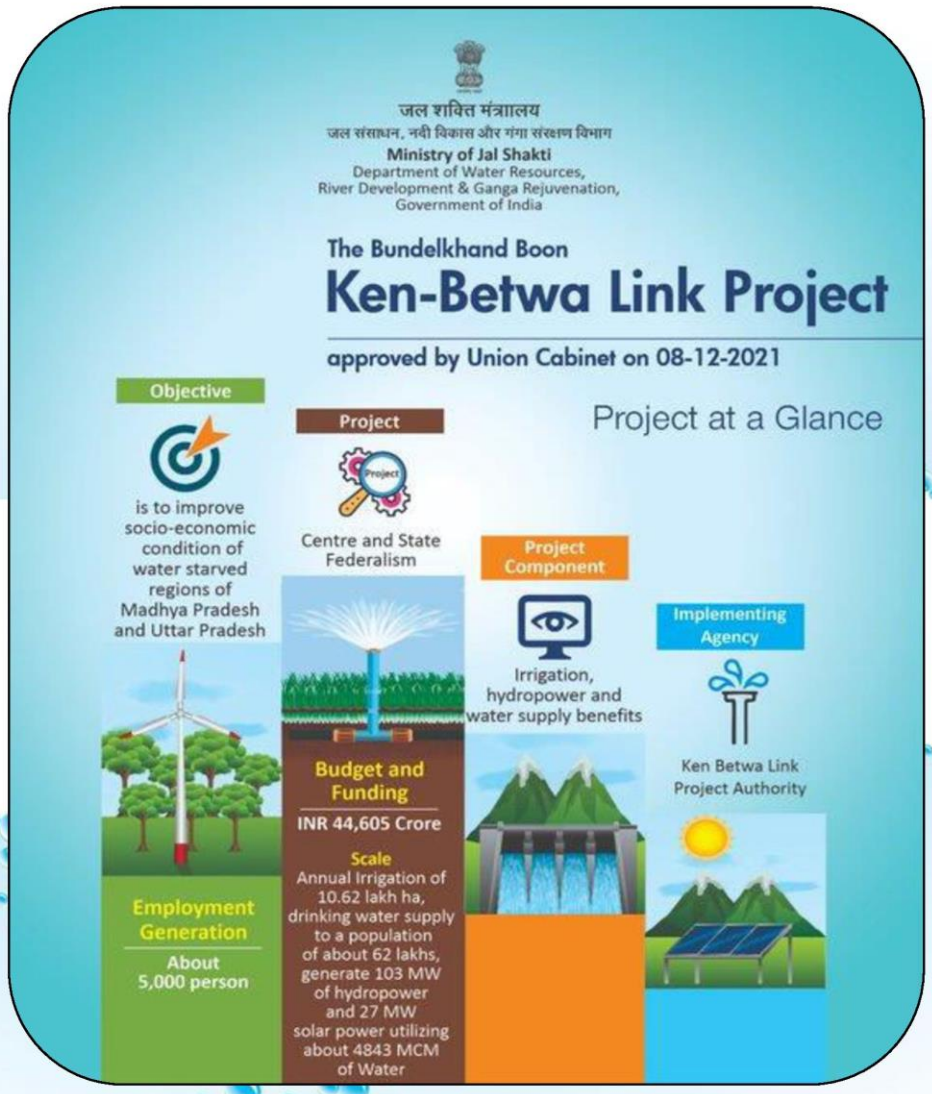
JAL-VIKAS

January-2022

जल विकास

जनवरी-2022



राष्ट्रीय जल विकास अभिकरण की आंतरिक पत्रिका

(Inhouse Bulletin of National Water Development Agency)

Activities of NWDA at a Glance

स्वच्छ भारत मिशन के अंतर्गत दिनांक 02.10.2021 को कोरोनो से बचाव के लिए मास्क जागरूकता अभियान चलाया गया।

स्वच्छता अभियान सितंबर-अक्टूबर 2021 के दौरान दिनांक 04.10.2021 को स्वच्छता रैली का आयोजन किया गया।

Shri K S Naidu, AE, NWDA presenting the DPR of Damanganga-Ekdare-Godavari Intra-State Link Project of Maharashtra to State Level Technical Advisory Committee on 06.10.2021

Handing over of Damanganga Ekdhare Godavari intra State draft DPR to Maharashtra WRD on 13.10.2021.

आज़ादी का अमृत महोत्सव के अंतर्गत राष्ट्रीय जल विकास अभिकरण द्वारा तकनीकी संगोष्ठी का आयोजन दिनांक 25.10.2021 को नई दिल्ली में किया गया।

सतर्कता जागरूकता सप्ताह-2021 के शुभारंभ के अवसर पर महानिदेशक रा.ज.वि.अ. द्वारा दिनांक 26.10.2021 को अधिकारियों-कर्मचारियों को ऑनलाइन शपथ दिलाई गई

दिनांक 29.10.2021 को राष्ट्रीय एकता दिवस के अवसर पर शपथ ग्रहण।

35th AGM of NWDA Society and 19th Meeting of SC- ILR held on 12.11.2021

From Director General's Desk

It is my pleasure to present the quarterly issue of "Jal Vikas-January 2022" of NWDA.The in-house bulletin gives a recap of works and functions of NWDA particularly with respect to Interlinking of Rivers (ILR) Programme of the Department of Water Resources, River Development & Ganga Rejuvenation (DoWR, RD&GR), Ministry of Jal Shakti (MoJS), Government of India alongwith the main activities accomplished during 01stOctober to31st December 2021

Main achievement during the period is the approval of Union Cabinet for the implementation of Ken-Betwa Link Project, which is an important mile stone for the interlinking of rivers programme and will encourage other states also for implementation of similar other ILR Projects.Fifteenth(15th)meeting of Task Force for Interlinking of Rivers (TFILR); 19th meeting of Special Committee for Interlinking of Rivers and 35th meeting of Annual General Body of NWDA were conducted during the reporting period. NWDA assisted MoJS in organizing BRICS Water Forum and BRICS Water Ministers Meet. Draft DPRs of Damanganga(Ekdare)-Godavariand Damanganga-Vaitarna-Godavari intra-state Link Projectsare completed and submitted to Govt. of Maharashtra.

This issue contains an article on "Unique Features of Ken-Betwa Link Project" which is quite relevant at this juncture and highlighting the importance of the project.While turning the pages of the magazine, you can find another article "Water: The Epic Struggle For Sentience Of Civilization"; Technical Digest; Water Resources in Media; Glimpses of NWDA briefing about the meetings and activities conducted by NWDA; Appointments, Promotions and Retirements of NWDA Officials; Family Corner and Poems.

In the end I wish to express my sincere thanks to the entire Editorial Team of Jal Vikas in assimilating the articles and bringing the January 2022 Issue of Jal Vikas to an informative one. Our efforts to further improve and expand the Jal Vikas Issues of NWDA will continue and would be possible by your timely contributions, supports and suggestions.

(Bhopal Singh)
Director General

Contents

Functions of National Water Development Agency

The then Ministry of Irrigation [now Ministry of Jal Shakti; Department of Water Resources, River Development & Ganga Rejuvenation (MoJS; DoWR, RD & GR)], Government of India, formulated a National Perspective Plan (NPP) in the year 1980 for optimum development and utilization of Water Resources of our country India. The NWDA was set up as a Society under the Ministry in July 1982 to give a feasible shape to the proposal of the NPP with the following functions:

- To carry out detailed surveys and investigations of possible reservoir sites and interconnecting links in order to establish feasibility of the proposal of Peninsular Rivers Development Component (1981)* and Himalayan Rivers Development Component (1994)* forming part of the NPP for Water Resources Development prepared by the then Ministry of Irrigation (now MoJS; DoWR, RD & GR) and Central Water Commission(CWC).

- To carry out detailed studies about the quantum of water in various Peninsular River Systems (1981)* and Himalayan River Systems (1994)* which can be transferred to other basins/States after meeting the reasonable needs of the basin/States in the foreseeable future.

- To prepare feasibility report of the various components of the scheme relating to Peninsular Rivers Development (1981)* and Himalayan Rivers Development (1994)*.

- To carry out surveys and investigations work and prepare Detailed Project Reports (DPRs) of river link proposals under the NPP for Water Resources Development and thereafter approach concerned States for obtaining concurrence for implementation of the project(2020)*.

- To prepare Pre – Feasibility Reports (PFRs)/ Feasibility Reports (FRs) (2006)*/ DPRs (2011)* of the Intra – State links as may be proposed by States. The concurrence of the concerned co-basin States for such proposals may be obtained before taking up their FRs /DPRs.

- To undertake/construct/repair/renovate / rehabilitate / implement the projects either of its own or through an appointed agency /organization/PSU or Company and the projects forming part of Interlinking of Rivers, for completion of projects falling under Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)of which projects under Accelerated Irrigation Benefits Programme (AIBP) are also included and similar other projects(2016)*.

- NWDA to act as a repository of borrowed funds or money received on deposit or loan given on interest or otherwise in such manner, as directed by the then Ministry of Water Resources, River Development and Ganga Rejuvenation (now the MoJS; DoWR, RD & GR) and to secure the repayment of any such borrowed funds/money deposits/loan etc. by way of mortgage, pledge, change or lien upon all or any other property, assets or revenue of the society both present and future (2016)*.

- To do all such other things the Society may consider necessary, incidental, supplementary or conducive to the attainment of above objectives (1981)*.

*Year of Gazette Notification

Highlights of NWDA Activities during the Quarter

- DG, NWDA attended a meeting of Public Investment Board (PIB) under the Chairmanship of Finance Secretary & Secretary (Expenditure) at FRESCO (Room No. 169-D), Ministry of Finance and also held a briefing for the PIB meeting to consider KBLP at the Chamber of Secretary, (WR, RD & GR), MoJS on 01.10.2021.
- Honourable Sri Jayant Patil, Minister, Water Resources & Command area development, Govt. of Maharashtra, conducted a meeting at Nashik on 02.10.2021 for review of various water diversion schemes in Nashik Region. He reviewed the DPR works of DEG & DVG links being done by NWDA.
- DG, NWDA attended the First &Second meetings of the Committee constituted for finalizing the structure and category of International Water Award(s) to be conferred during 7th India Water Week in the Chamber of Chairman, CWC, Sewa Bhawan, New Delhi on 04.10.2021 &27.10.2021 respectively.
- DG, NWDA gave a Point wise Explanation on Issues raised during PIB Meeting of KBLP at the Chamber of Secretary (WR,RD&GR),MoJS on 08.10.2021.
- DG, NWDA and CE (N) attended a Meeting to review the progress related to appraisal of DPR of KBLP phase-II held under the Chairmanship of Member (WP&P), CWC through Video Conferencing on 11.10.2021.
- The 15thmeeting of Task Force for Interlinking of Rivers was held on 22.10.2021 in Hybrid mode under the Chairmanship of Shri Sriram Vedire, Chairman, TFILR & Advisor, MoJS.
- DG, NWDA and CE (N) attended a review meeting with officers of CWC officials and officials of WRD, MP to discuss the aspects related to appraisal of DPR ofKBLP Phase-II through VC on 22.10.2021.
- A Chief Secretary level meeting has been convened on 26.10.2021 to finalise water sharing in PTN and draft MoA for the implementation of DP and PTN links at SS Bhawan, New Delhi.
- DG, NWDA attended a meeting taken by Shri Sriram Vedire, Adviser, MoJS in his chamber to discuss about Interlinking of Rivers regarding NABARD at the Chamber of Advisor, MoJS, SS Bhawan, New Delhi on 26.10.2021.
- 2nd meeting for Consultation among party States for the Godavari-Cauvery Link Project has been held on 29.10.2021 in a hybrid mode at Hyderabad.
- The 35th Annual General Meeting of the NWDA Society and 19th Meeting of the Special Committee for Interlinking of Rivers were chaired by Hon'ble Union Minister for Jal Shakti on 12.11.2021.
- BRICS Water Forum from 16th to 17th November 2021 and BRICS Water Ministers Meet on 18th November 2021 were organized.
- SE, IC, NWDA, Gwalior signed the MOU between GSI & NWDA for consultancy work for carrying out detailed DPR stage geological and geotechnical investigation for preparation of DPR of Pailani barrage and Marauli Barrage, underKBLP,Phase-I at Lucknow on 22.11.2021.
- DG, NWDA attended Meeting with Member(D&R), CWC to discuss the plan for having a long term MoU with CWC for providing design consultancy on various links whose DPRs are being/ or proposed to be prepared by NWDA on 23.11.2021 at Chamber of Member D&R, CWC, New Delhi.
- CE(N) NWDA, Lucknow and SE, IC, NWDA, Gwalior attended the VC meeting under the Chairmanship of Member (WP&P), CWC, New Delhi on 24.11.2021 to review of appraisal of projects under KBLP, Phase-II.

