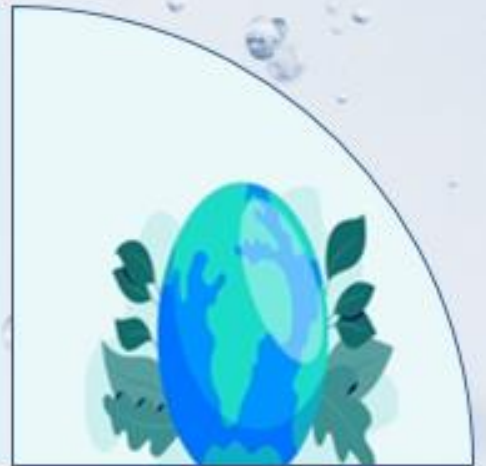
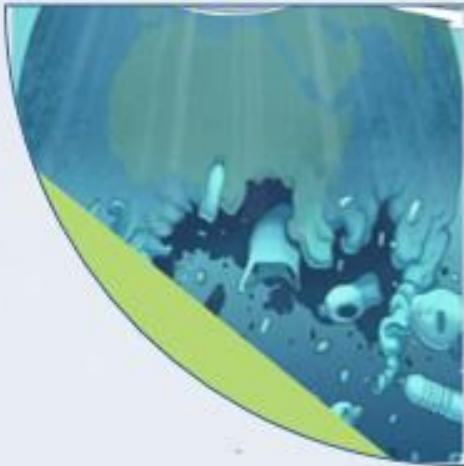


Jal-Vikas
July 2022



जल-विकास
जुलाई 2022



राष्ट्रीय जल विकास अभिकरण की आंतरिक पत्रिका
(Inhouse Bulletin of National Water Development Agency)

Activities of NWDA at a Glance



Meeting held on 06.04.2022 on Integrated Landscape Management Plan for KBLP in Panna Tiger Reserve, MP.



1st meeting of the Steering Committee of KBLP held on 07.04.2022.



Review meeting taken by DG, NWDA on 12.04.2022 for finalising the Work Program of NWDA.



CE (HQ), NWDA participated in the 10th meeting of India-Nepal Joint Committee on Kosi and Gandak Projects held during 12th-13th April, 2022 at Patna.



16th meeting of TFILR held on 17.05.2022.



Meeting on KBLP held by DG, NWDA with Senior Officers of I&WRD, Govt. of UP on 18.05.2022 at Jhansi.



From Director General's Desk

It gives me immense pleasure to present the quarterly issue of "Jal Vikas-July 2022" of NWDA. The in-house bulletin covers a recap of the important works during the quarter and functions of NWDA. The focus of the organisation remains on the 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.

During the reporting period starting from 1st April to 30th June, 2022; main accomplishments include formations of Steering Committee for Ken Betwa Link Project (SC-KBLP) and a Special Purpose Vehicle (SPV) i.e. Ken Betwa Link Project Authority (KBLPA) for the implementation of Ken-Betwa Link Project (KBLP). 1st meeting of the SC-KBLP and KBLPA had been held respectively on 07.04.2022 and 24.06.2022. The finalization of the report on Integrated Landscape Management Plan (ILMP) prepared by Wildlife Institute of India, Dehradun for Greater Panna Landscape following a meeting of all stakeholders organized on 06.04.2022 under my Chairmanship was released by Secretary, DoWR, RD&GR, MoJS on 02.06.2022 and conducting the 16th Meeting of Task Force for Interlinking of Rivers (TFILR) on 17.05.2022. A long term MoU had been signed on 09.06.2022 between CWC and NWDA for providing construction and DPR stage design consultancies for various links proposed and undertaken priority basis by NWDA during the intervening period of 2022-2024.

An Induction Training Programme for the newly recruited Junior Engineers (JEs) of NWDA had been organized at National Water Academy (NWA), Pune from 13.06.2022 to 24.06.2022. Here, I also wish to highlight about the awareness activities and programmes conducted by NWDA on ILR projects with the initiatives of Field Offices of NWDA as a part of Azadi Ka Amrit Mahotsav. A one day webinar organized on 04.05.2022 by Hyderabad, Investigation Circle in coordination with CE (South) Office, was a great success. I personally feel, in future too NWDA should take initiative in highlighting the importance of ILR projects and their implementations, especially when the challenges of uneven distributions of water resources spatially and temporally, are likely to be aggravated further.

When flipping through the pages of the July, 2022 Issue, you can see an article on "Challenges of Interstate and International Issues in Interlinking of Rivers (ILR) Projects", throwing a light on the main bottlenecks come across in implementing ILR projects. Another article is on Mahanadi (Barmul)-Godavari (Dowleiswaram) Link Project, which is the first link of Nine Link Canal System proposed for the diversion of Mahanadi River water to Cauvery/Vaigai Rivers. While turning further pages, the contents such as Technical Digest; ILR in Parliament; Water Resources in Media; Glimpses of NWDA incorporating briefing of meetings and activities conducted by NWDA; Appointments, Promotions and Retirements of NWDA Officials; Family Corner and Poems etc., could also find.

I thank Editorial Board and Contributors for their commitments and devotions in shaping up of the quarterly issue and take this opportunity to express forever gratitude to our readers and stakeholders for the supports and suggestions.

Looking forward to receiving value added articles and related contributions, as our endeavors to expand the reach of Jal Vikas Issues of NWDA continue.


(Bhopal Singh)
Director General

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Shri D.K. Sharma, Director (Technical), NWDA	: Chairman (As In-Charge CE (HQ), NWDA)
Shri D.K. Sharma, Director (Technical), NWDA	: Member
Smt. Jancy Vijayan, Director (Multi-Disciplinary Unit), NWDA	: Editor & Member Secretary
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The views and opinions expressed by the Authors are their own and not necessarily of NWDA.



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)*/ Detailed Project Reports (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, charge 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 briefing meetings taken by Hon'ble Minister, MoJS on the issues pertaining to the State Governments of Karnataka and Rajasthan held respectively on 05.04.2022 and 06.04.2022 at the Chamber of the Hon'ble Minister, MoJS,
- DG, NWDA held a meeting of all Stakeholders on 06.04.2022 under his Chairmanship for the finalization of Integrated Landscape Management Plan (ILMP) including five Supplementary Plans prepared by Wildlife Institute of India (WII), Dehradun for KBLP coming in Panna Tiger Reserve (PTR) area of MP,
- First meeting of the Steering Committee of KBLP (SC-KBLP) was conducted on 07.04.2022 under the Chairmanship of Secretary DoWR, RD&GR, MoJS,
- DG, NWDA attended the meeting taken by Hon'ble Minister, MoJS to review the issues of various Water Resources Projects of DoWR, RD&GR, MoJS held in Jaipur (Rajasthan) on 08.04.2022,
- DG, NWDA had taken a virtual meeting on 12.04.2022 to finalize the Work Programme of NWDA for the Year 2022-23,
- CE (HQ), NWDA attended the 10th India-Nepal Joint Committee on Kosi and Gandak Projects meeting held on 12.04.2022 at Patna, Bihar,
- DG, NWDA attended the meeting on "ESRI 3D Model of KBLP" on 13.04.2022,
- CE (HQ), NWDA attended the first meeting of Consultancy Evaluation Committee of DoWR, RD&GR held on 28.04.2022 under the Chairmanship of Chief Engineer (PAO), CWC, New Delhi,
- DG, NWDA participated as a Guest Faculty in (MCT-Level-3) for Central Water Engineering Service Group 'A' Officers for the lecture on "e-Flow: Implementation Issues & Challenges in India" held on 29.04.2022 at NWA, Pune,
- Preventive Vigilance Inspections of Office of NWDA, Nasik were conducted by Director (Administration), NWDA during 05.05.2022 to 07.05.2022,
- Final report of ILMP of KBLP prepared by the WII, Dehradun was released on 02.06.2022 by Secretary, DoWR, RD&GR, MoJS,
- Superintending Engineer, NWDA, Bhubaneswar and his team attended the review meeting taken by Hon'ble Minister of State for Jal Shakti & Tribal Affairs held on 02.06.2022 at Kujang (Jagatsinghpur), Odisha,
- DG, NWDA and Dir. (Tech) attended the meeting held on 06.06.2022 at the Chamber of Secretary, DoWR, RD&GR, MoJS for deliberating the Study Report of Sankosh Hydroelectric Project of Bhutan,
- DG, NWDA attended National Workshop on "Dam Safety Act 2021 for Dam Safety Governance in India" organized on 16.06.2022 at New Delhi,
- Induction Training for the newly recruited Junior Engineers of NWDA (1st Batch of 21 JEs) was conducted from 13.06.2022 to 24.06.2022 at NWA, Pune,
- First meeting of the KBLPA was held on 24.06.2022 under the Chairmanship of DG, NWDA and CEO, KBLPA, at New Delhi,
- DG, NWDA attended the briefing meeting of Consultative Committee of MoJS taken by Secretary, DoWR, RD&GR, MoJS held on 28.06.2022, and
- DG, NWDA and Dir (Tech) attended an updation meeting of Land Records on Government Land Information System (GLIS) Portal held on 28.06.2022 at New Delhi.

Challenges of Inter-State and International Issues in Interlinking of Rivers Projects

* **Bhopal Singh**

The water resources are not distributed equitably either in a temporal or spatial sense, in the country. Water is one of the key drivers of socio-economic prosperity of a region. ILR is an idea generated after centuries of such practices at a smaller scale but in 20th century, ILR of large scales with demonstrable success were highlighted to enable equitable distributions of water in the country and thereby bring prosperity to all. Earlier ideas in this direction were formulated by Dr. KL Rao in year 1972 and later on in a different context by Capt Dastur in the year 1977. The concept was formalized with the framing of NPP in 1980 for transferring water from water surplus basins to water-deficit basins/regions, under which 30 links were identified (Figure 1). It was estimated that implementation of the NPP would provide benefits of about 25 million ha of irrigation from surface waters, 10 million ha by increased use of ground waters, raising the ultimate irrigation potential from 140 million ha to 175 million ha in the country and generation of about 34000 MW of power, apart from the incidental benefits of flood control, drought mitigation, navigation, water supply, fisheries, salinity and pollution control etc.



