

● JAL JEEVAN MISSION

JJM'S MOBILE-FRIENDLY DASHBOARD IS A TEMPLATE OF PUBLIC ACCOUNTABILITY FOR MANY REASONS, FROM THE REAL-TIME DATA IT PROVIDES TO ITS GRIEVANCE REDRESS MECHANISM

Accountability in public policy

PUBLIC ACCOUNTABILITY IS often used as a rhetorical tool to convey the image of good governance. But what is public accountability? Mark Bovens, one of the most cited scholars on accountability, calls it an institutionalised practice of account-giving. Bovens' public accountability framework consists of three elements: (1) the government/actor is obliged to inform the citizenry/forum about its conduct; this can be done by providing various sorts of data, the reports on the review of performance, etc, (2) this is followed by accountee debating and evaluating the performance of the government, and (3) finally, the accountee passes the judgement on the performance of the accountor, which can lead to formal or informal sanctions. In some cases, these sanctions come in the form of electoral defeat.

Is the government obliged to be accountable? Yes, in certain cases, for instance, the executive is accountable to the legislature. But in a few cases, it is voluntary. We are concerned with the latter. Jal Jeevan Mission (JJM) is one such example wherein the government voluntarily has become accountable to people at the grassroots. Launched in 2019, JJM aims to provide each and every household in rural India safe and adequate drinking water and through tap connections by 2024. JJM aims to go beyond building pipeline infrastructure to create sustainable water solutions; ₹50,000 crore has been earmarked for the JJM in Budget 2021-22.

JJM has a mobile-friendly dashboard (bit.ly/3u3SYNf). It is a tool for voluntary public accountability for several reasons. (1) It has details of the number of households in which are

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taps are installed, and assured potable water is available in a state, city, district, village or block. This data is collected and updated in real-time. (2) The details of potable tap water connections in schools and *anganwadis*. (3) JJM empowers the local government and is based on a community approach. The dashboard also has details of the water utility management team of the village. This includes Gram Panchayat, Pani Samiti members, the person responsible for operation and management and most importantly, women identified for field test kit (FTK) testing. (4) It has a working e-grievance redressal mechanism. (5) It has details of samples tested in the last three months for contamination and whether the water has been found to be contaminated. (6) Sensor-based Internet of Things (IoT) solutions are being deployed, which will be able to gauge the amount of water being discharged in each and every water tank. Currently, this data is manually fed by the officials. (7) The ministry is working to develop a portable device to check water quality in villages, just like glucometers. Eventually, any-

body could check the quality of drinking water.

Further, there are systems of checks and balances to ensure that data is not fudged. Like other government initiatives, this now has to be vetted by third-party scrutiny. Additionally, for the wider dissemination of this data, it should be made available in regional languages. As a result, intended accountees will be better equipped to evaluate the performance of the government.

As far as JJM's performance is concerned, it has brought in sea changes in drinking water infrastructure in rural India. More than four crore rural households (as of March 30) have been provided with active tap water connection. This is more than double the number of connections from August 15, 2019, i.e. 3.23 crore connections to 7.24 crore connections. Goa (100%), Telangana (100%), Haryana (86.73%), Gujarat (82.96%), HP (76.03%), Punjab (73.73%) and Bihar (68.81%) have made large strides in providing access to tapped drinking water connection. West Bengal (8.93%), Assam (9.80%), Uttar

Pradesh (10.96%), Chhattisgarh (12.46%), Jharkhand (12.48%) and Rajasthan (19.09%) still have a long way to go.

The disparities between the states emanate out of different starting points. As of August 15, 2019, 70.13% of the rural households in Gujarat had access to assured quality drinking water through taps. On the contrary, only 1.91% of rural households in West Bengal had access to potable water connections on August 15, 2019.