- 19th Meeting of the "Sub-Committee on System Studies for identification of most appropriate alternative plan" was held on 26th November 2021.
- Constitution day was observed in HQ, New Delhi and Field offices of NWDA on 26.11.2021 and pledge has been administered on this occasion by all the officials.
- DG, NWDA attended the Thirteenth (13th) meeting of High Powered Steering Committee for implementation of National Projects under the Chairmanship of Secretary, DoWR, RD & GR, Ministry of Jal Shakti held on 06.12.2021.
- Director General, NWDA held a meeting with officials of Gujarat at New Delhi on 06.12.2021 to discuss various issues of PTN and DP Links and DPR of Damanganga-Sabarmati-Chorwad Link.
- The Union Cabinet has approved implementation of Ken-Betwa Link Project (KBLP) as a National Project with total estimated cost of Rs. 44,605 crore (2020 -21 price level) with central support of Rs. 39,317 crore for the implementation of KBLP and setting up of Special Purpose Vehicle (SPV) viz., Ken-Betwa Link Project Authority (KBLPA), for implementation of KBLP.
- Preparatory works for implementation of KBLP viz., gazette notifications, providing funds for land acquisition, compensatory afforestation and NPV, appointment of Chief Executive Officer, Additional Chief Executive Officer and Director Finance for Ken-Betwa Link Project Authority, preparation of working DPR for construction purpose, finalise the activity wise plan for the executing the projects etc. have been initiated/planned for implementing the project in stipulated time i.e., 8 years.
- Director General, NWDA made presentation and held discussions on various feasible options regarding implementation of ERCP and PKC link to Hon'ble Minister of Jal Shakti on 09.12.2021.
- Director General, NWDA attended meeting under the Chairmanship of Secretary (WRRD&GR) to discuss action points for the Visit of H.E. Ms. Mette Frederiksen, Prime Minister of Denmark to India at Chamber of Secretary (Jal Shakti), Deptt. of WR,RD&GR, on 14.12.2021.
- Director General, NWDA attended Sansad TV, Parliament of India program for discussing on Ken-Betwa River Link project through Video Conferencing on 15.12.2021.
- CE (N) chaired a meeting on 17.12.2021 with SE, IC Bhubaneswar, officials of CWC, Faridabad, Dir (F) and SE (N) regarding finalization of estimate and MoU for preparation of DPR of Subarnarekha-Mahanadi Link at O/o CE (N), NWDA, Lucknow.
- Officers of NWDA, Nashik and WRD, Govt. of Maharashtra jointly visited Damanganga (Ekdare) - Godavari link site on 20.12.2021 and met deputy Sarpanch of Ekdare village to resolve public hindrance and to inspect the area identified for Solar Power Unit, proposed Weir site and Drilling works.
- Director General, NWDA attended meeting with Shri Biju D, Chief Engineer, Irrigation Deptt. Govt. of Kerala at New Delhi on 23.12.2021 to discuss various ILR issues regarding the state.
- Meeting held between WRD, Govt. of Jharkhand and NWDA officials on 23.12.2021 through video conferencing regarding three Intrastate link projects of Jharkhand viz. Barakar-Damodar Subarnarekha link, Sankh-South-Koel link and South Koel Subernarekha link projects.
- Chief Engineer (N) has made Power Point presentation during review meeting held by Hon'ble Minister of State Sh. B Tudu, Ministry of Jal Shakti on 24.12.2021 to review of all ongoing and future projects of the Ministry of Jal Shakti in the state of Odisha.

Unique Features of Ken-Betwa Link Project

***Bhopal Singh**

The signing of Memorandum of Agreement (MoA) for the implementation of the Ken-Betwa link project (KBLP) amongst the Hon'ble Union Minister for Jal Shakti and Hon'ble Chief Ministers of Madhya Pradesh and Uttar Pradesh on 22nd March, 2021 in the august presence of Hon'ble Prime Minister and subsequent approval of Govt. of India on 8th December, 2021 for providing central support and its implementation through a Special Purpose Vehicle (SPV) are very significant events not only for addressing the water security of the Bundelkhand region but also for the interlinking of river programme in the country. The project is planned to be implemented as a model project in a time bound manner using state of art technologies and know-how. Some of the unique features of this interlinking project are discussed below:

1. **The KBLP is one of the first interlinking of river projects under National Perspective Plan (NPP) ready for implementation**

Under NPP, 30 nos. of links have been identified for inter-basin water transfer from water surplus basins to water deficit basins/areas. KBLP was also identified as a priority project way back in year 2002 by the Task Force on Interlinking of Rivers (TF-ILR). The KBLP was declared as national project in the year 2008 and was also included in the Prime Minister's Package of Bundelkhand region.

2. **The Ken-Betwa Link Project (KBLP) is a multi-purpose project with irrigation, hydropower and water supply benefits**.

The project will provide annual irrigation to an area of 10.62 lakh ha (8.11 lakh ha in MP and 2.51 lakh ha in UP) in the Chhattarpur, Tikamgarh, Panna, Sagar, DamohandDatia districts of Madhya Pradesh and Banda, Mahoba, Jhansi and Lalitpur districts of Uttar Pradesh in Bundelkhand region as well as to the Vidisha, Shivpuri and Raisen districts of Madhya Pradesh. The project will provide 194 Million Cubic Metre (MCM) of water for enroute drinking water supply to a population of 62 lakh (41 lakhin MP and 21 lakh in UP). The project will also generate 103 MW of hydropower and 27 MW of solar power.The layout map of the project is given in Plate-I.

3. Apart from other benefits, the project will rejuvenate all the tanks in the enroute area of link canal by feeding through the link canal, wherever possible and would help in ground recharge. **The project plan to use micro irrigation in about 5 lakh ha command for better water use efficiency**. It is planned use Supervisory Control And Data Acquisition (SCADA) for better water management in the two basins and supervisory board shall be established for water accounting and regulation of water in Ken and Betwa basins.

4. **Thus the project is aimed at not only providing water security in the Bundelkhand region but also ensuring the overall conservation of the region and specially for landscape dependent species such as tiger, vultures and gharial**.

Wildlife Institute of India (WII) is preparing a comprehensible Landscape Management Plan (LMP) for the conservation of wildlife and biodiversity not only in the PTR area but also in surrounding area of about 47620 sq km spread in 11 districts of MP and UP including forest area of 12125 sq. Km. to offset the impact of Daudhan reservoir. Further, all the stipulations contained in the Wildlife clearance of National

*** Director General, NWDA, New Delhi**

Board of Wildlife (NBWL) will be followed while implementing the project. Under LMP, it is proposed to integrate Panna Tiger Reserve (PTR) with Nauradehi Wildlife Sanctuary (WLS) and Durgavati WLS in MP and Ranipur WLS in UP to increase the carrying capacity of PTR.

5. **The implementation of KBLP is planned to be undertaken jointly (Centre and States) through the Special Purpose Vehicle (SPV) of Ken-Betwa Link Project Authority (KBLPA)**

The interlinking of river projects face several hindrances particularly the cooperation of party states in water sharing and requirement of high capital cost. The joint implementation of the project with major central funding will be an excellent example of the cooperative federalism. The implementation of KBLP will encourage states to come on board for the implementation of similar other projects in the interest of the nation. The Ministry of Jal Shakti is also considering the establishment of a national platform/authority, tentatively named as National Interlinking of Rivers Authority (NIRA) for the implementation of such projects through joint SPV.

6. **With a view to implement the KBLP efficiently using state-of-art planning and monitoring tools/technology and knowledge skills available in the field, it is planned to engage a Project Management Consultancy to support the KBLPA**.

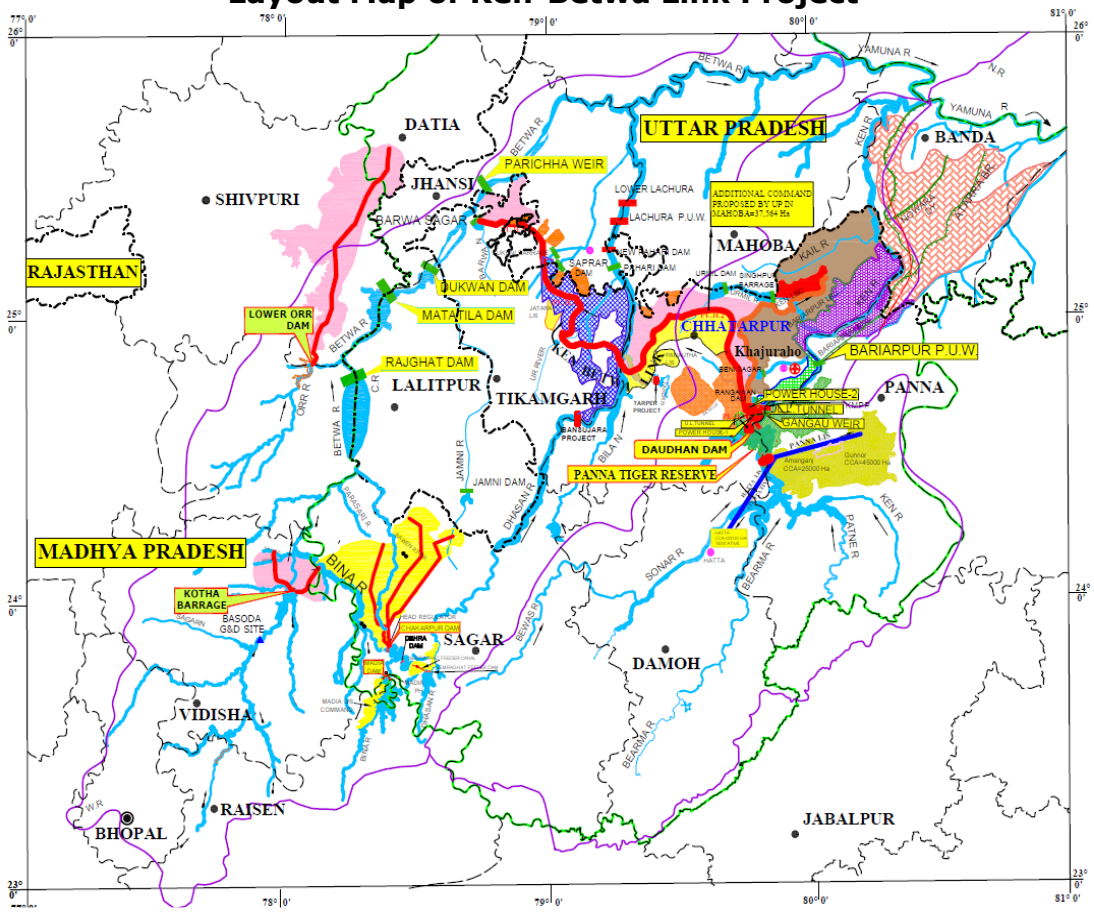
PMC will also be responsible to creation of Management Information System (MIS) for capturing data/information from multiple online systems, analyses the information, and reports data to aid in management decision-making.

7. **KBLP would be game-changer for the socio-economic prosperity of the Bundelkhand region which faces recurrent drought situation**

The region is not very rich in ground water due to hard rock and marginal alluvium terrain.Improving the water availability in comparatively dry region improves the carrying capacity by providing more income to rural areas. This project will definitely bring economic prosperity to this backward area due to increased agricultural activities and arrest the migration of the people from the region.