* **Director General, National Water Development Agency, Saket, New Delhi.**

The NWDA was set up in year 1982 to study the feasibility of the links in a scientific manner. Thereafter, NWDA has carried out large number of studies by covering the assessment of water balance basin/sub-basin wise/ and at diversion points for preparing Pre-Feasibility Reports and Feasibility Reports of the identified links. The work of preparation of Detailed Project Reports was also taken up by NWDA for prioritised links. Despite making substantial progress on the studies of various link projects, the progress in the implementation of the link projects on the ground has not been encouraging so far. The paper discusses the challenges of Inter-State and International issues in the implementation of ILR programme proposed in the country.

Central Government is pursuing the ILR programme in the country in a consultative manner by building consensus amongst the concerned States for the implementation of specific link projects. Six link projects have been identified as priority projects for implementation as given below:

- Ken-Betwa Link Project (KBLP)
- Damanganga-Pinjal Link Project (DPLP)
- Par-Tapi-Narmada Link Project (PTNLP)
- Godavari-Cauvery Link Project (alternate study) viz;
 - i. Godavari-Krishna (Nagarjunasagar) Link Project
 - ii. Krishna-Pennar (Somasila) Link Project and
 - iii. Pennar-Cauvery (Grand Anicut) Link Project.

Concerted efforts led to signing of a tripartite agreement amongst the States Government of Madhya Pradesh (MP), Uttar Pradesh (UP) and Central Government in March, 2021 for the implementation of the KBLP jointly through a Special Purpose Vehicle (SPV). Efforts are also being made for reaching out consensus amongst concerned States for implementation of other matured projects.

The Inter-State Issues

The Inter-State issues are the key challenges in the implementation of any ILR project. The States with surplus in water resources generally do not agree to such surpluses. It is difficult to have agreement between donor and donee States as the latter in general demand more water. The States are apprehensive about disturbing the existing allocation of water as per Awards/Interstate Agreements. Some States have apprehension that link proposals may have an adverse effect on their existing irrigation and power requirements. In view of growing requirements, some States are challenging the very definition of 'Surplus Basin' agreed earlier.

The Constitution and existing legal provisions do not specially permit or prohibit for Inter-basin transfer of water to non-basin States. The usual practice evolved for execution of specific projects covering inter-alia some Inter-basin transfer and transfers of waters to non-basin States in respect of Inter-State basins is through case specific agreements on water sharing executed amongst a set of State Governments. The issue had come up before some of the Inter-State Water Tribunals. Some of such Tribunal Awards like Godavari Water Disputes Tribunal (GWDT), Narmada Water Disputes Tribunal

(NWDT), Ravi-Beas Tribunal etc. have made provision for Inter-basin water transfer. Normally all the basin water is apportioned amongst co-basin States by the Tribunal making availability of surplus water in a basin a difficult proposition. Even the transfer of water to a basin based on feasible and optimal utilisation as per link alignment is contested by all co-basin States.

The issue of Inter-State cooperation in the implementation of ILR programme has been deliberated from time to time. Recently, a Legal Group was formed by Task Force on ILR to examine the issue. The Legal Group submitted its report in March, 2017. The Legal Group recommended that *there is no need for any constitutional amendment for bringing the subject 'water and its management' either under the concurrent list or under the Union list. In particular, the group felt that no such change is called for in regard to the planning and implementation of the inter basin water transfers or the NPP. It is very important that the decisions in regard to ILR are taken by building the consensus, if not unanimity, amongst all the States concerned. However, agreeing to a negotiated settlement will be facilitated if an alternative decision making process, through legal means, is available for use. The Group recommended that one or more Central legislation may be passed for the purpose of facilitating inter-basin transfer to the States other than co-basin States. The broad parameters of the proposed legislations are:*

- Mentioning in National Water Policy the need for transfer of water from surplus basins to water deficit basins/areas.
- Constitution of National Interlinking of Rivers Authority (NIRA) through an act or executive order.
- Mandating River Basin Authorities (RBAs) to prepare water management plan and decide whether a basin is surplus or deficit.
- Providing dispute resolution mechanism for ILR projects also on the line of adjudication of disputes related to water of Inter-State Rivers.

International Issues in ILR

As shown in Figure 1 above, there are Six ILR links whose some of the components lie either in Nepal or in Bhutan. Also there are another Seven links of Himalayan Component of the NPP, which are dependent on water brought through these Six links. Looking at the reducing water balance in Mahanadi and Godavari basins over the years, even the success implementation of some of the Peninsular Links shall depend upon the water brought from Brahmaputra basin. Moreover, the efficacy of Inter-basin water transfer would depend to large extent upon the water conserved/stored during the monsoon period. Many of the storage sites identified for Inter-basin water transfer lie in Nepal and Bhutan. Thus success of ILR projects will depend upon co-operation with the neighbouring countries especially with Nepal and Bhutan, where most of the storages and Head works are proposed. India, Nepal, Bhutan and Bangladesh need to move forward to create mutual trust for the optimal utilization of water resources, as there is huge potential for constructive cooperation. However, looking at the sensitivity of neighbouring countries at present, it is appropriate to focus firstly on developing storage projects jointly with Hydropower and Flood Control benefits like development of Pancheswar dam, Sankosh dam, Kosi High dam etc. Later on, cooperation in other components like ILR etc. for optimal utilisation of water recourses may be explored at appropriate time.

Mahanadi (Barmul) - Godavari (Dowleiswaram) Link Project (A crucial link in the Peninsular Component of NPP)

*** B. Ravichandar**

This link canal is the first link canal of Nine link canal system of Mahanadi River to Cauvery/Vaigai River and forms foremost part of the Peninsular Component of Inter-State link system identified under the (NPP) of our Country India.

The link canal takes off from proposed Barmul dam on Mahanadi River (near Gania village/Nayagarh district of Odisha State) to Dowleiswaram barrage on Godavari River (near Torredu village/East Godavari district of Andhra Pradesh. Dowleiswaram barrage is an existing Anicut across Godavari River since 1982 and is located downstream of Polavaram ongoing Major project. Barmul project is located 14 km upstream of the proposed Manibhadra project (dropped by Govt. of Odisha).

The length of the proposed link canal is 845 km. For practical reasons, the link canal is divided into two reaches. First is from Barmul dam to Vamsadhara River Crossing (473 km) covering 56% of the total link canal length and second is from Vamsadhara River crossing to Dowleiswaram (372 km) covering 44% of the total link canal length.

The length of link canal in Odisha is 319 km and in Andhra Pradesh is 526 km thus the length of link canal in Odisha State comprises is 40% and in Andhra Pradesh State is 60% of total length of link canal. It passes through the seven basins namely 1) Lower Mahanadi 2) Streams between Mahanadi & Rushikulya 3) Rushikulya 4) Streams between Rushikulya and Vamsadhara 5) Vamsadhara 6) Nagavali and 7) Streams between Nagavali & Godavari. It traverses through six districts of Odisha viz., Nayagarh, Khurda, Cuttack, Puri, Ganjam and Gajapati; and four districts of AP viz., Srikakulam, Vizianagaram, Visakhapatnam and East Godavari.

In Odisha State, the link canal crosses 1) Kuarria River 2) Kusuminadi 3) Mandakini River 4) existing Salia Reservoir 5) Dhanai River 6) Bhagua River 7) Badanadi 8) Rushikulya River 9) Nandini River 10) Gorahara River and 11) Bahuda River; and in Andhra Pradesh State, the link canal crosses through the Rivers of 1) Madala 2) Vamsadhara 3) Kandivalasa 4) Champavati 5) Gosthani 6) Sarada 7) Varaha 8) Tandava 9) Pampa 10) Eleru 11) Torrigedda (outfall point). A total of twenty branch canals take off from this link canal out of which eight branch canals (Kantilo, Kalisahi, khurda, Tangi, Purushottampur, Dengari, Rushikulya and Gorlapadu) are aligned in Odisha and remaining twelve branch canals (Mandasa, Kasibugga, Santakaviti, Ponduru, Etcherla, Laveru, Teppalavalasa, Pativada, Denkada, Uppada, Vepagunta and Tungalam are in Andhra Pradesh.

The link canal also comprises of two enroute tunnels - 1) First tunnel of length 750 m from RD 24.475 km to RD 25.225 km is located in Odisha State (Toposheet 73 H/3) and 2) Second tunnel of length 5400 m is located in Andhra Pradesh State from RD 634.05 km to RD 639.45 km (Toposheet 65 O/1).

For creating more storage and effective monitoring/releases, Six upstream projects (Ong dam/Ong basin, Tel project, Upper Udanti, UtteiRoul, Khadaga, Salki projects of Tel basin) are integrated with the proposed link system. Tel basin and Ong basin are sub-basins of Mahanadi basin.

*** Executive Engineer (Retd.), Nwda, Bhubaneswar.**

Two Power Houses are proposed in this project, 1) Power generation at Barmul dam through release into link canal would be around 153 MW and 2) Power generation from d/s releases into River would be 770 MW. Annual energy generations at the two Power House Sites would be 110 MU and 554 MU respectively.

As per National Institute of Hydrology (NIH), Roorkee report of April 2018, the water balance at Barmul dam is 6794 MCM. Water demand of M-G link would 10105 MCM. Hence, more water is to be diverted from Brahmaputra basin.

