**270** क्यूसेक पानी की जरूरत है जोधपुर को आइजीएनपी से।

**250-260** क्यूसेक के बीच पानी मिल रहा है अभी केनाल को।

**2-3** एमसीएफटी पानी प्रतिदिन कायलाना-तख्तसागर जलस्रोतों से लिया जा रहा है।

**198** एमसीएफटी पानी है अभी दोनों जलाशयों में।

**3** एमसीएफटी लगातार घटता रहा तो 2 माह में खाली हो जाएंगे जलस्रोत।

**70** दिन की नहरबंदी के लिए अभी जोधपुर में नहीं है स्टोरेज की पर्याप्त क्षमता

**300** एमसीएफटी से ज्यादा पानी चाहिए इन जलाशयों में संकट से निपटने के लिए।

**350** एमसीएफटी करीब दोनों जलाशयों की क्षमता।...

## काश इस साल पूरा हो जाता तीसरा चरण

राजीव गांधी लिफ्ट केनाल का तीसरा चरण यदि इस साल तक पूरा हो जाता तो बड़ी राहत मिल सकती थी। करीब 2 हजार गांवों को पानी मिलता तो केनाल में पानी स्टोर करने की क्षमता भी बढ़ती। इसके लिए करीब 14 सौ करोड़ की आवश्यकता है। राज्य सरकार ने अनुमति देकर केन्द्र सरकार के पाले में गेंद डाली है। वहां से स्वीकृति मिलने पर एशियन डेवलपमेंट बैंक से लोन राशि पास होगी।

अभी कुछ पानी कम मिल है और ग्रामीण क्षेत्र में खपत भी ज्यादा हो रही है। 70 दिन की नहरबंदी के लिए हम तैयार नहीं हैं। यदि लिफ्ट केनाल का तीसरा चरण पूरा होता है तो हम पर्याप्त पानी स्टोरेज कर पाएंगे।

**दिनेश कुमार पेडीवाल,**  
अधीक्षक अभियंता, जन स्वास्थ्य  
अभियांत्रिकी विभाग।