Plate-I

Layout Map of Ken-Betwa Link Project



Water: The Epic Struggle for Sentience of Civilization

***Dr R N Sankhua**

Introduction

Ironically, fresh water despite its growing scarcity and preciousness to life, is man's most misgoverned, inefficiently allocated and profligately wasted natural resource. Meticulously researched and undeniably prescient, *water* is a stunningly clear-eyed action statement. Seeking to inspire us to place a higher value on water and establish wiser approaches to its use, an anthology of inter-connected epochs relating to mankind's relationship to water has been at centre stage since ages. Like many historical events, there are external and internal factors that shape a water-moment in time. Along with the millions of other water-distressed people around the globe, climate change is exacerbating today's mounting crisis of freshwater scarcity by radically altering hydrologic patterns to produce overwhelming flood, droughts, storms, rising coastal sea levels, as well as the unprecedented melting of mountain glaciers. Hand in hand with the groundwater depletion and contamination, is a food supply "toxic time bomb" of global implications. It is through water that global warming destabilizes civilized societies. While the impacts are complex, they fall unevenly and are further dividing human society with water rich regions generally getting wetter and arid one's drier. This article astutely synthesizes a sizable amount of prophetic insight to spotlight patterns of water struggle for sentient civilization.

Water-short, semi-arid Chennai's episodes of rare, prolonged water crisis followed by intense rainfall and deadly unwarranted floods was but a mild taste of the pattern that is playing out on much more intense, larger, tragic scales in the freshwater distressed parts of it. In places like monsoonal Bihar, Assam, Odisha, the destruction of crop and grazing land by epic floods and droughts is spreading horrors like drought, disease outbreaks, and a totally new, burgeoning phenomenon of cyclones on a multi-scale. Well-informed assessment of the challenges we face today grows naturally from the comprehensive analysis that precedes it in the first two sections: "Ancient water wisdom," "True Paradox of win nowing in efficiencies."

The Ancient Water Wisdom

At the dawn of the 21stcentury, civilization faces an imperative category that defines the era's new water challenge: how to innovate new governing organizations and technical applications that make available sufficient supplies of freshwater for man's essential purposes in an environmentally sustainable manner and relieves the scarcity of an increasingly thirsty planet. No technological panacea that extracts more renewable water from nature is available or on the near-term horizon to answer the call. Some societies may borrow time by mining Earth's underground reservoirs or transferring freshwater from river basin to river basin until their total water reserves give out. For others, comprising many hundreds of millions of people, the day of reckoning has already arrived. For everyone sharing the land, the destiny of human civilization as we know it hinges on the responses to this challenge. History suggests those societies that make big breakthroughs that maximize productive use of their renewable water resources and possibly usher in a turning point in practices and applications are the likeliest to be rewarded with rising economic wealth and international power.

True Paradox of Winnowing Inefficiencies

Enormous inefficiencies, waste have been built up in the government command systems that controlled water use in almost every society through the centuries- the true paradox of water is that despite its scarcity, it nearly everywhere remains the

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most short-sightedly and poorly governed critical resource. Reform can come in one of two main ways: by foresightful, effective, top-down political leadership that uproots its own embedded systems and then makes wise choices about the governing technologies and methods to replace them; or by turning loose the proven reorganizing power of impersonal market forces within a properly regulated, governing framework to winnow out the inefficiencies and redeploy the existing water resources from less to more productive hands.

It is, of course, conceivable that uncommon leadership might arise within a handful of governments in the country to implement the necessary internal reforms. Yet judging from history, it seems highly imprudent, even fanciful, to bet that such exceptional leadership will arise across many regions at one time. Better-more pragmatic-odds of success almost surely lie with greater reliance upon the self-interested, profit motive of individuals organized by the politically indifferent market anchored in a pricing mechanism for valuing water that reflects both the full cost of sustaining ecosystems through externally imposed environmental standards and a social fairness guarantee for everyone to receive at affordable cost the minimum amounts necessary for their basic needs. Those uneasy with the free markets' singular devotion to lucre has on its side the considerable merit of being one of history's most subversive and undiscriminating enemies of unfairly entrenched privilege and deserves credit as a prodigious creator of the water wealth that necessarily precedes any debate about how to make its distribution of water more equitable. In vast swathes six of the Indian basins out of twenty, this precondition is in shocking deficit.

Water and Civilization

Throughout history water has been a great uniter and a great divider, a barrier, and a conveyance, but always a great transformer of civilization. As history's most critical natural resource, vital in virtually every aspect of human society, and one that interactively leverages food, energy, climate change, and other grave problems facing a nation rising towards135million souls, all striving for first world material standards, water also represents an early proxy test for human civilization's impending survival challenge of learning how to sustainably manage the environment. It can be grimly concluded that, on current trajectories, there are simply not enough planetary environmental resources, including accessible freshwater, to even come close to satisfying the aspirations of several billions to move up the development ladder to industrial-world levels of consumption and waste. As in previous eras, human population and available environmental resources are again widely out of balance. Famines, genocides, wars, disease, mass migrations, ecological disasters, and untold miseries are history's remorseless mechanisms for equilibration. In the end some regions will be buffeted, if not engulfed, by the myriad feedback channels of water crises that originate elsewhere. How much tumult and suffering lies ahead depends in significant measure upon how well mankind manages the total global freshwater crisis on our shared planet. Looking farther ahead, the extraordinary, unique substance that gave life to man and shaped the destiny of human civilizations is still the indispensable, prerequisite stepping-stone to someday transplanting our species beyond Earth's sphere to colonize other orbs in the solar system.

Compared to the richness of the acuity of our insights, however, these are small hitches. Water enlarges our understanding of how this vital element has shaped our past, providing enough evidence of humanity's ingenuity in the face of its challenges to offer reasonable hope that we will find ways to use it sanely.

Water Crisis in the Offing

There is one more special attribute about water that must inform any study of its role in history: The inextricable affinity between water and our own essential

humanity—not merely with human life, but with a dignified human life. Visit to the full-blown water crisis, Cauvery Delta in the summer can set off a personal alarm of just how dehumanizing and economically crippling the lack of water for basic needs could be. It drove home the mind-numbing inequity that most of the humanity still struggles to extract its meagre material surplus from nature using obsolete and even ancient water technologies. In the semiarid, rural Cauvery Delta in TN, on the edge of Nagappattinam, Tiruvarur and parts of Thanjavur districts the congeries of otherwise vibrant, culturally robust communities live in literally dirt-poor subsistence for one overriding reason-insufficient water. Cauvery River and her many tributaries, umpteen canals and channels have run dry due to several anthropogenic and climatic factors. The delta is witnessing agrarian distress for some years, something of an unprecedented scale not seen or heard in this once-prosperous region in the last centuryand facing subsidence threat due to lack of sediment flow from the upstream as well as due to seawater ingress, increasing coastal flooding and coastal erosion.

Vidarbha, Maharashtra has been in the throes of farmers' suicides and agrarian crises for more than two decades now. Increasing temperature and water shortage are hampering agriculture in the region. The heat wave and water shortage have made people toil for water. Men, women, and children are walking for more distances to fetch water. Hilly areas like Melghat, which is a tiger reserve, do not have enough water to satisfy the needs of tribals and other forest dwellers.

A Reflection of Regressive Thinking

More striking still is the ubiquitous sight of large numbers of women and children acting with their feet by marching two to three hours or more per day on dusty roads to fetch clean water from wells or other sources in large, yellow, plastic "jerry" cans, which they carry on their heads, on the ends of poles laid across their shoulders, and packed on bicycles or donkeys. A family of four needs to transport around 80 litres of water each day to meet its most minimal drinking, cooking, and cleaning needs. To manage such an impossible weight, two trips to the well each day by mother and children are not uncommon.

Carrying water for basic subsistence devours school time for children and places a dispiriting burden on the enterprising will of parents to struggle out of their material privation. That the water carrying falls traditionally on women adds the insult of gender inequity to the tragedy. There was genuine rejoicing when the two miles of piping our small, humanitarian group of volunteers often, for a pittance, was connected and began to deliver water directly. Since men in rural India have completely made women responsible for water management, this has led to polygamy in one drought-prone village of Maharashtra. This involves having more than one spouse to collect water. The arrangement is termed as '*waterwives'*.

From the Inside Flap

In *water*, the first-ever narrative portrait of the power struggles, personalities, and breakthroughs that have shaped humanity from antiquity's earliest civilizations through the steam-powered Industrial Revolution. Meticulously researched and masterfully stated by many, *water* is a ground-breaking account of man's most critical resource in shaping human destinies, from ancient times to our dawning age of water scarcity. Water has always been man's most indispensable natural resource. Despite its essential nature, water has often been mismanaged, misallocated, undervalued, and squandered by the many societies that have comprised the civilized world. According to many, we have reached a point of crisis in terms of both water quality and water quantity. In water-rich and water-poor societies alike, we are now squarely positioned in an age of water scarcity.

Water rich region may become a "complacent onlooker" due to its "relative comfort", as opposed to leveraging its water resource advantage for the greater good. Meanwhile, two seemingly promising avenues for water resource management are ignored. First is the potential contribution of population growth restrictions in places such as Bengaluru, Chennai, and Delhi where water needs continuously outstrip the sustainable supply. Second, there is no mention of individual-level behaviour change regarding responsible water use.

Seeding the Hope in Despair

Noble intentions need to be married with a practical approach to create opportunities and deliver results in the real world. Having ideas for sustainable development projects is a very comfortable space to be. But when you are in the government system, one must figure out the ways to get things done within the constraints of limited finance and administrative hurdles. Every water body site comes with a unique set of challenges and opportunities.

The good news is that the solutions through connecting flows rise and thrive. Rethinking the thoughts of apilot, Captain D J Dastur, suggestion of a variation: construction of garland canals, one for the Himalayan watershed and the other for the Western Ghats- an appealing, simple, and essential idea, can hit a click. Long-distance irrigation projects then spawned a huge water bureaucracy. Despite an onslaught of sobering statistics in the regions of water scarcity, the overall tone is cautiously optimistic. A grim catalogue of the environmental consequences of the ILR, warning that the basin neighbours are sitting atop a growing demographic and hydrological outfit," is placed in counterpoint to an account of tribunal awards as well as pragmatic consensus talks with riparian neighbours despite both sides' confrontational public posturing.

The Way Out

Convivial dialogue between riparian states with development of a larger neighbourhood policy incorporating interests of key stakeholders, adaption of better response to mainstream climate impacts, resilience across governance systems, in-situ capacities at local-national-regional levels, and a river basin solution to region's water sharing predicament can catch the wave. The coordinated national effort that is on in the spirit of federalism in the river interlinking project and the top-down model presumes of near-unison of some states except few discordant voices. NWDA's National Perspective Plan (NPP) can click the reality by spinning the benefits of 25 million ha of irrigation from surface waters and 10 million ha by increased use of groundwater, raising the ultimate irrigation potential from 140 million ha to 175 million ha.
As been throughout, we can put our faith in agreeable consensus of the riparian counterparts to prompt flexible, appropriate responses, if it recognizes and adjusts to the new reality that the ecosystem cannot be plundered indefinitely, and any new gains in water productivity must be environmentally sustainable. In addition, it must ensure equitable access to water for the India's poor or face the consequences likely to be inflicted by a generation of "freshwater have-nots," most living in areas of the country highly susceptible to fundamentalist extremism.