Based on the FR study, a quantity of 10105 MCM of water would be diverted through M-G link. Enroute irrigation requirement would be 3790 MCM (Odisha 3184 MCM + AP 606 MCM). Domestic and Industrial water supply would be 310 MCM and 390 MCM respectively. Transmission loss along the link canal would be 569 MCM. Hence, the net flows to Godavari River would be 5046 MCM, through M-G link.

However, to supply 6500 MCM of net water to Godavari River, the remaining quantity of water 1454 MCM (6500-5046), would be supplemented through Manas-Sankosh-Teesta-Ganga (M-S-T-G) link, through the proposed network system of Ganga-Damodar-Subarnarekha (G-D-S) and Subarnarekha-Mahanadi (S-M) links.

There are three alternatives of M-S-T-G link viz., 1) with Manas Dam 2) without Manas Dam and 3) from Sankosh Dam. In any alternative, 1454 MCM of water would be supplemented to M-G link, so that 6500 MCM of net water supply to Godavari River could be ensured.

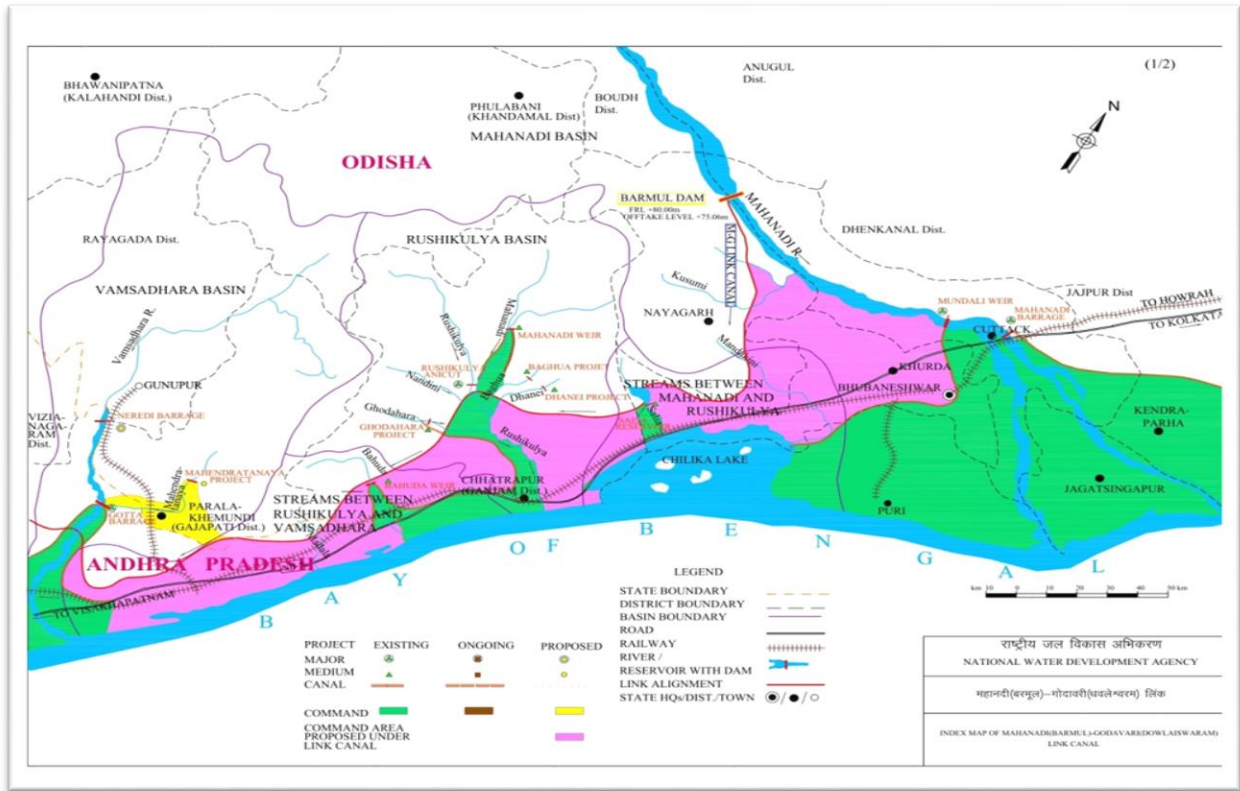
Total irrigation area under M-G link would be 442894 ha (Command area 363959 ha), out of which enroute irrigation in Odisha State would be 351786 ha (Command area 256770 ha) and enroute irrigation in AP would be 91110 ha (Command area 107189 ha). The depth of link canal would be 7 m throughout the length. However, width of link canal varies i) 69 m upto RD 225 km ii) 42 m upto RD 661 km and 28 m for remaining length of link canal. Bed slope of link canal would be 1: 20000. The canal would be of trapezoidal shape, with side slope 1.5 H: 1V. The offtake link canal level would be 75.06 m. The link canal level at tail end would be 14.505 m.

There would be 25 Aqueducts, 28 Syphon Aqueducts, 14 Super passages, 44 under tunnels, 19 Cross Regulators, 7 Escapes, 2 Level Crossings, 83 Single Road Bridges, 31 Double Road bridges and 7 Railway Bridges are proposed in enroute of the link canal.

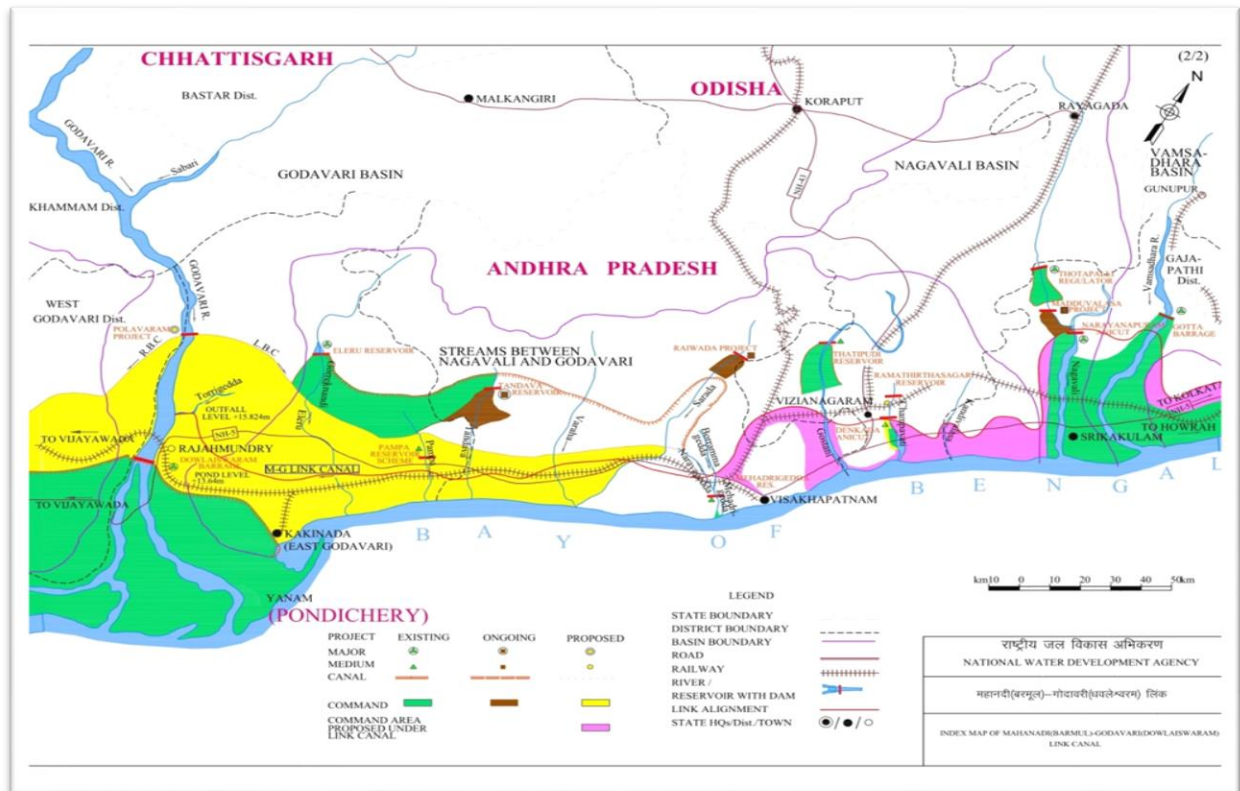
The cost of the link project would be Rs. 54,019 Crores at 2018-19 price level. Annual benefits would be Rs. 6,058 Crores. Annual Cost would be Rs. 2909 Crores. Thus, the Benefit-Cost ratio would be 2.08. The Internal Rate of Return would be 15.60%.

Hence, the Mahanadi-Godavari link project is technically and economically viable. Initially, FR of this link was prepared in the year 2002, considering Manibhadra project as take off point. Later on the modified and updated report (integrating six projects of upstream) has been prepared, considering Barmul dam as take off point. *Manibhadra project is dropped by the Govt. of Odisha, due to vast submergence issue.*

The modified FR is finalised and circulated during October, 2020. Presently, DPR preparation work is initiated and is under progress in NWDA, Investigation Circle, Bhubaneswar. The Estimated cost of the DPR preparation, as per the administrative approval of NWDA (HQ), is 39 Crores, and is bound to be completed in a time span of thirty months.