The government now has plans to extend the scheme to urban areas, but it is easier said than done. One would assume that it would be a low hanging fruit since urban India already has piped water infrastructure. In rural India, where population density is low, the unit of analysis for JJM is houses that are spatially separated. While in urban areas, there are also slums, chawls and other high population density clusters. The prevalence of closed urban spaces makes it difficult to track potable water's reach in the desired quantities (55 tpcd) to individual household within the slums. Thus, it will require a more innovative approach to ensure the desired outreach.

Regardless, the public policy interventions like JJM have brought in a new dawn of accountability wherein people can question those in power. It checks all the elements of Bovens' framework. Would the likes of Sir Humphrey Appleby approve of the public accountability the JJM dashboard offers? Probably not. But, it indeed makes the executive, including bureaucracy, more accountable to the people. And as Stephen Covey puts it, it is a sort of "accountability (which) breeds response-ability".

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The Tribune 03-April-2021

Govt gets \$300 mn loan to ensure quality water in Asr & Ldh

TRIBUNE NEWS SERVICE

CHANDIGARH, APRIL 2

The World Bank (WB) and Asian Infrastructure Investment Bank (AIIB) have approved \$300 million loan for canal-based drinking water schemes under Punjab Municipal Services Improvement Project.

The move aims at ensuring quality drinking water 24x7 and minimise water losses for Amritsar and Ludhiana. The two cities are currently being supplied water from tubewells. Two other canal-based water supply projects are already under execution in Jalandhar and Patiala.

As per the Central Ground Water Board (CGWB) report, the groundwater has been over exploited and the quality of water has deteriorated, causing health hazards. Therefore, it has been proposed to change water supply from ground to canal water to ensure uninterrupted potable drinking water

WB, AIIB approve funds under municipal project

supply in urban areas.

Of the estimated project cost of \$300 million, the entire project would be co-financed by IBRD (World Bank) loan of \$105 million and an AIIB loan of \$105 million along with Punjab Government funds to the tune of \$90 million.

For Amritsar project, the source of surface water supply would be Upper Bari Doab Canal and thereafter a 440 MLD (Million Litres per Day) water treatment plant would be constructed in Vallah village for treating the surface water.

The source of water supply in Ludhiana project is Sirhind Canal and thereafter a 580 MLD plant would be constructed for treating the surface water.

New Indian Express 03-April-2021

TN to seek Krishna water from May

EXPRESS NEWS SERVICE

@ Chennai

THOUGH the reservoirs that supply water to Chennai are brimming, the Water Resources Department will seek release of Krishna water from Andhra Pradesh, in May.

Currently, the combined water storage in the five reservoirs stands at 9,337 mcft against the total storage of 11,757 mcft. According to officials, at least 35 mcft of water is getting evaporated daily as temperatures are rising. However, they assured that there is enough water to supply for a year and that the Krishna water would act as a reserve.



FILE PHOTO

The Kandaleru reservoir in Nellore district, which augments drinking water supply to Chennai, had attained a record storage of 52.94 tmcft for the first time since the launch of the Telugu Ganga canal system in 1996. So, Chennai will receive its full quota of water from the neighboring state. Also, reservoirs in Chennai received copious amount of inflow following

heavy rains due to cyclones.

The Thervoy Kandigai reservoir, which was built exclusively to store drinking water for the city and inaugurated in November, reached full capacity for the first time in October. The storage now stands at 487 mcft as against the total capacity of 500 mcft.

The storage level at Chembarambakkam, Red Hills, Cholavaram and Poondi, the four reservoirs that supply drinking water to the city, is substantially higher than on the same day in 2020. The levels stand at 3,030 mcft (Chembarambakkam), 3,032 mcft (Red Hills), 2,018 mcft (Poondi) and 770 mcft (Cholavaram).

Telangana Today 03-April-2021

Eco-tourism hub planned at SRSP backwaters

STATE BUREAU
Nizamabad

The Forest Department plans to develop an eco-tourism hub at Sri Ram Sagar Project (SRSP) backwaters and also a community forest reserve in the area with the help of local people to protect wildlife and migratory birds, said Telangana Chief Conservator of Forest R Shobha.