References

1. Bandyopadhyay, Jayanta and Shama Perveen. (2004). *The doubtful science of interlinking*. Available at: http://www.indiatogether.org/2004/feb/env-badsci-p1.htm.
2. NCIWRD (1999). National Commission on Integrated Water Resource Development Plan. *Integrated Water Resource Development: A Plan for Action*, Ministry of Water Resources, Government of India.
3. NWDA, National Water Development Agency, Available at: http://nwda.gov.in/

Technical Digest

The technical work programme of NWDA mainly contains DPRs /FRs/PFRs preparations of various link projects both coming under the NPP as well as Intra-State as proposed by various State Governments of India; post DPR activities; modifications and scrutiny of FRs and Revision of Water Balance Studies (WBS) of River Basins/Sub-basins.The present status of the progress achieved on the above cited works during the reporting period starting from 1st October 2021 to 31st December 2021 were as follows:

I. Present Status of Preparation of DPRs

Sl. No.	Name of Link Project	Present Status of Preparation of DPRs
1.	Godavari(Inchampalli /Janampet)– Cauvery (Grand Anicut)	The final draft report was circulated to the Party States on 28.04.2021. Efforts to arrive at consensus between party States for water sharing is under progress and a consultation meeting was held by NWDA with the State on 18.09.2020 and 2nd consultation meeting of NWDA with the states was held on 29.10.2021 for consensus on the link.
2.	Krishna (Srisailam) - Pennar	Detailed action plan for DPR preparation is completed.
3.	Godavari(Inchampalli) - Krishna(Pulichintala)	Drawings of the FR stage are being modified for taking up the DPR work by updating the relevant details.
4.	Bedti – Varada	The DPR is taken up for two alternatives viz., Alt-I:Bedti- Varada NPP link proposal envisaging diversion of 276 MCM and Alt-II: Bedti (Suremane) - Dharma (Varada) link project envisaging diversion of 327 MCM. Preparation of the DPR is in progress.
5.	Cauvery (Kattalai) – Vaigai – Gundar	Draft DPR has been prepared and circulated to the concerned States of Tamil Naidu, Kerala and Karnataka and UT of Puducherry for their observations/comments.
6.	Integration of Parbati-Kuno-Sindh(P-K-S) with Eastern Rajasthan Canal Project(ERCP)	ToR for Hydrological and Water Balance Studies of Kuno Sub-basin of Chambal basin using on appropriate hydrological model has been sent by CE(N) office to Shri Ashish Pandey, Department of Water Resources Development and Management, IIT, Roorkee on dated 01.12.2021.
7.	Damanganga (Ekdare) –Godavari and Damanganga Val/Vagh) – Vaitarna – Godavari (Kadva Dev) (Intra-State Link projects)	The DPR of D(E)-G Link Project has been completed and the CE(S) NWDA, Hyderabad handed over the draft DPR of DEG link to CE, WRD, Nashik on 13.10.2021. The Draft DPR report of Damanganga-Vaitarna-Godavari Link Project is also completed and the same has been submitted to the WRD, NMPD, Govt. of Maharashtra by the Office of the Chief Engineer (South), NWDA on 25.11.2021.

8.	Damanganga – Sabarmati – Chorwad Link Project (Intra- State Link)	The Govt. of Gujarat conveyed their consent on 20.11.2021 for preparation of DPR of Damanganga – Sabarmati - Chorwad Link by NWDA on consultancy basis. As per the suggestion of GoG the alternatives (i) connecting DSC link with Narmada canal near Raska weir and (ii) with Kalpasar Project are being explored.

II. Present Status of Post DPR Activities

Sl.No.	Name of Link Project	Present Status of Post DPR Activities
1.	Ken – Betwa Link Project (KBLP)	A draft Cabinet Note for financing the Ken-Betwa Link project and formation of KBLPA was prepared and submitted to the ministry on 9.11.2021 and Finalised Cabinet Note was circulated on 16.11.2021 to all concerned ministries/departments. The Union Cabinet has approved implementation of Ken-Betwa Link Project and setting up of Special Purpose Vehicle (SPV) viz., Ken-Betwa Link Project Authority (KBLPA), for implementation of KBLP.
2.	Par – Tapi – Narmada Link Project (PTNLP)	The issue of consensus building is being pursued by NWDA and MoJS with Gujarat and Maharashtra Governments on sharing of water. The DPR is presently under appraisal in CWC. Matter of getting clearances from MoEF&CC and MoTA are being perused.
3.	Damanganga-Pinjal Link Project (DPLP)	The issue of consensus building for water sharing is being pursued by NWDA with the Government of Maharashtra and Gujarat. Matter of getting clearances from the MoEF&CC and MoTA are also being perused.
4.	Wainganga(Gosikhurd) – Nalganga((Purna / Tapi) Link Project (Intra-State)	Revised Desk top study for extension of Wainganga (Gosikhurd) – Nalganga (Purna) Intra-State link project upto Pentakli dam through pipeline and tunnel prepared by field office, as requested by the Government of Maharashtra is under scrutiny.
5.	Kosi-Mechi Link Project(Intra-State)	DPR was accepted and recommended respectively by the Advisory Committee and Investment Clearance Committee of DoWR, RD& GR in its 129th and 40thmeetings held on 22.10.2020 for investment clearance under State Plan. Recently letter has been received from Government of Bihar for preparation of working DPR of Kosi-Mechi Link Project.
6.	Ponnaiyar-Palar Link Project (Intra-State)	DPR has been completed and the EIA studies for getting Environment Clearance from State Environment Impact Assessment Authority are in progress.

III. Present Status of Preparation/Modifications of FRs/PFRs of Link Project

Sl No.	Name of Link Project	Present Status of Modification of FRs
1.	Yamuna – Rajasthan Link Project	FR of this link project has been modified and under examination in HQ, NWDA.
2.	Rajasthan–Sabarmati Link Project	FR of Rajasthan — Sabarmati Link Project is circulated to concerned states in February 2021.The FR is presently under modification/revision based on the modification of Sarda-Yamuna Link Project to incorporate the effects of the Pancheshwar Project.
3.	Ganga-Damodar-Subarnarekha Link Project	FR of the link project was completed and circulated in March 2021. Preliminary works for taking up of DPR work of the link is under progress. Estimate for the DPR has been prepared and approved administratively.
4.	Subarnarekha-Mahanadi Link Project	FR of Subarnarekha-Mahanadi link project was completed and circulated to concerned States in February 2021. DPR work of this link is proposed to be done by outsourcing to CWC. Estimate and MoU have been received from CWC in this regard.
5.	Chunar-Sone Barrage Link project	Report has been modified as per HQ observations and presently is under examination in CE (N) office.
6.	FRs of Manas-Sankosh – Tista – Ganga (M-S-T-G) and Mahanadi (Barmul) –Rushikulya – Godavari (Dowlaiswaram) Link Project	The draft FRs of these link projects have been finalized and circulated to the concerned States. System study of various possible scenarios for understanding long term effect on enroute canal irrigation for the M-G link is under progress through outsourcing by NIH, Roorkee. Draft final report of the same has been received from NIH and presently under scrutiny. Observations of the field office on the report has been submitted to HQs on 17.11.2021. Preliminary works for DPR preparation of MSTG Link Project is under progress.
7.	FR of Gandak – Ganga and Ghaghara-Yamuna Link Project	FR of Gandak – Ganga Link Project for Indian portion has been completed and circulated to concerned states. Topographical surveys of Nepal portion using latest technology like drone/ satellite data has been taken up.
8.	FR of Kosi – Ghaghara Link	FR of Kosi – Ghaghara Link for Indian portion is under preparation in Field office.
9.	PFR of Nagavalli- Vam sadhara Rushikulya link Project	The PFR of Nagavalli - Vamsadhara Rushikulya Intra-State link Project of the State Government of Odisha has been completed and circulated on 08.12.2021.
10.	Sone Dam-STG Link	FR preparation of the link is under progress.

11.	PFR of Sharda-Gomti Link Project	PFR of Sharda-Gomti Intra State Link project of Govt. of UP has been completed and submitted to Additional Principal Secretary, Irrigation & WRD, UP; E-in-C & HOD, Irrigation & WRD, Ministry of Jal Shakti, Government of UP on dated 27.10.2021.
12.	FR of Netravati – Hemavati Link Project	For preparation of FR of the Project the WBS at Yettinahole, Kerihole and Hongadhalladhole diversion sites has been revised under revision and is at finalization stage.

IV. Present Status of Revisions of Water Balance Studies

Revisions of the WBS reports are generally done after a period 10 years at the events of availability of additional data and need of conducting alternative studies to optimise water resources utilizations at various locations of the same river basins/sub-basins.

WBS considered for revisions in the work plan of NWDA for the year 2021-22 are at various stages of completions. During the reporting period WBS of streams between Krishna and Gundalakamma, Streams between Gundalakamma & Pennar, Ajay sub basin, Pennar upto Somasila dam site have been completed and circulated to TAC members. Four WBS are at circulation stage and preparation of Model WBS of Godavari basin between SRSP & Polavaram is under progress in IIT, Roorkee. Inception report for the same has been received from IIT, Roorkee and is under scrutiny in Field office.

ILR in Parliament

The issues related to Interlinking of Rivers were raised and discussed in both the Houses of Parliament during the Winter Session of the Parliament during November – December, 2021.Twenty number of questions in Lok Sabha and Twenty one number of questions in Rajya Sabha were asked on ILR and other issues, during the session.

The main issue on ILR raised in both the Houses during the session is related to its present status and impact of ILR on environment and ecology. The questions were raised for funding of Ken-Betwa link project and status of Godavari- Cauvery link project. ILR issues related to States of Rajasthan, Madhya Pradesh, Maharashtra, Bihar and Tamil Nadu were also raised and discussed. The details of Questions raised during the Session are enclosed at **Annexure-I.**

The present status of ILR as discussed during the session: Under National Perspective Plan (NPP) prepared in year 1980 for inter-basin water transfer, National Water Development Agency (NWDA) has identified 30 links (16 under Peninsular Component and 14 under Himalayan Component) for preparation of Feasibility Reports (FRs) under Inter-linking of Rivers Project.

Four links have been identified as priority links for preparation of Detailed Project Reports (DPRs) under the Peninsular Rivers Component viz; Ken-Betwa link project (KBLP), Damanganga-Pinjal link project, Par-Tapi-Narmada link project and Godavari-Cauvery link project for implementation on priority. Based on the concurrence of the concerned States, DPRs of KBLP, Damanganga-Pinjal link project, Par-Tapi-Narmada link project and Godavari -Cauvery link project {consisting of three links (Inchampalli) – Krishna (Nagarjunasagar), Krishna (Nagarjunasagar) – Pennar (Somasila), Pennar (Somasila)-Cauvery (Grand Anicut) link projects} have been completed and sent to concerned States. The DPR of Cauvery-Vaigai-Gundar link project was also completed and sent to the party States.

The Ken- Betwa link is the first link under NPP that is ready for implementation. A tripartite agreement has been signed amongst states of MP and UP and Central Govt, for the implementation of Ken-Betwa Link project in March, 2021 in the august presence of Hon'ble Prime Minister of India. Based on the PIB recommendations, a Cabinet Note for central funding and for setting up of a Special Purpose Vehicle (SPV) is approved by Cabinet on 8.12.2021.

Under the intra-State link projects, NWDA received 49 link proposals from 10 States out of which pre-feasibility reports of 37 link projects were completed and sent to concerned States. The PFRs of two links are in progress. The remaining links are either withdrawn by States or not under intra-state link category. Based on the request of concerned States, the DPRs of four links viz; Kosi-Mechi, BurhiGandak-Noon-Baya-Ganga links of Bihar, Wainganga-Nalganga link of Maharashtra and Ponnaiyar (Nedungal)-Palar intra-State link of Tamil Nadu were completed and sent to the concerned States. Further the Draft DPRs of Damanganga (Ekdare)-Godavari link and Damanganga-Vaitarna-Godavari link projects have also been completed.

Annexure-I

Lok Sabha Questions	
Question No.	**Subject**
75	Water storage capacity
61	Ken-Betwa link project
782	Increase in Floods
1941	Jal Shakti Abhiyaan
1328	Finance to Odisha
279	Database on water
4328	ILR in Konkan and Links of Maharashtra
820	Training to Women SHGs
817	National River linking project
819	Mekedatu project
855	Interlinking of rivers
1932	Madhya Pradesh projects
161	ILR and other issues like DRIP etc.
1955	ILR Features and impact on ecology
1151	Finance to Bihar
3055	Peninsular component of ILR
Dy No. 8389	ILR
4211	Godavari- Cauvery link
4292	ILR in Bengal
Dy No. 1416	Vacancy-reg.
Rajya Sabha Questions	
Question No.	**Subject**
Dy No. 234	Works carried out by the ministry
876	Water Conservation
Dy No. 390	Vacant posts under reservation categories personnel
Dy No. 2793	Dams
1700	ILR-Maharashtra, U.P, Punjab, Delhi and Budget allotted.
Dy No. 70	Finance to States for epidemic
Dy No. 3931	National Projects
2487	Rainwater Harvesting
Dy No. 390	Vacant posts under reserved category
106	Funds allocation of Ken-Betwa river linking project
Dy No. 111	Impact of National ILR Programme
101	Steps for Rivers Revival
Dy Nos. U587, S406, U662 & U663	SC, ST & OBC employees in Central Govt.
Dy No. 226	SC/ST/OBCs in senior posts
891	Godavari- Cauvery Link and Tamil Nadu
890	ILR and Rajasthan
Dy No. 2084	Godavari- Cauvery link
1685	Kosi-Mechi link-Bihar
Dy No. 814	Finance to States for epidemic
Dy No. 3103	Funds for Karnataka rivers
Dy No. 226	SC/ST/OBCs in senior posts

Water Resources in Media

The Hindu, Dated : 12.10.2021

1,900 water conservation structures built in Gurugram

Initiative under 'Catch The Rain' plan

SPECIAL CORRESPONDENT
GURUGRAM

Water conservation and rainwater harvesting structures have been constructed at 1,900 places and 68 groundwater wells have been revived across Gurugram district under the Jal Shakti Abhiyan's "Catch The Rain" programme.