Index Map of M-G link Part-I (Upto Vamsdhara River)



Index Map of M-G link Part-II (Beyond Vamsdhara River)

Technical Digest

The technical work programme of NWDA mainly contains preparation of DPR/FR/PFR of various link projects coming under the NPP as well as Intra-State links as proposed by State Governments of India; post DPR activities; modifications and scrutiny of FRs and Revision of Water Balance Studies (WBS) of River Basins/Sub-Basins and at Diversion Sites as per the requirement. Details of present status and the progress achieved on the above cited works during the reporting period starting from 01.04.2022 to 31.06.2022 are 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 during the year 2021. Consultation with the party States for implementation of this link project is under progress.
2.	Krishna (Srisailam) - Pennar	Preparatory works for preparation of the DPR in progress.
3.	Godavari (Sitarama LIS) - Krishna (Pulichintala) link project [renamed as Godavari (SSMPP) - Krishna (Pulichintala) Link Project]	Draft DPR Volume-I, II and III were submitted to HQs on 31.05.2022 for comments / observations. The offtake point of the link project is shifted to a barrage under the ongoing Sitamma Sagar Multi-Purpose Project (SSMPP) instead of the existing Sitarama LIS and is renamed as Godavari (SSMPP) - Krishna (Pulichintala) Link Project.
4.	Bedti - Varada	DPR had been prepared and submitted to the Govt. of Karnataka on February, 2022.
5.	Cauvery (Kattalai) - Vaigai - Gundar	Draft DPR has been prepared and circulated to the concerned States for their observations / comments.
6.	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 awarded to CWC and MoU for preparation of the DPR was signed on 19.01.2022. The work of preparation of the DPR is in progress at CWC.
7.	Manas-Sankosh-Tista-Ganga (MSTG) Link Project	Preparation of DPR is under progress. The work of System Study of the link as discussed in the 20 th meeting of Sub-Committee on System Study for identification of most appropriate plan held on 26.03.2022 has been awarded.
8.	Damanganga (Ekdare) - Godavari (Intra-State Link Project)	Draft DPR of the Link Project was submitted to the Govt. of Maharashtra with NWDA designs during October, 2021. Designs by CWC are under progress and the work of CEIA studies of the link was awarded. Observations of the Govt. of Maharashtra on the draft DPR is under compliance.
9.	Damanganga (Val/Vagh) - Vaitarna - Godavari (Kadva Dev) (Intra-State Link Project)	Draft DPR of the Link Project was submitted to the WRD, Nandur Madhameshwar Project Division (NMPD), Govt. of Maharashtra during November, 2021. Consultancy works such as drilling works, geo-technical investigations and designs by CWC are under progress. Solar Power studies by GERM and the work of CEIA studies has been awarded. Modifications of the draft DPR based on the observations of CE, North Maharashtra Region (NMR) & NMPD, WRD, Nashik are under progress. On 25.06.2022,

Sl. No.	Name of Link Project	Present Status of Preparation of DPRs
		SE, NWDA Valsad held discussions with CE, NMR, WRD, Nashik & EE, NMPD, WRD, Govt. of Maharashtra for finalization of alternate alignment, simulation and water distribution system for the command area near Sinnar Taluk area based on the revised water requirements and realignments of DVG link.
10.	Damanganga - Sabarmati - Chorwad Link Project (Intra-State Link)	The Govt. of Gujarat conveyed their consent for preparation of the DPR of the Link on consultancy basis. Estimate for the same has been prepared and submitted to CE (SG) and Addl. Secretary Gandhinagar for consent.
11.	Sarda-Yamuna Link Project	Works related to finalisation of alignment, drill holes and trial pits / auger holes are under progress. A team of NWDA, Lucknow visited the site for reconnaissance survey to finalise the alignment. Preparatory works for preparation of the DPR is in progress.

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)	The first meeting of SC-KBLP was held on 07.04.2022 under the chairmanship of Secretary, DoWR, RD&GR, MoJS. Stage-II / Final forest clearance approval of Lower Orr dam from Forest Advisory Committee (FAC) of MoEF&CC had been received vide their letter dated 06.05.2021. Final Report of Landscape Management Plan (LMP) for KBLP in Panna Tiger Reserve (PTR) has been received from WII, Dehradun. Updation of Comprehensive report is under Progress. 1 st meeting of KBLPA was held on 24.06.2022, in which various issues of implementation of KBLP were discussed.
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. Modification of its DPR incorporating the latest available data is under progress.
3.	Damanganga-Pinjal Link Project (DPLP)	Efforts for getting the clearances from MoEF&CC and MoTA are under progress. The issue of consensus building for water sharing is being pursued by NWDA with the Governments of Maharashtra and Gujarat.
4.	Kosi-Mechi Link Project (Intra-State)	DPR was accepted and recommended respectively by the Advisory Committee and Investment Clearance Committee of DoWR, RD&GR for investment clearance under State Plan. Letter was received from the Govt. of Bihar for preparation of Working DPR. Estimate for preparation of Working DPR has been approved. Draft Agreement to be signed between the WRD, Govt. of Bihar and NWDA is being prepared by WRD Bihar.

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

Sl. No.	Name of Link Project	Present Status of Modification of FRs/PFRs
1.	Ganga-Damodar-Subarnarekha Link Project	FR of the link project was completed and circulated in March, 2021. Preliminary works for taking up of DPR of

Sl. No.	Name of Link Project	Present Status of Modification of FRs/PFRs
		the link is under progress. Estimate for the DPR has been prepared and approved administratively. Finalization of the alignment for the DPR on Toposheet with respect to Google earth is under progress.
2.	Chunar-Sone Barrage Link Project	The FR is being modified as per observations of the CE (N), NWDA, Office.
3.	FR of Mahanadi (Barmul)-Rushikulya-Godavari (Dowlaiswaram) (M-G) Link Project	Draft FR of the link project was completed 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 outsourced to NIH, Roorkee and is in progress. Draft final report of the same has been received from NIH and observations on the same are under scrutiny in CE (N), NWDA Office. Reconnaissance surveys for the alignment from Barmul to Vamsadhara River and also for six projects in Odisha have been completed and Work Order for sample Command Area Survey for two patches (18450+9100=27550 ha.) has been issued. Other preparatory works for preparation of the DPR is under progress.
4.	FR of Kosi-Ghaghara Link	Draft FR has been prepared and presently under modification as per the comments/observations of CE (N), NWDA Office.
5.	Modified Parbati-Kalisindh-Chambal Link Project (PKCLP)	Final PFR of the modified PKCLP circulated to State Governments on 30.03.2022 for their comments / observations. Note on hydrology of Kuno, Parbati and Kalisindh has been prepared and submitted to CWC for vetting. TFILR in its 16 th meeting recommended to place the proposal of making the modified PKCLP as a part of the NPP of ILR and declaring the project as a priority ILR project and placing the same before SCILR for consideration and approval.
6.	Sone Dam-STG Link Project	FR preparation of the Link Project is under progress.
7.	PFR of Nagavalli-Vamsadhara Rushikulya Link Project	PFR of the project of the State Govt. of Odisha has been completed and circulated.
8.	PFR of Sharda-Gomti Link Project	PFR of Sharda-Gomti Intra State Link project of Govt. of UP has been completed and submitted to Govt. of UP.
9.	PFR of Bedti-Hirevaddati Link Project	Draft PFR of the link project is prepared and is under modification as per HQ comments.
10.	Godavari (Inchampalli) - Cauvery (Grand Anicut) link project	Preparation of the PFR of the project (with a diversion of 15600 MCM water) is in progress.

IV. Present Status of Revisions of Water Balance Studies (WBS)

During the reporting period revision of total 3 WBS had been completed and circulated to TAC Members. These WBS are i) Upper Cauvery Sub-basin of Cauvery basin ii) Stream between Rushikulya & Vamsadhara including Bahuda and iii) Middle Cauvery Sub-basin of Cauvery basin. In addition to this, revision of 11 WBS are under progress. The work of Model Water Balance Study using System Studies and modelling techniques of Godavari basin between Sri Ram Sagar Project (SRSP) & Polavaram was given to IIT, Roorkee. IIT-Roorkee submitted the sample study of Sabri Sub-basin and comments of NWDA on sample study of Sabri Sub-basin had been submitted to IIT, Roorkee on 14.06.2022 for compliance.

ILR in Parliament

Here, the ILR issues raised and were discussed in both the houses of Parliament during the Budget Session of the reporting period of 01.04.2022 to 30.06.2022 and projected on the Parliament of India Website (Lok Sabha and Rajya Sabha) are incorporated for information to our readers/stakeholders.

Rajya Sabha

1.1 Whether Government has received any feedback, response or communication from the stakeholder States with regard to Government's Draft Detailed Project Report for Godavari, Krishna and Cauvery River linking project; and if so, the details thereof ?

The draft Detailed Project Report (DPR) of Godavari (Inchampalli) - Cauvery (Grand Anicut) River Link Project was circulated to the concerned States in March, 2019 for their views/suggestions. Comments from various States/Union Territory on the draft DPR have been received and the same were discussed in the joint meeting held by NWDA with the concerned States on 18.09.2020. The comments received from the States/ Union Territory (UT) were also considered during the finalization of the DPR. Those points made by the States, which were considered feasible, were incorporated in the draft DPR which was again circulated in April, 2021 for further comments/views. Karnataka, Andhra Pradesh, Tamil Nadu, Kerala, Puducherry, Maharashtra and Telangana have offered their comments on the DPR.

With a view to build consensus among the party States on water sharing, etc., consultation meetings with party States/UT had been held on 29.10.2021 and 18.02.2022 and the States/UT have been requested to confirm or supplement the details of projects incorporated in the DPR.

The implementation of the ILR projects mainly depends on the consensus among the concerned States.

1.2 Whether it is a fact that Government is planning to link five Rivers in the country; if so, the details thereof; and how it will be helpful in supply of water to water scarce States ?

Under the National Perspective Plan (NPP), the NWDA has identified 30 links (16 under Peninsular Component & 14 under Himalayan Component) for preparation of Feasibility Reports (FR). Out of these, Ken-Betwa Link Project (KBLP), Par-Tapi-Narmada Link Project, Damanganga-Pinjal Link Project and Godavari (Inchampalli Barrage)-Cauvery (Grand Anicut) Link Project have been declared as priority link projects by the Government of India. Godavari (Inchampalli Barrage)-Cauvery (Grand Anicut) Link Project consists of three links, viz; Godavari-Krishna, Krishna-Pennar and Pennar-Cauvery links.