On Friday, she inspected the SRSP backwaters along with other officials. Shobha said backwaters attract wild animals and birds, and this was evident as the number of animals and birds have increased in Nizamabad and Nirmal districts. According to Shobha, one could spot hundreds of blackbuck herds in this area and migratory birds like flamingoes and painted storks, especially in the rainy season.

She also asked officials to charge for the services they provide to tourists and use that money to develop facilities like watch towers for photography lovers. Nizamabad DFO Sunil Hiramam, FDO Bhavani Shankar, Forest Range Officer Ganesh, Deputy Range Officers Sudhakar and Narsing Rao were present.



Chief Conservator of Forest R Shobha inspecting the SRSP backwaters on Friday.

The Statesman 03-April-2021

NGT directs Delhi chief secretary to resolve dispute between SDMC, DJB over water supply

PTI

NEW DELHI, 2 APRIL

The National Green Tribunal has directed the Delhi chief secretary to resolve the dispute between South Delhi Municipal Corporation and the Delhi Jal Board over supply of water through tankers.

A bench headed by NGT Chairperson Justice Adarsh Kumar Goel said the issue can be better resolved at the higher level in the administration, taking into account all practical considerations, including availability of funds and need for conserving scarce resource of drinking water.

Accordingly, we dispose of the application by directing the Chief Secretary, Delhi to look into the matter and take appropriate decision in the matter, following due process of law, the bench said.

The tribunal's direction came on a plea filed by South Delhi Municipal Corporation contending that the Corporation is maintaining 6822 parks. It was having borewells for irrigation of the parks



which have been sealed as per order of the tribunal.

The plea stated that the DJB has to ensure supply of treated water with adequate pressure and wherever piped supply is not available, to supply such water by tankers.

The DJB is in the process of providing pipe network from STP to the parks. But till such pipelines are laid, there is need for tankers for supply of water to 5357 parks. Hiring of tankers is the responsibility of the Jal Board and not of the Municipal Corporation, the plea said.

It referred to a letter written by the Member Secretary, Delhi Pollution Control Committee which has direct-

ed the Jal Board to hire tankers.

Responsibility of water supply and maintenance of sewage is the statutory responsibility of the Jal Board under the Jal Board Act, 1998, SDMC said in its plea.

The NGT had earlier directed the Delhi Jal Board (DJB) to ensure supply of treated water with adequate pressure in public parks and to stop groundwater extraction for gardening.

It had said that though steps are reported to have been taken, the matter needs to be taken forward to ensure that freshwater is not used for gardening in public parks by the DDA and the South Delhi Municipal Corporation.

The Pioneer 03-April-2021

Preservation of the lotic ecosystem in India



BKP SINHA

Almost all Indian rivers are under severe despoliation caused by anthropogenic activities; the magnitude varies at various segments all along the rivers' course

One of the crucial challenges of the 21st century is the restoration of degraded running-water ecosystems — streams, rivers, springs — besides preserving those that are still in good condition. The historical scientific databases on lotic ecosystems are generally poor with largely anecdotal or incomplete information. The ecosystem paradigms can serve as tools for evaluating the existing condition of running waters, surmising their likely antecedent condition and developing targets and strategies for their restoration. Because the majority of degraded streams and rivers has changed beyond our ability to return them to their original state, the call for their rehabilitation acquires significance. It often takes the form of returning certain organisms or processes to a condition that addresses societal objectives.

Restoration will dominate in more developed regions where modifications of running water systems and their watersheds have been more extensive. In lesser developed regions, preservation of many of these lotic systems may still be possible, but the distinction between pristine and degraded systems is disappearing rapidly. In the context of preserving and rehabilitating streams and rivers, it is important to enlist the best scientific understanding of the structure and function of running-water ecosystems. The regulations governing the protection and width of riparian buffer zone plays a vital role.