It was revealed by Deputy Commissioner Yash Garg during a review meeting through videoconferencing, chaired by Devender Singh, Additional Chief Secretary, Irrigation and Water Resources Department. Dr. Garg said as many as 2,113 places were identified for construction and the work was completed at 1,900 places. Work for modernisation of water tanks and other traditional waterbodies was completed at 18 of the 21 places identified.

Similarly, 68 groundwater wells were revived, 35 watersheds developed, and more than five lakh saplings planted as part of the scheme to conserve rainwater.

The Hindu Dated : 13.10.2021

4 killed as rain batters Kerala

Low-lying areas inundated, widespread damage caused

SPECIAL CORRESPONDENT
THIRUVANANTHAPURAM

Driven by twin weather systems in the Arabian Sea and the Bay of Bengal, heavy rain pounded large parts of Kerala on Tuesday, claiming at least four lives. Floodwaters inundated low-lying areas, damaged houses and disrupted road traffic in several districts.

Fatal fall: The house at Karipur in Malappuram district where two children died after a wall collapsed on Tuesday.

At Karipur in Malappuram, two children, one a seven-year-old and the other aged eight months, died when the wall of a house collapsed in heavy rain following a mudslip from a nearby hillock. A journalist working for a language daily was crushed to death after a tree fell on him while he was travelling on a two-wheeler at Pandalam in Pathanamthitta. In Kollam, a 66-year-old man drowned in a swollen canal near the Nagamala estate.

Isolated heavy rainfall is likely to continue in the State till October 16 under the influence of cyclonic circulations persisting over both the Arabian Sea and the Andaman Sea, according to the weather office here.

Revenue Minister K. Rajan said 27 relief camps had been opened to accommodate families displaced by the floods.

Six teams of the National Disaster Response Force were positioned in Thrissur, Alappuzha, Idukki, and Wayanad. Families in places prone to landslips and flooding would be relocated to safer places, he said.

In Thrissur, people living along the banks of the swollen Chalakudy river were evacuated when floodwaters entered many houses after the sluice valves of the Peringalkuthu dam were opened in the earlier hours on Tuesday. The spillway shutters of the Vazhani, Peechi and Chimoni dams too were opened.

Heavy rain continued to pound most parts of Ernakulam district on Tuesday. Heavy crop damage was reported from the eastern fringes of the district.

In Malappuram, landslips were suspected to have occurred in the forests of Nilambur, Karuvarakundu, and Silent Valley. A bridge at Thiruvali gave in to the surging floodwaters.

The heavy rain that lashed Kozhikode district since Monday night triggered landslips in Mavoor, Chathamangalam and Peruvayal grama panchayats.

The Hindu, Dated : 02.11.2021

Finding a way out of India's deepening water stress

In any new National Water Policy, the aim should also be to encourage conserving water resources and efficient usage

THOMAS VARGHESE

The complexity and scale of the water crisis in India calls for a locus specific response, that can galvanise and integrate the ongoing work of different Ministries and Departments through new configurations. Such an integrated approach must necessarily cut across sectoral boundaries and not stop at the merger achieved between the two Ministries of Water Resources, River Development and Ganga Rejuvenation and the Ministry of Drinking Water and Sanitation, which led to the formation of the Ministry of Jal Shakti in 2019.

Understanding sources used

Seeing India's looming water crisis through the locus of 'urban' and 'rural' not only allows a better grasp of the causative factors but also enables a stronger grip on the strategies to be deployed to reverse the water crisis. Fundamental to this is a preliminary understanding of the sources from which the country draws water to meet its varying needs. In the rural areas, 80%-90% of the drinking water and 78% of the water used for agriculture is drawn from groundwater sources. In urban areas, 50%-60% of the water supply is drawn from groundwater sources, whereas the remaining is sourced from surface water resources such as rivers, often located afar, in addition to lakes, tanks and reservoirs.

According to the composite water management index released by the think tank NITI Aayog in 2019, 21 major cities (including Delhi, Bengaluru, Chennai, Hyderabad) were on the brink of exhausting groundwater resources, affecting about 100 million people. The study also points out that by 2030, the demand for water is projected to be twice the available supply.

The Chennai example

A significant, and by no means less worrying, example of the water crisis that unfolded before our eyes was in Chennai in 2019, where life came to a standstill and parts of the city went without piped water for months. Though this may well have been forgotten, Chennai remains a spectacle of the impending tragedies brought about by the city's inability to meet the basic needs of citizens, vis-à-vis drinking water, cooking and sanitation.

A closer look at the factors that brought about the water crisis in Chennai is inescapable, should we gain a better grasp of the underlying problems, especially as this was a city which among others like Mumbai had suffered from floods previously. Many have cited the poor rainfall received in Chennai in the previous year as one of the main reasons for the water crisis. Though it is true that rainfall was low, which was 50% less than normal, focusing on this factor alone would absolve responsibility by blaming the vagaries of the rainfall patterns to a fast-changing climate, without understanding the ground-level steps (or missteps) which have been equally responsible factors.

Chief among these is that the city has been built by incrementally encroaching floodplains and paving over lakes and wetlands that would have otherwise helped the process of recharging groundwater. The lack of space for water to percolate underground prevented rainwater from recharging the aquifers.

This was further exacerbated by the loss of green cover (which would have otherwise helped water retention) to make way for infrastructure projects. Such a situation, on the one hand, leads to flooding during normal rainfall due to stagnation, and on the other hand leads to drought-like conditions due to the prevention of underground water storage. It is only that this situation was more magnified in Chennai, but other cities in India would echo these misrelations in varying degrees owing to a lack of sustainable urban planning.

There is also the example, in Mumbai, in 2019, when 2,141 trees were felled at the Aarey colony, amid massive protests, to make space for a shed for the Mumbai Metro Rail Corporation Limited.

Need for synergy

If the Government is serious about addressing the water crisis in urban areas, the Ministry of Water Resources must reconfigure its relationship with other Ministries and Departments (Urban Development, Local Self-Government and Environment). This would be for enhanced integration and coordination through effective land and water zoning regulations that protect urban water bodies, groundwater sources, wetlands and green cover while simultaneously working to enhance waste water recycling and water recharge activities targeting aquifers and wells through rainwater harvesting.

Lessons from rural Punjab

In rural areas, the situation is no different, as the acute water crisis in Punjab shows. The draft report of the Central Ground Water Board concluded that Punjab would be reduced to a desert in 25 years if the extraction of its groundwater resources continues unabated. 82% of Punjab's land area has seen a huge decline in groundwater levels, wherein 109 out of 138 administrative blocks have been placed in the 'over exploited' category. Groundwater extraction which was at 35% in the 1960s and 1970s, rose to 70% post the Green Revolution – a period which saw governments subsidising power for irrigation that left tubewells running for hours.

Concomitantly, cultivation of water intensive crops such as paddy have further aggravated water depletion, even turning water saline. Immediate measures need to be taken to manage and replenish groundwater, especially through participatory groundwater management approaches with its combination of water budgeting, aquifer recharging and community involvement.

Such an approach to water conservation again beckons new configurations between sectors and disciplines. At the sectoral level, the Ministries and Departments of water resources must coordinate efforts with their counterparts in agriculture, the environment and rural development for greater convergence to achieve water and food security. At the disciplinary level, governance and management should increasingly interact and draw from the expertise of fields such as hydrology (watershed sustainability), hydrogeology (aquifer mapping and recharge) and agriculture sciences (water-sensitive crop choices and soil health). Again, the importance given to groundwater conservation should not ignore surface water conservation including the many rivers and lakes which are in a critical and dying state due to encroachment, pollution, over-abstraction and obstruction of water flow by dams.

Protecting resources

The Ministry of Jal Shakti, last year, had announced an ambitious plan to provide water connections to every household in India by 2024. In view of the ongoing erosion of water resources and an ever-increasing demand for water, the thrust should not be on promising water supply. Instead the aim should be towards protecting and conserving water resources on the one hand and minimising and enhancing efficiency of water usage on the other. As the expert committee constituted under the Union Water Resources Ministry drafts a new National Water Policy, one hopes it would be rooted in locus specific realities and allow greater flexibility for integrating the insights and work of multiple departments and disciplines making way for new configurations to sustainably manage the country's water resources.

Thomas Varghese is a researcher and consultant working on sustainable development in Kochi, Kerala.

The Hindu, Dated : 10.11.2021

Rain lets up, but woes of Chennai continue

HC cracks the whip over inundation

Bounteous yield: Residents fishing in Korattur Lake that overflowed on Tuesday. • M. VEDHAN

SPECIAL CORRESPONDENT
CHENNAI

Chennai had some respite from the rain on Tuesday when inundation cleared up in a few areas. But people were stranded and in need of help at other places where the stagnant water was yet to be drained. Residents are approaching the next couple of days with fear as heavy rain has been forecast.

HC warning

The Madras High Court warned the Chennai Corporation that it would take up a suo motu public interest litigation petition on the travails of residents due to waterlogging, if the situation did not improve by Friday. Chief Minister M.K. Stalin said action would be taken against the contractors implementing Smart City.

In the 24 hours till 8 a.m. on Tuesday, Chennai recorded 3.2 cm of rain. The weather office has issued a red alert in Chennai for Wednesday and Thursday as the low-pressure area that had formed on Monday is likely to turn into a depression.

The government announced a holiday for schools and colleges in Chennai, Kancheepuram, Tiruvallur, Chengalpattu, Cuddalore, Nagapattinam, Thanjavur, Thiruvarur, and Mayiladuthurai on November 10 and 11. A holiday has been declared for schools and colleges in Pudukottai, Perambalur, Ariyalur, Madurai, Dindigul and Virudhunagar districts on November 10. Schools in Tiruchi and Ramanathapuram will be closed on November 10. The toll in the rain has risen to five and over 500 huts have been damaged.

The Hindu, Dated : 16.11.2021

Heavy rain continues in Kerala, 3 dead

Yellow alert issued for eight districts today

SPECIAL CORRESPONDENT
THIRUVANANTHAPURAM

Heavy rain continued to lash parts of Kerala on Monday affecting Thiruvananthapuram, Kollam and Kottayam districts the most, resulting in the death of three persons and widespread damage to property.

The India Meteorological Department has issued a yellow alert for eight central and northern districts for isolated heavy rain on Tuesday. They are Kottayam, Ernakulam, Idukki, Thrissur, Malappuram, Kozhikode, Kannur and Kasaragod.

The State Disaster Management Authority informed that in the last 24 hours, three lives, including that of two toddlers, were lost.

In all, five persons have died in rain-related incidents in the State since November 10.

Parts of Pathanamthitta and Alappuzha continued to battle waterlogging on Monday. Pathanamthitta has 69 relief camps, accommodating 2,410 people, while in Alappuzha 619 people were housed in 26 camps.

Across the State, 12 houses were fully damaged and 229 partially since November 10. Between October 12 and November 15, the State reported crop loss on 62,991.41 hectares, affecting 1.43 lakh farmers. The Upper Kuttanad region has been hit hard.

The water levels at the Mullaperiyar and Idukki reservoirs were rising slowly on Monday, despite Tamil Nadu increasing the tunnel discharge from Mullaperiyar and the opening of a shutter of the Cheruthoni dam of the Idukki reservoir on Sunday.

The IMD has forecast a reduction in rain after Tuesday.

(With PTI input)

No trace: A flooded municipal stadium in Pathanamthitta district on Monday. • K.K.MUSTAFA

'Will ensure safety of pilgrims'

STAFF REPORTER
PATHANAMTHITTA

Health Minister Veena George, who assessed the flood situation in Pathanamthitta district on Monday, said the safety of Sabarimala pilgrims would be ensured. A team of the National Disaster Response Force (NDRF) has been positioned at Kulanada.

The temple opened for the Mandalam-Makaravilakku season on Monday.