KBLP is the first Interlinking of Rivers (ILR) project under the NPP which is under implementation. The Govt. of India had approved the implementation of KBLP with an estimated cost of Rs. 44,605 Cr (year 2020-21 price level) with central support of Rs. 39,317 Cr through a Special Purpose Vehicle viz; Ken Betwa Link Project Authority (KBLPA) on 08.12.2021. The Gazette Notification for constitution of the Steering Committee and KBLPA had been issued on 11.02.2022.

For other priority ILR projects also the Govt. of India is making all efforts for consensus building. The consultation with the States and review of the progress of ILR projects are being carried out at various platforms. A "Special Committee on Interlinking of Rivers" (SCILR) has been constituted in September, 2014 for the implementations of ILR programme. Nineteen meetings of the SCILR had been held so far. Further, a Task Force for Interlinking of Rivers (TFILR) had been constituted by MoWR, RD&GR (now Ministry of Jal Shakti) in April, 2015 and Fifteen meetings of the TFILR had been held so far. Efforts have been made for building consensus among the concerned States.

The implementation of the ILR projects depends mainly upon consensus among the concerned States.

The implementation of the link projects under the NPP is expected to give benefits of 25 million ha of irrigation from surface water and 10 million ha by increased use of ground water, raising the ultimate irrigation potential from 140 million ha to 175 million ha, apart from generation of 34 million KW of power and other benefits of flood control, navigation, augmentation of water supply, fisheries, salinity control, pollution control and employment generation etc.

1.3 Whether a meeting of the SCILR was held recently; if so, the details of issues discussed therein along with the outcome thereof; whether the DPR related to ILR has been prepared; if so, the details of current status of DPR related to ILR project, which includes various States; and whether Government has taken steps to expedite various ILR projects and, if so, the details thereof ?

Under the NPP, the NWDA has identified 30 links (16 under Peninsular Component & 14 under Himalayan Component) for preparation of Feasibility Reports (FRs). DPRs of eight links have been completed. Details and current status of the proposals for Inter-State Linking of Rivers under the ILR Programme is furnished at **Annexure-I**.

A "SCILR" had been constituted in September, 2014 to expedite execution of the ILR projects. Nineteen meetings of the SCILR had been held so far and the last meeting of the same was held on 12.11.2021, in which the progress of the proposed link projects was discussed and reviewed. Further, a TFILR had been also constituted by MoWR, RD&GR (now Ministry of Jal Shakti) in April, 2015. Fifteen meetings of the TFILR had been held so far and the last meeting of the same was held on 22.10.2021. Efforts have been made for building consensus among the concerned States on water sharing, etc. as the implementations of the ILR projects depend mainly upon consensus among the concerned States

Annexure-I**Details and status of the proposals for Inter-State Linking of Rivers under the ILR Programme**

Sl. No.	Name	Rivers	States concerned	Status
Peninsular Component				
1. (a)	Mahanadi (Manibhadra)-Godavari (Dowlaiswaram) link	Mahanadi and Godavari	Jharkhand, MP, Chhattisgarh, Telangana, AP, Odisha, Karnataka and Maharashtra	FR Completed.
(b)	Mahanadi (Bermul)-Godavari (Dowlaiswaram) link	Mahanadi and Godavari	-do-	FR Completed. Preparation of DPR under progress.
2.	Godavari (Inchampalli link)-Krishna (Pulichintala) link	Godavari and Krishna	Odisha, MP, Chhattisgarh, Telangana, AP, Maharashtra and Karnataka	FR Completed.
3.	Godavari (Inchampalli)-Krishna (Nagarjunasagar) link	Godavari and Krishna	-do-	FR Completed. DPR Completed.
4.	Godavari (Polavaram)-Krishna (Vijayawada) link	Godavari and Krishna	-do-	FR Completed.
5.	Krishna (Almatti)-Pennar link	Krishna and Pennar	Telangana, AP, Maharashtra and Karnataka	FR Completed.
6.	Krishna (Srisailem)-Pennar link	Krishna and Pennar	-do-	FR Completed.
7.	Krishna (Nagarjunasagar)-Pennar (Somasila) link	Krishna and Pennar	-do-	FR Completed. DPR Completed.
8.	Pennar (Somasila)-Cauvery (Grand Anicut) link	Pennar and Cauvery	AP, Karnataka, Tamil Nadu, Kerala and Puducherry	FR Completed. DPR Completed.
9.	Cauvery (Kattalai)-Vaigai-Gundar link	Cauvery, Vaigai and Gundar	Karnataka, Tamil Nadu, Kerala and Puducherry	DPR Completed.
10.	Ken-Betwa link	Ken and Betwa	UP and MP	DPR (Phase – I, II & Comprehensive report) Completed. Project is Under Implementation.
11. (i)	Parbati-Kalisindh-Chambal link	Parbati, Kalisindh and Chambal	MP, UP and Rajasthan requested to be Consulted during consensus building)	FR Completed.
(ii)	Parbati-Kuno-Sindh link	Parbati, Kuno and Sindh	MP and Rajasthan	PFR Completed \$
12.	Par-Tapi-Narmada link	Par, Tapi and Narmada	Maharashtra and Gujarat	DPR Completed.

Sl. No.	Name	Rivers	States concerned	Status
13.	Damanganga-Pinjal link	Damanganga and Pinjal	-do-	DPR Completed.
14.	Bedti-Varada link	Bedti and Varada	Maharashtra, AP and Karnataka	PFR Completed. Draft DPR Completed.
15.	Netravati-Hemavati link	Netravati and Hemavati	Karnataka, Tamil Nadu and Kerala	PFR Completed.
16.	Pamba-Achankovil-Vaippar link	Pamba, Achankovil and Vaippar	Kerala and Tamil Nadu	FR Completed.
\$ <i>Integration of Eastern Rajasthan Canal Project (ERCP) of Rajasthan and Parbati-Kalisindh-Chambal link.</i>				
Himalayan Component				
1.	Manas-Sankosh-Tista-Ganga (M-S-T-G) link	Manas, Sankosh, Tista and Ganga	Bhutan & India (Assam, West Bengal and Bihar)	FR Completed. DPR in progress.
2.	Kosi-Ghaghra link	Kosi and Ghaghra	Nepal & India (Bihar and UP)	PFR Completed.
3.	Gandak-Ganga link	Gandak and Ganga	-do-	FR Completed (Indian portion).
4.	Ghaghra-Yamuna link	Ghaghra and Yamuna	-do-	FR Completed (Indian portion).
5.	Sarda-Yamuna link	Sarda and Yamuna	Nepal & India (Bihar, UP, Uttarakhand, Haryana and Rajasthan)	FR Completed (Indian portion).
6.	Yamuna-Rajasthan link	Yamuna and Sukri	Gujarat, Rajasthan, Haryana and UP	FR Completed.
7.	Rajasthan-Sabarmati link	Sabarmati	-do-	FR Completed.
8.	Chunar- Sone Barrage link	Ganga and Sone	Bihar and UP	FR Completed.
9.	Sone Dam – Southern Tributaries of Ganga link	Sone and Badua	Bihar and Jharkhand	PFR Completed.
10.	Ganga (Farakka)- Damodar-Subarnarekha link	Ganga, Damodar and Subarnarekha	West Bengal, Odisha and Jharkhand	FR Completed. DPR in progress.
11.	Subarnarekha-Mahanadi link	Subarnarekha and Mahanadi	West Bengal and Odisha	FR Completed.
12.	Kosi-Mechi link	Kosi and Mechi	Nepal & India (Bihar and West Bengal)	PFR Completed.
13.	Ganga (Farakka)- Sunderbans link	Ganga and Ichhamati	West Bengal	FR Completed.
14.	Jogighopa-Tista-Farakka link (Alternative to MSTG)	Manas, Tista and Ganga	Assam, Bihar and West Bengal	PFR Completed.

1.4 Whether Government has assessed the impact of the Ken Betwa project on local population that will be displaced by the project implementation; if so, the details thereof, including the number of persons to be displaced and, if not, the reasons therefor; whether the displaced persons will be relocated and provided with any forms of compensation; if so, the details thereof and, if not, the reasons therefor; and the details of measures taken to ensure that local populations were provided detailed information about the project before being asked to attend public hearings ?

A comprehensive Environmental Impact Assessment (EIA) study for the proposed KBLP has been carried out to identify positive and negative impacts of the project on physical, biological and socio-economic environment. It is estimated that total submergence due to Daudhan reservoir shall be about 9,000 ha, spreading over 4,141 ha of Panna Tiger Reserve (PTR) core, 1,314 ha of PTR buffer and 10 villages. About 1,913 families will be affected in these 10 villages. Details of submergence and Rehabilitation and Resettlement (R&R) for other components of KBLP are given at **Annexure-II**.

The R&R Plan of KBLP has been prepared as per the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013. The cost of relief, resettlement and rehabilitation of the affected households under KBLP have been accordingly worked out.

Madhya Pradesh Pollution Control Board (MPPCB) organized public hearings in 2014 at Silon village in Chhatarpur District and Hinnota village in Panna District. Prior to organizing these Public Hearings, MPPCB published a notice of Public Consultation and Disclosure in local newspapers and a time period of 30 days was allowed for the public to respond. The Executive Summary of the project was placed by MPPCB in District Collector's Office, Office of Municipal Corporation, Head office of State Pollution Control Board, State Department of Environment etc. to ensure adequate access of public to it. Both the public hearings were organized with good participation by the public.