Riparian zones depict areas that are transitional between terrestrial and aquatic ecosystems. They are distinguished by gradients in biophysical conditions, ecological processes and biota. They connect surface and subsurface hydrology namely, water bodies with their adjacent uplands. Riparian areas are adjacent to perennial, intermittent and ephemeral streams, lakes and estuarine-marine shorelines. They usually extend from the edges of water bodies to the edges of upland communities and represent a zone of interactions between the aquatic and terrestrial component.

A river is more than a channel carrying water; it transports sediments, harbours various organisms, plants, animal and microbes. Hence it should be conceived as a natural resource comprising biotic and abiotic ingredients essential for management of hydrological and ecological system. Until recently, planning and management of rivers were largely oriented on the channels themselves and it is integrated with catchment management. However, there are many aspects of channel catchment linkages with ecological perspective of riparian zones and these are essential for maintaining the health of the lotic system.

In India, rivers are classified mainly into two types based on their geographical locations and origin — Himalayan rivers and peninsular ones. The former are glacier-fed and perennial, while the latter are altogether monsoon-fed. The perennial Himalayan rivers constitute three major river systems — the Ganga, Brahmaputra and Indus — which cover various types of catchments and provide a variety of microhabitats. The Ganga river system (major tributaries — Yamuna, Ghaghara, Gandak, Gomati, Sone and Tons), the Brahmaputra river system (Siang river as a main channel and major tributaries — Dibang, Lohit, Subansiri, Ranganadi, Manas, Kulsi, Dhansiri, Champamati, Sankhosh and Digaru rivers) and the Indus river system (consisting of the Beas and Sutlej as major tributaries in India) are the principal Himalayan rivers; however, a major stretch of the Indus flows in Pakistan, leaving back a small segment of its drainage basin in



AN OBVIOUS DIFFICULTY IS THE INABILITY TO DISTINGUISH THE DIRECT EFFECTS OF MODIFIED FLOW REGIMES FROM THE EFFECTS ASSOCIATED WITH OTHER CHANGES THAT OFTEN ACCOMPANY WATER RESOURCE DEVELOPMENT. ONE OFTEN ENCOUNTERS RIVER SYSTEMS AFFECTED BY MULTIPLE STRESSORS, MAKING IT NEARLY IMPOSSIBLE TO DEFINITELY SEPARATE THE EFFECTS OF ALTERED FLOW REGIMES FROM THOSE OF MYRIAD OTHER FACTORS AND INTERACTIONS ASSOCIATED WITH CLIMATE AND LAND USE CHANGES

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the Indian territory. The Himalayan rivers are antecedent rivers having deep gorges exhibiting practically vertical to convex valley walls; and slope failures have become very common particularly in the belts cut by active faults in their hilly stretch. They provide different gradient of habitat heterogeneity from its headwater to mouth for colonisation of aquatic fauna. Further, the fragility of geologic formations in the Himalayas and deforestation of riparian catchments, soil erosion in the upper stretch of rivers causes severe sedimentation to downstream and habitat destruction.

The ecological conditions of peninsular rivers depend on hydrological characteristics like water level, current velocity and discharge, which vary from very lean to very high depending on relative rainfall in the respective watershed and catchment areas. Among the peninsular rivers, majority of them are East Coast rivers viz, Mahanadi, Krishna, Godavari and Cauvery. These east-flowing rivers drain into the Bay of Bengal. The West Coast rivers comprising Narmada, Tapi, Sabarmati and Luni flow towards west and drain into the Arabian sea.

All peninsular rivers are monsoonal and display very poor water flow to heavy flood, displaying fluctuating ecological and biological conditions. However, almost all the Indian rivers are under severe despoliation caused by anthropogenic activities; though the magnitude varies at various segments of the rivers all along their course. Some serious issues arise — river pollution throughout the country caused by untreated urban sewage, industri-

al effluents, agricultural runoff, mining wastes, religious ceremonies and navigational operations; indiscriminate destruction of drainage basin because of clearing of riparian zone vegetation; huge load of suspended solid, causing increased magnitude and frequency of flood that changes the level of interaction between land and water and hence affects despoiling input of energy source; river regulation, lift irrigation and water allocation without considering the ecological consequences that have adversely influenced the density, diversity and productivity of aquatic bio-resources. The population of migratory fishes is also adversely affected.