The Pampa is flowing turbulently. Most roads in the Konni-Achencoil region, which form part of the pilgrimage circuit, are unnavigable. The police are diverting vehicles to alternative routes.

The Hindu, Dated : 22.11.2021

Flood situation remains grave in A.P.

CM asks Ministers, MLAs to camp in affected areas, monitor relief works; death toll in Kadapa 15

SPECIAL CORRESPONDENT
VIJAYAWADA

Andhra Pradesh Chief Minister Y.S. Jagan Mohan Reddy on Sunday directed the in-charge Ministers and MLAs of flood-affected Chittoor, Kadapa and Nellore districts to stay in the region and monitor rehabilitation and relief operations. The swelling Chitravathi, Papagni and Penna rivers continue to pose a threat at various places in the Rayalaseema region.

Taking stock: State Principal Education Secretary B. Rajasekhar and Nellore District Collector K.V.N. Chakradhar Babu overseeing the evacuation process in Nellore. • SPECIAL ARRANGEMENT

Bridge collapses

The road bridge across the Papaghni, connecting Kadapa and Tadipatri towns, collapsed on Sunday due to the impact of the floods. The district was severely battered by rain, especially the Kadapa, Rajampet and Kamalapuram constituencies.

Amid speculative figures that put the number of deceased at over 50, the district administration has officially pegged the death toll at 15 as on Sunday evening. "We have identified 15 bodies and handed them over to relatives and paid a compensation of ₹5 lakh to the kin of 13 victims. Around 22 persons have been reported missing and a search is on for them", Kadapa Collector V. Vijayarama Raju told *The Hindu*.

In Puraganur, heavy rains led to the crumbling of the durbar hall and the adjoining walls of the 200-year-old zamindari palace.

In SPSR Nellore district, normal life was thrown out of gear as rains wrecked havoc.

Vehicles were stranded on the Chennai-Kolkata highway for about 12 hours as the highway suffered erosion in Nellore and Kovur.

As the Railways cancelled trains due to breaches and damage to tracks, many passengers were stranded in Vijayawada, Nellore, Eluru, Guntur and Tirupati. Many trains originating and operating from Visakhapatnam, Vijayawada, Kakinada, Guntur and Nellore towards Chennai were cancelled and diverted, the South Central Railway said.

In Tirupati, the 500-year-old Kayalacheruvu tank developed minor breaches. The Chittoor district administration issued warning asking people of 16 villages to vacate immediately.

(With inputs from Kadapa, Chittoor, Nellore and Tirupati bureaus)

The Hindu, Dated: 10.12.2021

'Ken-Betwa project a boon for Bundelkhand'

It will increase agri output: Chouhan

ANUP DUTTA
BHOPAL

Madhya Pradesh Chief Minister Shivraj Singh Chouhan said on Thursdaythat the Ken-Betwa river link project will lead to prosperity for the drought-prone Bundelkhand region.

The Chief Minister thanked Prime Minister Narendra Modi, Union Minister Nitin Gadkari and the Cabinet for approving the project.

The Centre on Wednesday cleared the funding and implementation of the project and sanctioned ₹39,317 crore for it.

Chhatarpur, Panna, Tikamgarh, Niwari, Damoh, Sagar, Datia, Shivpuri, Vidisha and Raisen districts of Madhya Pradesh would benefit upon completion of the river link, said an official.

In addition, 103 mega watt of hydropower and 27 mega watt of solar power will be generated from the project, he said.

CM Shivraj Singh Chouhan

A tripartite memorandum of understanding (MoU) has been signed in the presence of the Government of Madhya Pradesh, Government of Uttar Pradesh and the Prime Minister to prepare the detailed DPR of the project.

Mr. Chouhan said the linking of rivers will increase agricultural production and lead to prosperity. A new dawn of development and progress will be ushered in Bundelkhand when the project takes shape.

दैनिक जागरण 16.12.2021

पीएम कृषि सिंचाई योजना के विस्तार को मिली मंजूरी

यमुना पर बनने वाली परियोजनाओं से दिल्ली को भी होगा फायदा

कैबिनेट के फैसले

93 हजार करोड़ रुपये से अधिक की योजना से 22 लाख किसानों को होगा सीधा फायदा

जागरण ब्यूरो, नई दिल्ली : प्रधानमंत्री कृषि सिंचाई योजना के विस्तार को मंजूरी मिल गई है। इसे बढ़ाकर वर्ष 2025-26 तक कर दिया गया है। 93 हजार करोड़ रुपये से अधिक की इस योजना से 22 लाख किसानों को सीधे फायदा होगा, जिसमें ढाई लाख अनुसूचित जाति और दो लाख अनुसूचित जनजाति वर्ग के किसान शामिल हैं। प्रधानमंत्री नरेन्द्र मोदी की अध्यक्षता वाली आर्थिक मामलों की मंत्रिमंडलीय समिति ने बुधवार को इसे मंजूरी दी। इसमें दो राष्ट्रीय परियोजनाएं, रेणुका और लखवार भी शामिल हैं, जिससे दिल्ली समेत यमुना किनारे के बाकी राज्यों को पर्याप्त जलापूर्ति की सुविधा मिलेगी। साथ ही त्वरित सिंचाई लाभ कार्यक्रम (एआइबीपी) के तहत लगभग 14 लाख हेक्टेयर रकबे में अतिरिक्त सिंचाई की क्षमता विकसित होगी।

प्रधानमंत्री मोदी की अध्यक्षता में हुई कैबिनेट की बैठक में सिंचाई परियोजनाओं को लेकर निर्णय लिए गए। सूचना प्रसारण मंत्री अनुराग ठाकुर और जल शक्ति मंत्री गजेंद्र सिंह शेखावत ने केंद्रीय मंत्रिमंडल की बैठक के बाद प्रेस कांफ्रेंस में यह जानकारी दी।

'हर खेत को पानी' के तहत लघु सिंचाई और जल स्रोतों के उद्धार के जरिये 4.5 लाख हेक्टेयर के रकबे में सिंचाई की क्षमता विकसित की जाएगी। लगभग डेढ़ लाख हेक्टेयर में भूजल से सिंचाई की सुविधा होगी।

मंत्रिमंडलीय समिति ने सिंचाई परियोजनाओं को वित्तीय सहायता प्रदान करने के लिए एआइबीपी, हर खेत को पानी और भूमि, जल व अन्य विकास घटकों को 2021-2026 के दौरान जारी रखने के लिए प्रस्तावित योजनाओं मंजूरी दी है। एआइबीपी का उद्देश्य सिंचाई परियोजनाओं को वित्तीय मदद प्रदान करना है। इसके तहत वर्ष 2021-26 के दौरान कुल अतिरिक्त सिंचाई क्षमता को 13.88 लाख हेक्टेयर तक करना है। चालू 60 परियोजनाओं को पूरा करने पर ध्यान देने के साथ उससे संबंधित 30.23 लाख हेक्टेयर कमांड क्षेत्र का विकास भी शामिल है।

यमुना नदी पर बनाए जाने वाली रेणुका बांध परियोजना (हिमाचल प्रदेश) और लखवार बहुद्देश्यीय परियोजना (उत्तराखंड) में केंद्र की वित्तीय हिस्सेदारी 90 प्रतिशत तक होगी। ये दोनों परियोजनाएं यमुना बेसिन में जल भंडारण की शुरुआत करेंगी। इससे दिल्ली समेत यमुना बेसिन के ऊपरी हिस्से के पांच राज्यों हिमाचल प्रदेश, उत्तराखंड, उत्तर प्रदेश, हरियाणा और राजस्थान को लाभ होगा। हर खेत तक पानी पहुंचाने में भी इससे लाभ होगा, जिससे सिंचित क्षेत्र बढ़ेगा।

कैबिनेट ने वाटरशेड विकास घटक परियोजना को भी मंजूरी दी है। इसका लक्ष्य वर्षा जल को सिंचित क्षेत्रों तक पहुंचाना है। इसमें मिट्टी व जल संरक्षण, भूजल की भरपाई और अन्य प्राकृतिक संसाधनों के क्षरण को रोकना शामिल है। इसके तहत 2021-26 के दौरान संरक्षित सिंचाई से ढाई लाख हेक्टेयर भूमि विकसित की जाएगी।

Glimpses of NWDA

1. Swachhta Abhiyan September-October 2021 under Swachh Bharat Mission

Under Swachhta Abhiyan September-October 2021, Swachhta Rallies and mask distribution for awareness campaign against covid-19 were conducted as part of Swachh Bharat Mission in various offices of NWDA including HQ.

Mask distribution conducted by NWDA, HQ on 02.10.2021

Swachhta Rally organized by NWDA, Bhubaneswar on 04.10.2021

2. 15th Meeting of Task Force for Interlinking of Rivers

The fifteenth meeting of Task Force for Interlinking of Rivers was held on 22ndOctober, 2021 in Hybrid mode under the Chairmanship of Shri Sriram Vedire, Chairman, TFILR & Advisor, MoJS, DoWR, RD & GR.

During the meeting DG, NWDA briefed about the present mandates of NWDA and enhanced mandate of NIRA and presented a comparison between functions of NWDA and functions proposed for NIRA. He also explained about the three tier proposed structure for NIRA.

Sh. M. Gopalakrishnan, Former Secretary General, ICID & Former Member, CWC; M.E. Haque Former Member, CWC; Prof Vasant Gandhi, IIM Ahmedabad; Shri Manoj Sethi, AS & FA, DoWR, RD & GR gave their views and suggestions on the proposal. Sh S.K. Haldar, Chairman, CWC shows his agreement with proposal for the constitution of NIRA and emphasized that the proposal should be taken forward for the early constitution of NIRA.

Chairman, TFILR proposed to present the decisions of present meeting in forthcoming meeting of SCILR. DG, NWDA thanked Chairman, TFILR and concluded the meeting by expressing deep gratitude to all the members and special invitees for their valuable guidance and deliberations.

3. Vigilance Awareness Week

Vigilance Awareness Week was conducted in all the Offices of NWDA during the period from 26.10.2021 to 01.11.2021. To begin with, a "Pledge" was administered on 26.10.2021 by the Director General, NWDA online to the officers and staff members of NWDA, HQ. Oath was also administered by all the Field Offices of NWDA. Banners and Posters highlighting the evils of corruption were displayed at prime locations in the Headquarters Office as per the instructions of the CVC. A debate has also been organized in the head quarter office on 01.11.2021 on the topic "ईमानदारी के साथ आत्मनिर्भरता"in which staff/officers of NWDA participated through VC.


Pledge administration at NWDA, HQ and at Bhubaneswar office

4. National Unity Day

National Unity day is observed to mark the birth anniversary of Sardar Vallabh Bhai Patel- the man who played an important role in unification of India. This day was observed in NWDA on 29.10.2021 and on this occasion pledge was taken by officials of various offices of NWDA including HQ, NWDA.


Administration of Pledge at NWDA, HQ and at Gwalior office

5. 35th AGM of NWDA and 19th Meeting of SC-ILR

The 35th meeting of Annual General Body of National Water Development Agency (NWDA) and 19th meeting of Special Committee for Interlinking of Rivers were held on 12.11.2021 at Vigyan Bhawan, New Delhi under the Chairmanship of Shri Gajendra Singh Shekhawat, Hon'ble Minister for Jal Shakti. Some of the participants attended the meeting through VC link also. The Annual Report and Audited Accounts for the year 2019-20 were approved by the Society. The budget estimate and actual expenditure during the year 2020-21 and 2021-22, upto October, 2021 were detailed in the meeting. The present status of DPRs, FRs, and PFRs for Inter State and Intra State link projects were informed to the members of the Society.

DG, NWDA briefed about the status of priority links viz; Ken – Betwa link, Damanganga-Pinjal link, Par-Tapi-Narmada link, Godavari- Cauvery link and other links like Kosi –Mechi Intra State link and Cauvery- Vaigai- Gundar link project, whose DPRs have been completed. He listed out the activities to be undertaken for Ken – Betwa link project as post DPR activities. He also explained about the System Studies for Mahanadi-Godavari link, which is being carried out by NIH, Roorkee and informed that it is proposed to take up system studies of four more links viz, Manas-Sankosh-Tista-Ganga, Farakka-Sunderbans, Ganga-Damodar-Subernarekha and Subernarekha-Mahanadi links.