Annexure-II

Details of Submergence and Rehabilitation and Resettlement (R&R) for other Components of KBLP

Sl. No.	Project Name	No. of Villages	No. of Project Affected Families	Area submerged (in Ha)
1.	Lower Orr Dam	12	944	2,723.70
2.	Kotha Barrage Project	27	638	1,359.00
3.	Bina Complex Project	84	2,290	9,114.70

Water Resources in Media

The Times of India, dated: 25.04.2022

Banking on rain: More catchment reservoirs along river to help ensure taps don't run dry

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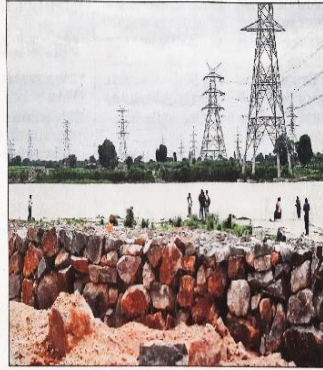
File photo

New Delhi: In a bid to catch the Yamuna's excess water during the monsoon and augment the city's drinking water supply, the Delhi Jal Board has started constructing more catchment reservoirs along the river.

In a letter to the Delhi government's revenue department, the Delhi Jal Board has sought help to take 400 acres of land on lease in north Delhi's Burari and neighbouring areas along the river. While 100 acres of this land belongs to the government's flood and irrigation control department, the DJB has shown interest in taking the remaining 300 acres of land from the individuals on a 30-year lease.

Sources said a five-member committee comprising the divisional commissioner, officials of the finance, revenue and irrigation and flood control departments and DJB is being constituted to negotiate with individuals and acquire the land.

According to officials, chief minister Arvind Kejriwal had in February given the go-ahead to the construction of two catchment reservoirs along the Yamuna to store the monsoon run-off.



HEALTHY START: According to a Delhi Jal Board official, the pilot project of storing the excess water in Palla had shown positive results

While one reservoir would come in a 400-acre area on the western bank of the river north of the Wazirabad reservoir, a smaller 20-acre reservoir would be built slightly away from the Yamuna but within its catchment area.

"The bigger reservoir will be able to store 1735 million gallons of floodwater

while the smaller one will have the capacity of approximately 220 million gallons, as it will be much deeper," said a Delhi government official privy to the project, adding that it will have minimal or no adverse impact on the river ecology.

Officials said the excess floodwater reaching the Delhi part of the Yamuna

A GOVT OFFICIAL SAYS

The bigger reservoir will be able to store 1,735 million gallons of floodwater while the smaller one will have the capacity of approximately 220 million gallons

would be stored and purified in these reservoirs, which will eventually help in augmenting the supply in the capital. While there is a projected demand of 1,238 million gallons per day, the supply is estimated at around 963 MGD, with a clear shortfall of 300 MGD water. Storage of excess rainwater will solve Delhi's mounting water crisis.

According to a DJB official, the pilot project of storing the excess water in Palla had shown positive results. The Palla project was started in 2019 by digging shallow pits over 45 acres of land to store excess rainwater. It was observed that in the first year, the groundwater level increased between 1.5 metres, while the second year saw it swelling between 0.5 metres to 2 metres during the monsoon flooding cycle, said an official.

The Times of India, dated: 11.05.2022

Pollution down in Yamuna, but still 1,220 times higher than acceptable standards

Kushagra Dixit@timesgroup.com

New Delhi: The Yamuna's water quality saw a slight improvement in April compared with March, according to a report by Delhi Pollution Control Committee. However, the pollution level through faecal coliform or untreated sewage was still 1,220 times higher than the desired standard.

The analysis showed components like dissolved oxygen (DO), biochemical oxygen demand (BOD) and faecal coliform were within permissible limits when the river entered the city. But by the time it approached the exit point, a high level of effluents left it more polluted.

Faecal coliform is found in excreta that contaminates water through untreated sewage. The higher its level, the greater is the presence of disease-causing pathogens in the water. DO indicates the presence of life in the water while BOD is the minimum oxygen required by the river to break and manage organic matter.

According to the report, faecal coliform levels in the river were 1,200 MPN (most probable number)/100ml at entry. At the Asgarpur exit, after the confluence of Shahdara and Tughlaqabad drains, the levels stood at 6,30,000 MPN/100ml — 244 times higher than the maximum permissible limit of 2,500 MPN/100ml and 1,220 times higher than the desired limit of 500 MPN/100ml. The exit levels were worse in the previous two months — they stood at 8,40,000 MPN/100 ml in March and 7,90,000 MPN/100 ml in February.

In April, the BOD levels, which should not exceed 3 mg/l, worsened slightly com-

A DROP IN THE OCEAN

The total stretch of the river in Delhi is about 48 km from Palla to Okhla barrage

22km-long urban stretch from Wazirabad barrage to Okhla barrage is most polluted

BOD is the minimum oxygen required to treat or break the biological/organic pollutants in the water

High BOD also depicts that untreated sewage is present



Station	DO (min)	BOD (max)	Faecal coliform (Desired 500 MPN/100ml)
Palla (in)	8.1	2.5	1,200
Wazirabad	5.0	9	26,000
SBT bridge	NH	30	2,60,000
Asgarpur (out)	NH	75	6,30,000

pared to March, ranging between 2.5 mg/l and 75 mg/l against 3-70 mg/l the previous month.

While the BOD levels were normal at Palla, where the river enters Delhi, they increased expo-

mentally between Wazirabad and SBT bridge and worsened thereafter. Similarly, the DO level was within the safe limit (8ml/l) at entry point, but deteriorated (close to nil) by the time the river left the city.

A DPCC analysis in March showed most sewage treatment plants didn't meet prescribed standards. Out of 26 STPs inspected, only eight catering to 120 MGD (million gallons per day) of sewage met the standards on COD, BOD and total suspended solids.

"The quality of the river fluctuates with the flow of water, but the pollution sources are consistent. At Signature Bridge, the Yamuna enters the city but the flow is blocked and diverted, after which sewage from Najafgarh and 28 other drains seeps into it, thereby polluting it," said a Delhi Jal Board official.

The Hindu, dated: 21.05.2022



Touch and go: Indian Army personnel rescue a man from flood waters in the Jamunamukh area in Hojai district of Assam on Friday. ■ RITU RAJ KONWAR

Floods wreak havoc in Assam

SPECIAL CORRESPONDENT GUWAHATI

Rains in Assam have affected 7.18 lakh people across 27 flood-hit districts and caused widespread damage to private and public infrastructure besides inundating 63,970.62 hectares of cropland.

According to data provided by the Assam State Disaster Management Authority (ASDMA) on Thursday, two

people drowned in Nagaon district. Floods and landslides since May 14 have so far killed 11 people while seven others have been reported missing.

"So far, 80,298 people including 12,855 children have been shifted to 167 relief camps across the flood-affected districts," an ASDMA spokesperson said.

A defence spokesperson said more than 900 people

were rescued by the Army in central Assam's Hojai, one of the worst-affected districts. Personnel of the National Disaster Response Force and other agencies have evacuated almost 7,000 others by boats.

Chief Minister Himanta Biswa Sarma, who inspected landslide-hit districts said the Centre has sanctioned ₹1,000-crore for Assam to deal with the flood situation.

The Times of India, dated: 24.05.2022

Rain brings more chaos than comfort in Ggn

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Gurgaon: Office-goers, students headed for an exam and flyers travelling for work meets — Monday blues for them came on the road as they battled a maze of challenges that freak weather and shaky infrastructure had hurled at them.

A road cove in here a flooded street there and a stretch blocked by an uprooted tree somewhere else — there were hurdles everywhere that strong winds and 75.5mm of rain early in the morning brought in their wake. Roads in several areas developed craters. There were cave-ins around IFFCO Chowk on the Delhi-Gurgaon expressway Sheela Mata Road, Atul Kataria Chowk, Bansi and Palam Vihar, among others. The service lanes of Delhi-Gurgaon expressway and several internal stretches in Sushant Lok, South City, Palam Vihar and Golf Course road were under knee-deep water. Stuck on the road for hours, people were late to reach offices, students got held up for their exams and several cancelled flights turned a nightmare for travellers.

Although the rain brought relief from the punishing spells



WATER WORLD: Complaints about waterlogging and snarls started pouring in from as early as 6.30am



of heatwave, there was no opportunity to soak in the comfort. Dharm Veer Singh had left his Sector 82 home an hour in advance to reach his son Dipen at the exam centre in Sector 54. Dipen had his computer science paper for CBSE X boards.

"There were traffic jams everywhere — the Kherki Daula toll, IFFCO Chowk and Golf Course Road. Police, too, could not do much. My son was 35 minutes late for his exam. One of his friends waded through wa-

ter to reach the centre, another hitched a ride. Many of them were 25-30 minutes late," said Singh, president of Mapsko Casabella RWA. "Why don't MCG and GMDA act in advance?"

It wasn't easy for travellers either. Priyanka Sidana, who works with Hero MotoCorp, was stuck on the road for almost two hours. Her ordeal was far from over when she reached the airport. "My first flight to Pune got cancelled. I then booked an alternative

flight, which also got delayed by three hours. I booked a third flight, which was again three hours late. Half the day was wasted in this. I finally boarded an evening flight," she told TOI.

The Gurgaon administration did issue an advisory asking corporate houses and private offices to allow employees to work from home. But by the time it did, the city was already mired in the move.

For those working from home, it wasn't any better. There

were power cuts in several sectors and the internet was feeble.

The small toppled trees around the city — around 150, by estimates — on Monday morning. Most of these were at green belts or landscaped areas. Experts said this had likely happened because the roots of trees in landscaped areas are not as strong as they receive inadequate nutrients because of concretisation around them.

(With inputs from Siddharth Tiwari)

Glimpses of NWDA

I. Meeting on Integrated Landscape Management Plan of KBLP

A meeting of all stakeholders for finalization of ILMP along with five Supplementary Plans prepared by WII, Dehradun for the KBLP in Panna Tiger Reserve (PTR), MP was held on 06.04.2022 under the Chairmanship of DG, NWDA in the Committee Room of NWDA. During the meeting, DG, NWDA requested the stakeholders to give their further observations, if any, on the draft ILMP report prepared by WII, Dehradun and it was decided to finalize the report before the end of the month of April, 2022 by duly incorporating the suggestions / views of all the stakeholders suitably.