The water accounting study suggests that there is less physical risk of meeting the existing or future water demands and quantity of the supplied water as well. However, water quality is an issue that poses a major threat to the river ecology, risking the livelihoods of people dependent on rivers. The alteration of flow regimes is the most serious contemporary threat to the ecological sustainability of rivers and their associated floodplains. There is a growing awareness about the pivotal role of the flow regime in maintaining the ecological integrity of riparian zones. There is still much to learn about the ecological significance of individual flow events and sequences of events.

There is a small set of overarching ecological principles that, if employed for river management, may alleviate many of the difficult flow regulation issues facing resource managers and policy makers. The following princi-

ples, derived on several spatially broad overviews of river and riparian characteristics, are simple to maintain — The flow regime determines the successional evolution of riparian plant communities and ecological processes; the river serves as a pathway for redistribution of organic and inorganic material that influences plant communities along rivers; every river has a characteristic flow regime and an associated riparian community; riparian zones are topographically unique in occupying nearly the lowest position in the landscape, thereby could be integrated with catchment-scale management.

The major challenge for riparian management is to place water resource development within the context of these fundamental ecological principles in order to maintain ecological vitality with long-term planning. Despite growing recognition of the relationships between riparian characteristics and flow regimes, ecologists still struggle to predict and quantify biotic responses to altered regimes.

An obvious difficulty is the inability to distinguish the direct effects of modified flow regimes from the effects associated with other changes that often accompany water resource development. One often encounters river systems affected by multiple stressors, making it nearly impossible to definitively separate the effects of altered flow regimes from those of myriad other factors and interactions associated with climate and land use changes.

Economic Times 03-April-2021

The Clean Water and Fuel Opportunity

Budget 2021 talks of Swachh Bharat Mission (Urban) 2.0, and allocates ₹1,41,000 crore for wastewater treatment and solid waste management (SWM). The Mihir Shah committee report on water reforms had brought out the startling fact that only 2% of our urban areas have both sewerage systems and sewage treatment plants. The government must draw up multi-year projects for sewage treatment via public-private partnerships (PPP), and also to boost municipal capacity to that end.

India ranks 120th among 122 countries in the water quality index, one significant reason being that we have given short shrift to investments in modern sewage systems for decades. A holistic, integrated approach is clearly required. Take, for



instance, SWM. India generated 62 million tonnes of municipal solid waste in 2019, but the vast bulk of it was simply dumped at landfills without any scientific processing and treatment. Worse, given the hugely inadequate capacity in sewage treatment plants, it is par for the course for urban wastewater to simply flow

into local water bodies. True, in recent years, there has, indeed, been sharp increases in budgetary outlays for the urban sector both at the Centre and in the states. But there appears to be little or no commensurate improvement in the institutional and financial capacity of local bodies that can purposefully equip them to discharge urban services in an effective and business-like manner.

Hence the need to step up investment in SWM and sewage treatment plants in the PPP mode, to tide over the inefficiencies of urban local bodies, including by way of innovative financing mechanisms such as value capture finance, so as to boost public health. Sewage treatment has synergies with plans to produce biogas and cut methane emission at scale, too.

Going With The Flow

Leaking water tankers unite India's drought-hit countryside and thirsty cities and home routines are shaped around their intermittent arrival. **Vikram Doctor** reports



ANIRBAN BORA

If the police wanted to crack down on people celebrating non socially distanced Holi last week, they could have followed the water tankers. Other Indian festivals might have vehicles like the ornate raths in Puri, but in water starved Indian cities the vehicle for Holi is now the water tanker. In Hyderabad some years back, a government minister faced flak for taking part in a Holi rain dance party that used 12 full tankers.