DG, NWDA gave a background for constitution of National Interlinking of Rivers Authority (NIRA) and apprised all the participants that based on deliberations during the last meeting of TFILR, a structure of NIRA is proposed and he explained in details about the structure, its broad mandates and functions and proposal of subsuming NWDA into NIRA and manpower requirement and composition of Committees in NIRA. DG, NWDA informed that 7th India Water Week has been postponed to November, 2022 and its curtain raiser function will be held shortly.

35th AGM of NWDA and 19th meeting of SC-ILR held on 12.11.2021

States' representatives and dignitaries expressed their viewpoints / comments on presentation made by DG, NWDA on various items.

DG, NWDA in his concluding remarks, assured that the views / observations of States on link projects shall be duly considered. He also assured that views of members of SCILR on constitution of NIRA will be duly incorporated in the proposal.

6. BRICS Water Ministers' Meet and BRICS Water Forum

At the eleventh BRICS Leaders' Summit in 2019, Hon'ble Prime Minister announced that India would organise a BRICS Water Ministers' meeting to discuss the challenges of sustainable water management and sanitation in urban areas.

Accordingly, the first BRICS Water Ministers' Meet was organised by DoWR, RD & GR, Ministry of Jal Shakti on 18th November, 2021. Also, a BRICS Water Forum was organised by India on 16-17 November, 2021 in virtual mode.

The following three Technical Sessions were held on 16-17 November, 2021:

1. Climate Change Impacts – Challenges and Opportunities in Water Sector.
2. Technology Innovations in Water Management.
3. Addressing the Water, Food and Energy Security.

Government of India presented Country Papers in these sessions.Officials from India, China, South Africa, Brazil and Russia have participated virtually and gave presentations. Concluding Session held on 18.11.2021 and was dedicated to "BRICS Water Ministers Meet" which was Addressed by Shri Gajendra Singh Shekhawat, Hon'ble Union Minister for Jal Shakti, GoI and Water Ministers/Representatives of China, South Africa, Brazil and Russia. This is followed by Joint declaration. Event has been ended by vote of Thanks by Secretary, DoWR, RD & WR, MoJS. A Joint declaration was issued by the BRICS Water Ministers' Meet to continue to focus attention on the precious water resources and further explore ways and means to intensify cooperation in water management among BRICS countries.

7. Activities under Azadi Ka Amrit Mahotsav (AKAM)

'Azadi Ka Amrit Mahotsav' is an initiative of the Government of India to celebrate and commemorate 75 years of independence of progressive India and the glorious history of its people, culture and achievements. NWDA carried out various programme/ activities to commemorate the Azadi Ka Amrit Mahotsav.

Rallies were organised by Field offices of Lucknow and Nagpur on 25.10.2021 and 30-12-2021 respectively for creating awareness on ILR programme of NWDA.

Technical seminar was organized on the subject "Technical, economical and environmental dimensions of interlinking of Indian rivers" on 25.10.2021, in which papers of various organizations were presented. This has enhanced awareness on ILR and views/issues on the ILR had also been exchanged.

A speech Competition on the topic "Water Conservation & Water Security" as a part of AZADI KA MAHAOTSAV was jointly organized by NWDA and NIH, Patna on 06th Dec., 2021 inviting students of DAV Public school, Phulwari Sharif, Patna.

An "Awareness programme on Interlinking of Rivers" was organized in Little Flower High School, Abids, Hyderabad as part of Azadi Ka Amrit Mahotsav by NWDA, Hyderabad on 10-12-2021.

NWDA, Nagpur organized a painting competition with children / students of the colony on the topic "Relationship of water & life and benefits of river linking" on 31-12-2021.

Appointments, Promotions and Retirements of NWDA Officials

During the reporting period starting from 1st October 2021 to 31st December 2021:

Appointments:

Sl.No	Name & Designation	Deputation/Direct	Place of Posting
1	Smt. Deepika Sharma, Dy. Director (Hydrology)	Deputation w.e.f. 08.10.2021 (FN)	NWDA (Hqs.), New Delhi
2	Shri Dharm Singh Bairwa, Junior Engineer	Direct w.e.f. 25.10.2021 (FN)	NWDA (Hqs.), New Delhi
3.	Shri Sachin Vishnoi, Junior Engineer	Direct w.e.f. 27.10.2021 (FN)	ID-II, NWDA, Nashik
4.	Shri Abhayraj Meena, Junior Engineer	Direct w.e.f. 27.10.2021(FN)	ID, NWDA, Lucknow
5.	Shri Kumbha Ram Jakhar, Junior Engineer	Direct w.e.f. 27.10.2021(FN)	ID, NWDA, Bhopal
6.	Shri Shivam Sharma, Junior Engineer	Direct w.e.f. 27.10.2021(AN)	NWDA (Hqs.), New Delhi
7.	Shri Gourav Thory, Junior Engineer	Direct w.e.f. 28.10.2021(AN)	ID, NWDA, Bhopal
8.	Shri Kana Ram, Junior Engineer	Direct w.e.f. 28.10.2021	ID-II, NWDA, Nashik
9.	Shri Deepak, Junior Engineer	Direct w.e.f. 29.10.2021(AN)	NWDA (Hqs.), New Delhi
10.	Shri Amit Boora, Junior Engineer	Direct w.e.f. 29. 10.2021(FN)	N NWDA (Hqs.), New Delhi
11.	Shri Chandrekesh Meena, Junior Engineer	Direct w.e.f. 29.10.2021 (FN)	ID, NWDA, Bhopal
12.	Smt. Sajanji Pramila, Junior Engineer	Direct w.e.f. 02.11.2021(FN)	NWDA (Hqs.), New Delhi
13.	Shri Ravi Kumar Choudhary, Upper Division Clerk	Direct w.e.f. 08.11.2021 (FN)	ID-II, NWDA, Nashik
14.	Shri Dinesh Kumar Sharma Upper Division Clerk	Direct w.e.f. 09.11.2021 (FN)	ID,NWDA, Hyderabad
15.	Shri Tejparkash Yadav, Upper Division Clerk	Direct w.e.f. 11.11.2021 (FN)	ID, NWDA, Lucknow
16.	Shri Ravi, Upper Division Clerk	Direct w.e.f. 11.11.2021 (FN)	IC, NWDA, Hyderabad
17.	Shri Naveen Kumar, Upper Division Clerk	Direct w.e.f. 11.11.2021 (FN)	O/o CE (North), NWDA, Lucknow.
18.	Ms. Pooja Meena Stenographer Gr.II	Direct w.e.f. 12.11.2021 (FN)	NWDA (Hqs.), New Delhi
19.	Shri Ronak, Upper Division Clerk	Direct w.e.f. 15.11.2021 (FN)	ID, NWDA, Chennai
20.	Shri Ankur, Upper Division Clerk	Direct w.e.f. 15.11.2021 (FN)	IC,NWDA, Patna
21.	Shri Parveen Suhag Stenographer Gr.II	Direct w.e.f. 16.11.2021 (FN)	ID, NWDA, Kolkata
22.	Shri Deepak Verma, Accounts Officer	Deputation w.e.f. 16.11.2021 (FN)	NWDA (Hqs.), New Delhi
23.	Shri Anuj Chauhan Upper Division Clerk	Direct w.e.f. 16.11.2021 (FN)	ID, NWDA, Bhopal
24.	Shri AmarJeet, Upper Division Clerk	Direct w.e.f. 18.11.2021 (FN)	ID,NWDA, Gwalior

25.	Shri Dinesh Kumar Stenographer Gr.II	Direct w.e.f. 22.11.2021 (FN)	O/o CE(North), Lucknow
26.	Shri Vivek Kumar, Lower Division Clerk	Direct w.e.f. 22.11.2021 (FN)	IC, NWDA, Patna
27.	Shri Keshav Mudgal Lower Division Clerk	Direct w.e.f. 23.11.2021 (FN)	NWDA (Hqs.), New Delhi
28.	Shri Kuldeep Singh Lower Division Clerk	Direct w.e.f. 23.11.2021 (FN)	IC, NWDA, Valsad
29.	Shri Rahul Kaushik Lower Division Clerk	Direct w.e.f. 23.11.2021 (FN)	NWDA (Hqs.), New Delhi
30.	Ms. ArzooTomar Lower Division Clerk	Direct w.e.f. 23.11.2021 (FN)	NWDA (Hqs.), New Delhi
31.	Shri Utkarsh Sonkar, Lower Division Clerk	Direct w.e.f. 24.11.2021 (FN)	IC, NWDA, Gwalior
32.	Shri Sunil Meena Lower Division Clerk	Direct w.e.f. 24.11.2021 (FN)	ISD, NWDA, Jaipur
33.	Shri Arjun Lower Division Clerk	Direct w.e.f. 24.11.2021 (FN)	NWDA (Hqs.), New Delhi
34.	Shri Kushi Ram Meena Lower Division Clerk	Direct w.e.f. 26.11.2021 (FN)	IC, NWDA, Valsad
35.	Shri Jatin Rana Lower Division Clerk	Direct w.e.f. 26.11.2021 (FN)	NWDA (Hqs.), New Delhi
36.	Shri Deepak Kumar Lower Division Clerk	Direct w.e.f. 27.11.2021 (FN)	ID, NWDA, Patna
37.	Shri Hira Lal, Lower Division Clerk	Direct w.e.f. 29.11.2021 (FN)	O/o CE (South), NWDA, Hyderabad
38.	Shri Sonvir Bhagor, Upper Division Clerk	Direct w.e.f. 29.11.2021 (FN)	ID, NWDA, Gwalior
39.	Smt. Shrawan Bishnoi, Upper Division Clerk	Direct w.e.f. 30.11.2021 (FN)	NWDA (Hqs.), New Delhi
40.	Shri Harshit Sehajpal Steno Gr. II	Direct w.e.f. 30.11.2021 (FN)	ID, NWDA, Bhubaneswar
41.	Shri Amit, Lower Division Clerk	Direct w.e.f. 01.12.2021 (FN)	ID, NWDA, Chennai
42.	Shri Shahapurkar Sanjay Sidram, Lower Division Clerk	Direct w.e.f. 02.12.2021 (FN)	NWDA (Hqs.), New Delhi
43.	Shri Himanshu Arora, Junior Accounts Officer	Direct w.e.f. 06.12.2021 (FN)	NWDA (Hqs.), New Delhi
44.	Shri Haris.P, Junior Accounts Officer	Direct (FN) w.e.f. 06.12.2021 (FN)	IC, NWDA, Hyderabad
45.	Shri Satynarayan Kumar Lower Division Clerk	Direct w.e.f. 03.12.2021 (FN)	ISD, NWDA, Ranchi
46.	Shri Sanjay Kumar Lower Division Clerk	Direct w.e.f. 07.12.2021 (FN)	IC, NWDA, Hyderabad
47.	Shri Karan Kumar, Upper Division Clerk	Direct w.e.f. 08.11.2021 (FN)	O/o CE(North), Lucknow
48.	Shri Dadi Bagya Nookesh , Junior Engineer	Direct w.e.f. 13.12.2021 (FN)	ID, NWDA, Hyderabad
49.	Shri Krishna Gurjar, Junior Engineer	Direct w.e.f. 15.12.2021 (FN)	NWDA (Hqs.), New Delhi
50.	Shri Suresh, Lower Division Clerk	Direct w.e.f. 15.12.2021 (FN)	IC, NWDA, Bhubaneswar
51.	Kumari Abhilasha Meena, Lower Division Clerk	Direct w.e.f. 17.12.2021 (FN)	ID, NWDA, Vadodara

Promotions:

Sl. No.	Name & Designation	Post and Date of Promotion	Place of Posting on Promotion
1.	Shri S.B. Singh, Upper Division Clerk	Head Clerk w.e.f. 04.10.2021	O/o CE(North), Lucknow
2.	Smt. S.B. Dhirsamanta Upper Division Clerk	Head Clerk w.e.f. 04.10.2021	ID, NWDA, Kolkata
3.	Shri P.K. Verma, Assistant Engineer	Assistant Ex .Engineer w.e.f. 01.11.2021	ISD, NWDA, Jaipur
4.	Shri Dakshesh Kumar B. Oza, Junior Engineer	Assistant Engineer w.e.f. 30.10.2021	ID, NWDA, Vadodara
5.	Smt. Mehta Krishnaben Champaklal, UDC	Head Clerk w.e.f. 02.11.2021	IC, NWDA, Valsad