II. First Meeting of Steering Committee of Ken-Betwa Link Project

The First Meeting of Steering Committee of KBLP (SC-KBLP) was held under the Chairmanship of Shri Pankaj Kumar, Secretary, DoWR, RD&GR, MoJS & Chairman, SC-KBLP on 07.04.2022 in the Committee Room of Ministry of Labour and Employment, Shram Shakti Bhawan, New Delhi.



Important decisions taken in the meeting includes the Government of MP may actively pursue the land acquisition in respect of 21 villages and initiate the process of transfer of non-forest Govt. land identified for Compensatory Afforestation (CA) for the PTR coming under the submergence in 21 villages immediately. It was proposed to open the Head Office of the KBLPA at Bhopal and offices at Chhatarpur and Jhansi. The recruitment rules for CEO / ACEOs for the KBLPA may be modified and process to be initiated for the engagement of CEO/ ACEOs/ Director (F) at the earliest. The ILMP report to be finalised and the recommendation of the same along with implementation mechanism shall be placed in next meeting of the SC-KBLP. ToRs to be finalised and process to be initiated for the engagement of Project Management Consultant (PMC) at the earliest.

III. 16th Meeting of Task Force for Interlinking of Rivers (TFILR)

The sixteenth meeting of TFILR was held on 17.05.2022 in hybrid mode under the Chairmanship of Shri Sriram Vedire, Chairman, TFILR & Advisor, MoJS, DoWR, RD&GR.

During the meeting DG, NWDA informed that the proposal for constitution of NIRA was broadly agreed upon by the SCILR in its 19th meeting and as suggested by DoE

(Department of Expenditure), the CEE (Committee of Establishment Expenditure), a note has been prepared and submitted to the Ministry and the same is under submission to DoE. He also briefed the members about the present status and progress made in moving forward towards the implementation of KBLP. The Chairman TFILR, CWC and Members gave their suggestions regarding implementation of the KBLP.



The TFILR recommended to place the proposal of making the modified PKC link as part of the NPP of ILR and declaring the project as a priority ILR project before the SCILR for consideration and approval. Consideration of Mahanadi-Godavari (M-G) as one of the priority link project was also discussed by the Members of the TFILR.

IV. Review Meeting held by Director General, NWDA on NWDA Website



DG, NWDA held a review meeting on 01.06.2022 at NWDA (HQ), Saket to discuss various issues of NWDA Website and performance of NWDA on Social Media.

During the meeting various decisions regarding the steps to be expedited to improve the public reach and other performance parameters of social media handles of NWDA were taken. Various issues of NWDA website regarding its quality and security were also discussed.

V. Release of Report on Integrated Landscape Management Plan for Greater Panna Landscape

The final report on Integrated Landscape Management Plan (ILMP) for Greater Panna Landscape was released by Shri Pankaj Kumar, Secretary, DoWR, RD&GR, MoJS in presence of the Officers from the Ministry of Environment and Forest, and other concerned organizations on 02.06.2022.

The preparation of the ILMP was awarded to the Wildlife Institute of India (WII), Dehradun for the KBLP, which had been approved by the GoI in December, 2021 for implementation, following the signing of a historic agreement on 22.03.2021 between the Union Minister of Jal Shakti and the Chief Ministers of MP and UP in virtual presence of the Hon'ble Prime Minister of India.



Subsequently the WII carried out extensive field works by using advanced scientific tools and techniques, analysed the data and came up with the detailed site-specific inputs for Implementation of the proposed activities. The Landscape Plan provides for better habitat protection and management of flagship species (tigers, vulture and gharial). It will help to holistically consolidate the landscape for biodiversity conservation and human well-being, especially to the forest dependent communities. It is expected to enhance

tiger carrying capacity due to the proposed strengthening connectivity with Nauradehi Wild Life Sanctuary (WLS) and Durgavati WLS in MP and Ranipur WLS in UP.

VI. Signing of MoU between Central Water Commission (CWC) and NWDA



Signing of MoU in the presence of Member (D&R), CWC and DG, NWDA

An MoU had been signed on 09.06.2022 between CWC and NWDA for providing construction and DPR stage design consultancy for various links proposed by NWDA during 2022-2024.

The CWC is an apex organization in the country, involved in the planning and designing of water resource structures. NWDA has been taking up the consultancy from CWC in hydrology and design of various links from time to time. Considering the fact that the DPR works of

several links are being carried out by NWDA and constructions of one or two links are also likely to be taken up soon by NWDA, a long-term understanding with CWC for providing design consultancy of links taken up either for preparations of DPR or constructions like KBLP was being looked into by NWDA.

The issue was discussed in a meeting taken by Member (D&R), CWC with DG, NWDA on 23.11.2021. As per the discussion arrived during the meeting, the current MoU proposes a long term agreement between CWC and NWDA, say for the next three years, from the year 2022 to the year 2024, for carrying out the consultancy works by CWC in hydrology; designing works of DPR of various links; construction stage design works of KBLP or any other project as and when taken up by NWDA during the MoU period.

The scope of works in the current MoU shall cover the ongoing consultancy works as well as new works of DPRs and construction stage designs.

VII. Induction Training Programme for Newly Recruited Junior Engineers of NWDA

An Induction Training Program for the newly recruited Junior Engineers (JEs) of NWDA, had been organized at National Water Academy (NWA), Pune from 13.06.2022 to 24.06.2022. Shri Bhopal Singh, DG, NWDA and Shri D.K. Tiwary, Head of NWA inaugurated the program and addressed the inductees on the occasion. G. Srinivasulu, Deputy Director, NWA was the Course Coordinator of the program. During the training period, the Officers of NWDA, NWA, CWC, NIH and MoJS delivered lectures on various topics including Preparations of PFRs/ FRs/ DPR and on NPP; ILR-A Case Study; Topographical Survey of Water Resources Project; latest technologies of topographical surveys; System Study of Mahanadi-Godavari Link Project - Case Study; and uses of latest softwares like MODEFLOW, WEAP, MIKE HYDRO and CROPWATT 8.0 etc. Field Visit had been arranged to Dhom Dam near Mahabaleshwar, where various components of dams such as Spillway, Barrage, Weirs and Hydropower Plants had been explained by Experts.



The Art of Living Class and Yoga Session were also a part of the Program. During Valedictory Function, certificates had been given to all the JEs.

VIII. First Meeting of Ken-Betwa Link Project Authority (KBLPA)



First meeting of the KBLPA was held under the Chairmanship of DG, NWDA & CEO, KBLPA on 24.06.2022 at NWDA, Palika Bhawan, New Delhi.

During the meeting, the Review / Progress of works accomplished in 2021-22 and the Work Plan of 2022-23 of the KBLP were discussed and the present status was informed to Members. The follow up actions on various decisions taken in the first

meeting of the SC-KBLPA was also discussed. The WRD, MP informed about the latest status of work of Phase-II projects viz. Lower Orr, Bina Complex and Kotha Barrage. It was further requested that the WRD, MP may be sent the monthly progress of all the three projects w.e.f June, 2022 including status of land (Govt., Private and Forest) to the Authority so as to validate the implementation of R&R and Property Survey. The CEO, KBLPA suggested that a status note on R&R status and other issues may be prepared for the advice of Steering Committee. The I&WRD, UP to open a bank account for transfer of budget through PFMS; and Director (Finance), KBLPA to open their account for KBLPA in Jhansi, Bhopal and Chhatarpur Divisions; and the Head office of the KBLPA at Bhopal office may be made operational at the earliest. It was also informed during the meeting that the revision of comprehensive DPR is likely to be completed by mid of July, 2022. Thereafter it will be shared with both the States of MP and UP and then it will be submitted to CWC. The meeting concluded with vote of thanks to the Chair, all Members and Participants.

IX. Programmes Organised under "Azadi Ka Amrit Mahotsav"

Various Awareness Activities / Programmes on ILR projects were conducted by Field Offices and NWDA (HQ) during the reporting period. A webinar was conducted by the NWDA, Hyderabad on 04.05.2022. Lectures presented during the webinar were as detailed below.



Sl. No.	Technical Presentation			
	Forenoon Session		Afternoon Session	
	Topic	Presenter	Topic	Presenter
1.	A keynote address on 'Modern Technology for Survey and Investigations in DPR Preparation'.	Dr. R.N. Sankhua, Chief Engineer (S), NWDA	Presentation on 'An overview on KBLP'.	Shri B.L. Sharma, SE
2.	Lecture on 'Computation of basin weighted rainfall through Global Mapper software'.	Shri R. Ramraj, Consultant	Lecture on 'Land Acquisition in the context of Irrigation projects-Process, Provisions and Challenges.	Shri S.K. Gawande, EE and Shri H.K. Pande, Consultant
3.	'75 years of Independence and 40 years of River Linking'.	Shri K.S. Naidu, Assistant Director, NWDA	Presentation on 'A successful journey of KBLP'.	Shri Raghvendra Gupta, EE
4.	'Utilization of west flowing River waters in rain shadow areas of Western Ghats - A Case Study'.	Ms. Mitra Pradeep, Junior Engineer, NWDA	Lecture on 'Application of RS and GIS in Inter-Basin Water Transfer Studies (ILR Project) with special reference to studies done in NWDA'.	Shri MP Krishnamurthy, Assistant Director, NWDA

A rally was organised by NWDA, Kolkata on 10.05.2022 for creating awareness on ILR programme. Banners were displayed and Pamphlets related to Par Tapi Narmada (PTN) and Damanganga-Sabarmati-Chorwad (DSC) Link Projects were distributed by NWDA, Vadodara from 16.05.2022 to 21.05.2022. NWDA, Gwalior organized awareness rally on KBLP on 20.05.2022.