Water tankers are now ubiquitous on Indian roads. We always seem to be dodging these leaky lorries as they lurch past, water sloshing out from the top and leaving a dripping trail behind. They are often involved in accidents, possibly because their stressed drivers are always rushing to fulfil desperate demands for water or staying up at odd hours to fill their tankers from whichever water source they can find.

Vehicles reflect the societies they serve. Egalitarian bicycles for the Netherlands and bullet trains for Japan, packed jeepneys for the Philippines and pick-up trucks for rural USA. India was bullock-carts and bulbous Ambassadors, then came boxy little Marutis and the swaggering SUVs of politicians, but now it is the water tanker that really unites drought hit countryside and thirsty cities.

Everyone needs them: the poor with their pots and the rich with their swimming pools, factories and hotels whose needs long ago surpassed what the state could supply, cricket stadiums that need them to water their pitches and Bollywood which buys them for rain sequences, paying extra for better quality water which will not irritate the skin of actors. In 1992 the Times of India (ToI) reported that the chief minister of Maharashtra, Sudhakarrao Naik, far from being able to solve the problem, admitted: "I had to wait for half an hour for my bath till water was supplied by tankers."

Water tankers evolved from barrels mounted on wagons. Increasing use of oil as a fuel prompted development of safely sealed versions of this and by 1910 Standard Oil was using motorized tankers. These were adapted for water delivery during the First World War and by 1952 these were being used in India to deal with drought in Gujarat. ToI described an early example of jugaad "consisting of a versatile Allis-Chalmers tractor and a specially designed 700 gallon tank with several taps attached to it, the tanker can negotiate rough terrain..."

In 1968 ToI reported a troubling new reason for use of tankers. Monghyr (now Munger) in Bihar was situated on the Ganges but, after a nearby refinery released waste into the river, tankers were needed to supply good water to the city. Other stories spoke about ration cards being issued for tanker water in Gujarat and the problems of ensuring Dalits in Rajasthan were not discriminated against in distributing such water.

But the real tanker boom started in the 1980s with the explosive growth of Mumbai's satellite cities, like Vasai-Virar and Mira-Bhayandar. Public water supply lagged urban growth, which opened a perfect opportunity for tankers. Providentially, this business grew just as textile mills, previously their main customers, closed down. With the mills now turned into malls and offices, water tankers are among the few survivors from the textile era.

ToI's reports show how the tankers transformed the city Vasai, then a farming area north of Mumbai, was drained of its water as tankers paid farmers to pump from their wells. With farming less viable without water, farmers sold their land to builders who constructed more colonies. When families arrived to take possession of their apartment, the lack of water was an unpleasant surprise. But the builders had a solution—simply get water from tankers, which were often owned by the builders!

Anil Singh wrote caustically in ToI in 2000 of how "washing water is sourced from rainwater ponds in quarries which these very builders have exhausted, and drinking water is pumped out well, bore wells and the civic pipeline." The tanker trade was shaping the structure and future of the Mumbai region. Citizens might protest the tanker mafia, but expecting help from politicians was pointless after tanker owners moved into politics. One satellite city is known for being effectively controlled by a politician from the tanker trade.

But Mumbai is hardly alone in its water tanker woes. Chennai's chronic water woes mean that tankers have long ruled supreme, with home routines shaped around their intermittent arrival. In 2000 ToI reported on Delhi's water mandis, the network of tankers that supplied the margins of the main city. Now with states like Haryana threatening to withhold water from Delhi, this tanker business can only grow. Even in states like Goa which used to boast abundant water, unrestricted development is drying or contaminating ground water, forcing people to call in water tankers.