Retirements:

Sl. No.	Name & Designation	Date of Retirement
1.	Shri Bupasha Paul, Steno Gr.II, IC, NWDA, Hyderabad	20.10.2021 **(Resigned)**
2.	Shri Jyothi Rajvedi, Accounts Officer, NWDA, Saket, New Delhi	31.10.2021
3.	Shri S.C. Mangal, Assistant Director, NWDA(Hqs.), New Delhi	31.10.2021
4.	Shri Dalip Singh, PS, NWDA (Hqs.), New Delhi	31.10.2021
5.	Shri R.A. Raheem, Head D'Man, ID, NWDA, Nagpur	31.10.2021
6.	Shri Tandel Bikhubai, AE, IC, NWDA, Valsad	31.10.2021
7.	Shri Vinay Saluja, Jr. Accountant, ID, NWDA, Lucknow	3.11.2021 **(Resigned)**
8.	Shri Aman Trivedi, Steno. Gr.II, O/o CE(North),NWDA, Lucknow	30.11.2021 **(Resigned)**
9.	Shri A.N. Mehta, D'Man Gr.III, ID, NWDA, Vadodara	30.11.2021
10.	Shri Anurag, Steno Gr.II, NWDA (Hqs.), New Delhi	08.12.2021 **(Resigned)**
11.	Shri K.K. Shrivastava, SE, IC, NWDA, Patna	31.12.2021
12.	Shri D.B. Singh, Deputy Director, O/o CE(North), NWDA, Lucknow	31.12.2021
13.	Shri D.K. Goyal, Executive Engineer, ID-II, NWDA, Nashik	31.12.2021

Participation of NWDA Officials in Trainings/ Seminars/ Conferences

During the reporting period starting from 1st October 2021 to 31st December, 2021, the two numbers of trainings / seminars/ workshops etc. were organized.

Details of events in which the officials participated were as per the list shown below:

- GEO Smart India Conference, 7-9 Dec, 2021 at HICC Hyderabad, being organised by Geospatial Media and Communications Pvt. Ltd., Noida - Dr. R. N. Sankhua, CE(S), delivered a keynote address during the Session on Small River Rejuvenation, on 8.12.21 on behalf of DG, NWDA.
- CE (HQ), NWDA attended 21st meeting of WRD 10, BIS on 21.12.21 (10:30AM) in virtual mode.

हिन्दी के बढ़ते कदम

1. दिनांक 25.10.2021 को केंद्रीय जल आयोग के पुस्तकालय सभागार में हिंदी में एक दिवसीय तकनीकी संगोष्ठी का आयोजन किया गया। इस संगोष्ठी में जल अभियांत्रिकी संबंधित विभिन्न अभियंताओं ने हिंदी में प्रस्तुतिकरण दिया और अपने तकनीकी अनुभवों को भी साझा किया।

2. दिनांक 29.12.2021को राजविअ मुख्यालय के राजभाषा कार्यान्वयन समिति की 137 वीं बैठक आयोजित की गई जिसमे अध्यक्ष महोदय ने सभी अधिकारियों और कर्मचारियों तथा डीलिंग हैंड्स को विशेषकर हिंदी में ही प्रारूप आदि तैयार करने का सख्त निर्देश देते हुए कड़ाई से इसके अनुपालन का भी आदेश दिया।

राजविअ मुख्यालय के राजभाषा कार्यान्वयन समिति की 137 वीं बैठक

Family Corner

Every year World Food Day is observed on October 16 and is celebrated to raise awareness on the issue of hunger and healthy food habits for all. It marks the founding day of the Food and Agriculture Organisation(FAO). This day aims at tackling global hunger and striving to eradicate hunger across the world. It gradually became a way to raise awareness about hunger, malnutrition, sustainability and food production

"There are people in the world so hungry, that God cannot appear to them except in the form of bread."- Mahatma Gandhi

The theme for World Food Day 2021 was "Safe food now for a healthy tomorrow". The theme of this year was based on appreciating the individuals who have contributed to creating sustainable surroundings where no one is left hungry..One of the best ways to celebrate World Food Day is by **giving food to people who need it the most.**

Good Eating Habits to Achieve Your Health Goals

- Choose Water. Set a goal to drink water instead of sugar-sweetened drinks
- Eat Slowly and Mindfully. It takes about 20 minutes for your brain to send out signals that you are full.
- Cut down processed food as much as you can.
- Eat Fruit and Vegetables.
- Swop to Wholegrains.

Unheard Lessons of Life from Nature

*Garima Sharma

Our environment, in its own simple and subtle ways, conveys us the most significant methods of peaceful co-existence. Human has not only learned about life through the practice of bio-mimicry, but also by fascinating about the fact that how nature always works a way out to sustain life.

Advancement of technology and our subsequent shift of focus has led to a certain aloofness to this connection. "Now" is the only best time to rediscover and nurture this bond! Let's look at these necessary precepts that should be our guiding light.

1. **Awareness of Presence:** Being aware of the existence and most importantly, about the ways to continue it uninterruptedly. Every element of nature seems to be completely aware of its significant responsibilities towards its inhabited environment.
   In a different sense, awareness also reflects the quality of being in present and not giving unnecessary importance to "what's gone". As is visible in the fact that after a storm recedes, Sun does rise again and birds do begin to get merry again, symbolising their awareness about their present existence and celebrating this fact!

2. **Beauty in Stillness:** Forever curious mind of humans has gave us a significant mobility which has its own pros and cons. A major disadvantage is that we have somewhere forgotten to be calm and appreciate what we have in "this" moment. To cherish what we have and make the most of available resources, being happy at the same time is what can be a major missing of our forever advancing society.

3. **Experiments are necessary, but with calculated risks:** Nature's simulation has methods of both creation and destruction. Experimenting with our resources is an inherent nature of humans, but let's not forget that with rights, comes the responsibility of respecting the biodiversity and preserving it. Methods of sustainable development should be encouraged so as to make both experimentation and existence go hand in hand.

4. **Forever Freedom:** Life has innate nature of growing in whatever way it feels best. Let's not cling onto anything and become a far from other opportunities we want to discover. Technology allows us to dive deep into it, but in this process, we may be captured by it and forget to look towards other invaluable aspects which may have a good part to play towards our development.

5. **Maintaining Relationships:** What better than nature can teach us the importance of healthy relationships in our life? As it is said that human being is a social animal, and togetherness is an important element of life. We cannot thrive in isolation. Animals help in dispersal of seeds and enhance chances of survival;

- **Garima Sharma, Persuing B. Tech., Daughter of D.K. Sharma, Director (Tech), NWDA, New Delhi**

plants on the other hand provide shelter and food to animals. Both have an important role to play and unknowingly, they ensure the mutual survival.

Nature is our parent, best teacher, guide and friend. No university or school can teach us what nature can teach, so observe, love, feel, save, preserve and learn from the nature.

Conclusively, as much we are working to dig deep in the field of technology and innovations, we should work the same amount to protect and preserve what we already have. Best solution is always the combination of the two, done while taking calculated risks with utmost sincerity.

कविता

पर्यावरण की सुरक्षा

*सतीश चन्द्र अवस्थी

मानवता मुस्कान खो रही आशंका संघार की,
आज देश को आवश्यकता है पर्यावरण सुधार की।
जीवन में खुशहाली लाओ पर्यावरण विनाश बचाओ,
धूल, धुआ, ध्वनि, ध्वंस दूर रहे इनसे अब परित्याग कराओ ।
श्रृजन सिमट के सो जायेगा स्थिति क्या परिवार की,

आज देश को आवश्यकता है पर्यावरण सुधार की ।

वसुन्धरा पर वृक्ष लगाओ इससे मिले सहारा पूरा,
पादपहीन धरा यदि होगी तो विकास फिर रहे अधूरा ।
मानस, मनुजता चिंतित सी है इच्छा कहां विहार की,

आज देश को आवश्यकता है पर्यावरण सुधार की ।

अरबों रुपयों का व्यय करके पर्यावरण विनाश बचेगा? नहीं,
भूल भारी है भाई इससे ये रोग हटेगा नहीं ।
जन-जन में जागरण सुरक्षण सास्वत स्वस्थ सुधार की,

आज देश को आवश्यकता है पर्यावरण सुधार की ।

बूंद-बूंद जल का संरक्षण हो सके प्रतिपल प्रतिक्षण,
पोलीथीन प्रयोग को रोको स्वच्छ रहो औरों को टोको ।
नदी नदी से जल को जोड़ो करो लीला जल के विस्तार की,

आज देश को आवश्यकता है पर्यावरण सुधार

पर्यावरण विनाश हुआ तो प्रलयंकारी मेघ उठेंगे,
चेतो मेरे देश वासियों फिर कैसे हम आप बचेंगे ।
सूक्ष्म कर दो सभी फलक अपने जीवन परिवार की,

आज देश को आवश्यकता है पर्यावरण सुधार की ।

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* **अधीक्षण अभियंता (उ०), राजविअ, पालिका भवन, नई दिल्ली**

जल है तो कल है

***विमलेश गोस्वामी**

जल में ही है शक्ति जगत की,
जल से ही है तृप्ति जगत की।
जल ही कल है जीव जगत का,
जल ही जीवनदान॥

जल से ही यह हरा-भरा जग,
जल से ही ओजोन-हवा सब।
जल से पुष्प अन्न फल संभव,
जल से जग की शान॥
जल ही कल है जीव जगत का,
जल ही जीवनदान॥

जल से निर्मल, स्वच्छ, मधुर-फल,
घर-आँगन-शौचालय निर्मल।
जल से जंगल बाग सरोवर,
जल से ही जगत्राण॥
जल ही कल है जीव जगत का,
जल ही जीवनदान॥

तन- मन सुंदर जल से ही है,
स्वस्थ-सुखी जीवन जल से है।
नदी सरोवर जल से शोभित,
सारा जग गतिमान॥
जल ही कल है जीव जगत का,
जल ही जीवनदान॥

सारे जग की गति नीरमय,
भूतल की सुरम्यता जलमय।
भूधर की हिम-शोभा जल से,
ईश्वर का प्रतिमान॥
जल ही कल है जीव जगत का,
जल ही जीवनदान॥

जल बिन सूना है जग सारा,
जल से ही है जीवन सारा।
सारे जीव, वनस्पति, प्राणी,
सब का जल ही प्राण॥
जल ही कल है जीव जगत का,
जल ही जीवनदान॥

गगन,वायु,पावक,सब जल में,
शब्द, स्पर्श ,रूप, रस जल में।
अव्यक्त और महत्, सत्, रज, तम,
गुणों की जल ही खान॥
जल ही कल है जीव जगत का,
जल ही जीवनदान॥

जल एक-एक बूंद बचाएं,
व्यर्थ न एक भी बूंद बहायें।
जल संरक्षण से ही जीवन,
जग होगा आयुष्मान॥
जल ही कल है जीव जगत का,
जल ही जीवनदान॥

- **प्रारूपकार, राजविअ, पालिका भवन, नई दिल्ली**

Activities of NWDA at a Glance

BRICS Water Ministers' Meet held on 18.11.2021 Under India's Brics Chairship 2021

Review meeting taken by DG, NWDA on 03.12.2021

Superintending Engineer, NWDA, Hyderabad giving presentation on ILR at Geo Smart India 2021 on 08.12.2021

Visit of NWDA officers to Kadwa reservoir outfall site for Damanganga Vaitarna Godavari intra State link project

During "Awareness Programme on ILR" - at Little Flower High School (LFHS), Abids, Hyderabad on 10.12.2021

Shri R.K. Jain, CE, NWDA delivering Keynote addressing 5th International conference on "Construction, Real Estate Infrastructure and Project Management"

Chief Engineer (N), NWDA gave presentation before Hon'ble Minister of State for Jal Shakti & Tribal Affairs on NWDA Studies during a review meeting for all ongoing & future Projects of the MoJS in Odisha on 24.12.21

दिनांक 29.12.2021 को राजविअ, मुख्यालय, नई दिल्ली में वीडियों कॉन्फ्रेंसिंग द्वारा आयोजित राजविअ मुख्यालय की राजभाषा कार्यान्वयन समिति की बैठक

Jal Vikas can also be accessed at www.nwda.gov.in
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