It isn't surprising then that in 2006 Jitish Kallat, one of India's most innovative artists, unveiled Aquasaurus, a monster installation of a water tanker made up of simulated bones, its hosepipes dangling like entrails. Kallat explained he was inspired by the paradox of how a tanker "signifies life, a creature manoeuvring the streets of Mumbai supplying one of the five basic elements of life—water." And yet they were often so ramshackle and rusting, like dinosaur automobiles, still roaming the world. Or they could represent the death of proper urban planning, of hopes of a world where tankers would not exist. We can only dream of this in India, as we dodge, despise and yet still demand the water tankers who rule our roads.

Rashtriya Sahara 03-April-2021

4 करोड़ ग्रामीण आबादी को नल कनेक्शन : कटारिया

■ नई दिल्ली (एसएनबी)।

केंद्रीय जल शक्ति राज्यमंत्री रतन लाल कटारिया ने कहा है कि ग्रामीण परिवारों को जल जीवन मिशन के तहत 4 करोड़ से अधिक परिवारों को कार्यात्मक घरेलू नल कनेक्शन (एफएचटीसी) उपलब्ध करा दिया गया है और ग्रामीण आबादी के 38 प्रतिशत से अधिक लोगों को वर्तमान में नल कनेक्शन दिये जा चुके हैं। उन्होंने संबंधित अधिकारियों को इस सफलता के लिए बधाई दी।

केन्द्रीय जल शक्ति राज्यमंत्री रतन लाल कटारिया ने बताया कि कुल 38 प्रतिशत से अधिक ग्रामीण आबादी के पास वर्तमान में नल कनेक्शन हैं जिनमें से 21.14 प्रतिशत घरों को वर्ष 2019 में मिशन के आरम्भ होने के बाद से नल जल कनेक्शन उपलब्ध कराए गए हैं। अभी तक 58 जिलों, 711 प्रखंडों, 44,459 पंचायतों तथा 87,009 गांवों में एफएचटीसी का 100 प्रतिशत कवरेज सुनिश्चित किया गया



38 फीसद से ज्यादा लोगों को दिए जा चुके हैं नल कनेक्शन

इनमें से 21.14 प्रतिशत घरों को वर्ष 2019 में मिशन के आरंभ होने के बाद से नल जल कनेक्शन उपलब्ध कराए गए हैं

है। कटारिया पिछले सप्ताह कोविड-19 पॉजिटिव होने तथा उपचार के लिए अस्पताल में भर्ती हैं और डिजिटल प्लेटफार्म के जरिए लगातार कार्यों की समीक्षा कर रहे हैं।

समीक्षा के दौरान अधिकारियों ने कटारिया को इंटरनेट ऑफ थिंग्स (आईओटी) टेक्नोलॉजी आधारित सेंसरों का उपयोग करते हुए पांच राज्यों में गांवों में जलापूर्ति की प्रभावी ढंग से निगरानी करने

के लिए सफल पायलट परियोजना के बारे में भी जानकारी दी गई।

पायलट परियोजना की सफलता ने राज्यों को सक्रियतापूर्वक इस प्रौद्योगिकी के उपयोग के लिए प्रोत्साहित किया है। गुजरात, बिहार, हरियाणा और अरुणाचल प्रदेश सहित कई राज्यों ने पहले ही कई जिलों के 500 गांवों तक आईओटी आधारित रिमोट मोनिटरिंग सिस्टम के लिए टेंडर भी जारी कर दिए हैं। इसके अतिरिक्त सिक्किम मणिपुर, गोवा, महाराष्ट्र, उत्तराखण्ड जैसे राज्यों ने इस प्रौद्योगिकी को आरम्भ करने की प्रक्रिया शुरू कर दी है। कटारिया ने सार्वजनिक सेवाओं की आपूर्ति में सुधार लाने में प्रौद्योगिकी के महत्व को स्वीकारा। उन्होंने कहा कि सामाजिक दूरी के लिए सख्त क्वारंटाइन प्रोटोकॉलों का अनुपालन करने के दौर में भी प्रौद्योगिकी ने दुनिया के साथ वर्चुअल कनेक्ट में सफल बनाया है तथा लोगों को काम करने और अपना योगदान देने में मदद की है।