X. Celebration of International Yoga Day – 2022

The COVID-19 pandemic and its impacts has generated anxiousness among people about their wellbeing and existence. People around the world embraced Yoga to stay healthy and be rejuvenated and to fight social isolation and depression during the pandemic. By now practising of Yoga proved that it can be an important instrument in the collective quest of humanity for promoting sustainable lifestyle in harmony with planet Earth. In keeping with this spirit, the theme identified for International Yoga Day-2022 was "Yoga for Humanity".

The Concept of the International Yoga Day (IYD) was first proposed by the Hon'ble Prime Minister of India during his speech at the UN General Assembly (UNGA) on 27.09.2014. Subsequently, the UNGA on 11.12.2014 announced that June 21st will be seen as International Yoga Day or World Yoga Day in all the forthcoming years. Yoga Day-2022 was celebrated on 21.06.2022 in NWDA (HQ) as well as in Field Offices. Here shown are some glimpses of the celebrations.



DG, NWDA with Officials at HQ



Officials of NWDA, Nashik



World Environment Day (WED) is celebrated on 5th June, every year to create awareness about problems faced by the environment due to air pollution, global warming, deforestation, wild forest fires etc. The celebrations initiated to help make a check on the kind of life we all are living that harms and destroys nature. The WED was established following the UN Conference on the Human Environment in Stockholm in 1972, and after two years, in 1974 the first WED was held. Since then the event has been celebrated annually on 5 June, with in a different country hosting it in each year.

The theme for the WED 2022 was "Only One Earth", with focus on "living sustainably in harmony with nature". The Central Government had issued an advisory to all States and Union territories to phase out single use plastic and contribute to improving the environment under the overarching mandate of "Clean and Green".

**Protecting our environment starts with us.
Simple things that we can do to help protect the Earth.**

Reduce, reuse and recycle

Cut down on what we throw away. Follow the three "R's" to conserve natural resources and curtail landfill space,

Volunteer

Volunteer for clean-ups in our community. We can get involved in protecting our watershed through sustainable planning, development and management,

Educate

When we further concentrate in our own education, we can help others understand the importance and value of our natural resources,

Conserve water

The less water we use, the less wastewater production and that eventually end up in less pollution of the rivers and ocean as a whole,

Shop wisely

Buy less plastic and bring a reusable shopping bag,

Use long-lasting light bulbs

Energy efficient light bulbs reduce greenhouse gas emissions. Also flip the light switch off when we leave the room,

Plant a tree

Trees provide food and oxygen and absorption of carbon. They help save energy, clean the air, and help combat climate change,

Don't send chemicals into our waterways

Choose non-toxic chemicals in homes and offices,

Bike more, drive less

Wherever possible, Use cycle in place of petrol/diesel vehicles.

"Save Planet Earth. It's the only Home we have".

Family Corner

Hand Gestures (Hast Mudra) for Healthy Life

* Vineeta Sharma

Mudras or postures help link the brain to the body, soothe pain, stimulate endorphins, change the mood and increase our vitality. Mudras are used extensively in Yoga, Meditation and Dance.

Our body is like a mini world, which consists of five elements or components Vayu (Air), Agni (Fire), Jal (Water), Bhumi (Earth), and Akasha (Aether). When any of these elements is disturbed, one can experience some imbalance in mind and it can also lead to illness. Hand gestures assist in controlling energy flows to particular parts of our brain. Practicing of various Mudras develop a connection with the brain patterns that affect the unconscious reflexes in different parts of the body make our body as a whole to a more balanced and healthy one.

Some of main hand gestures are:

Gyan Mudra (Mudra of Knowledge)

To perform this yoga pose, couch your index finger using thumb and ensure that the remaining three fingers stretched and straight. This pose can be performed better early in the morning for a duration of 35 to 40 minutes. Gyan Mudra helps in opening root chakra, which reduces depression and tension. The Mudra kindles body's air element, which in turn leads to an improved nervous system, memory power and production of the pituitary gland.



Vayu Mudra (Mudra of Air)

Use thumb to press index finger while bending it and ensure that the remaining fingers remain straight. For this Mudra to be effective, you need to do it for an average of 45 minutes every day. The Mudra is responsible for controlling Vata dosha and it is good for people with conditions like gout, gas problems, knee pain, arthritis, sciatica, and bulging stomach.



Prana Mudra (Mudra of life)

Use both little and ring fingers to touch thumb's tip, and keep the other two fingers stretched or straight. Take regular breaths, as you inhale and exhale after every few seconds. Practicing this Mudra for 30 to 40 minutes each day can help to achieve great results. Prana Mudra enhances eyesight, removes tiredness, reduces vitamin deficiency, and it helps our bodies to be resistant to diseases.



Shunya Mudra (Mudra of Emptiness)

While sitting comfortably, bend middle finger in a manner that it allows to keep it at thumb's base. Then, use the tip of your thumb to press the middle finger's first phalanx bone, and ensure that the remaining three fingers remain stretched and straight. To achieve great results, practice Shunya Mudra three times a day, for 15 minutes. It helps in reducing the body's space element. Practicing Shunya Mudra for one hour on a regular basis can assist in reducing watering in your eyes as well as ear pain. Shunya Mudra strengthens bones, improves hearing, reduces throat problems and heart-related diseases.



Apan Mudra (Mudra of Digestion)

Bend the middle and ring finger and then touch thumb's tip as the other two fingers remain straight. Also known as Mudra of Digestion, it relieves constipation, diabetes, piles, dental problems, and kidney problems.



Surya Mudra (Mudra of the Sun)

Using the tips of ring finger, touch thumb's base and then exert some pressure to the thumb. Ensure that the other fingers remain relaxed or straight. To achieve great results, make sure to practice Surya Mudra for 30 minutes every day in the morning. Practicing this Mudra helps you to lose weight and control obesity. This mudra upsurges your body's fire element, and this helps in maintaining the body temperature as well as improving your vision.



Varun Mudra (Mudra of Water)

Faintly touch thumb's tip using little finger and then exert a little pressure and check to see whether there is any difference. This Mudra doesn't have a time limit, and one can do it anywhere and anytime. To get better results, consider sitting cross-legged. It is good for skin care as it helps in reducing skin dryness and it assists in improving skin softness and luster. It helps to cure several skin diseases and it inspires fluid communication and openness.



Assistant Director (Hydrology), NWDA, Saket, New Delhi.

Involvement of NWDA in Pradhan Mantri Krishi Sinchayee Yojana

During 2015-16, Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) was launched by the Central Government with an overarching vision to ensure access to protective irrigation for all agricultural farms in the country, and to produce 'per drop more crop', thus bringing much desired rural prosperity.

Accelerated Irrigation Benefits Programme

Central Government launched the Accelerated Irrigation Benefits Programme (AIBP) in the year 1996-97 to provide Central Assistance (CA) to Major/Medium Irrigation (MMI) projects in the country, with the objective to accelerate implementation of such projects which were in advanced stage of completion. After the launch of the PMKSY, the AIBP became a part of the PMKSY. Under PMKSY-AIBP, 99 projects have been prioritized for implementation. The progress of the projects in physical as well as financial terms is monitored through the field units of CWC and Nodal Officer nominated for each of the 99 priority projects regularly, using Management Information System (MIS) developed for this purpose.

NWDA has been identified to act as an agency for borrowing resources from Long Term Irrigation Fund (LTIF) and release Central Assistance (CA) received from NABARD to concerned State Government(s) to complete the PMKSY-AIBP projects in a time bound manner. NWDA has signed a contract agreement in October, 2017 with M/S WAPCOS Limited for "Establishment of Project Monitoring Unit (PMU). The PMU established under the Chairmanship of CE (HQ), NWDA to work in coordination with Ministry of Jal Shakti, NABARD and M/S WAPCOS and release CA as and when due to the concerned State(s).

Release of Fund under PMKSY-AIBP up to 30.06.2022 (Rs. in Crores)				
Sl. No.	Names of States covered under PMKSY-AIBP	Fund released upto 2021-22	Fund released during year 2022-23	Total fund released upto 30.06.2022
1.	Andhra Pradesh	91.8100	0.00	91.8100
2.	Assam	7.5500	0.00	7.5500
3.	Bihar	146.0633	0.00	146.0633
4.	Chhattisgarh	62.7896	0.00	62.7896
5.	Goa	3.84	0.00	3.8400
6.	Gujarat	5635.4553	0.00	5635.4553
7.	Jammu & Kashmir	46.2522	0.00	46.2522
8.	Jharkhand	756.7300	0.00	756.7300
9.	Karnataka	1183.3170	0.00	1183.3170
10.	Kerala	2.69	0.00	2.6900
11.	Madhya Pradesh	811.1150	0.00	811.1150
12.	Maharashtra	1796.7866	0.00	1796.7866
13.	Manipur	228.3540	0.00	228.3540
14.	Odisha	1340.8247	0.00	1340.8247
15.	Punjab	277.9460	0.00	277.9460
16.	Rajasthan	509.9450	0.00	509.9450
17.	Telangana	673.8640	0.00	673.8640
18.	Uttar Pradesh	1553.9120	0.00	1553.9120
	Total A	15129.2447	0.00	15129.2447
Name of Projects				
1.	Polavaram Project	10650.1600	0.00	10650.1600
2.	North Koel Project	721.2200	0.00	721.2200
	Total B	11371.3800	0.0000	11371.3800
	Grand Total (A+B)	26500.6247	0.0000	26500.6247

Appointments, Promotions and Retirements of NWDA Officials

During the reporting period starting from 1st April, 2022 to 30th June, 2022:

Appointments:

Sl. No.	Name & Designation	Deputation/ Direct/ Compensatory Ground	Place of Posting
1.	Shri Dheer Singh Meena, Junior Engineer	Direct w.e.f. 01.04.2022	ID, NWDA, Jhansi
2.	Shri Sandeep Sumanm, Junior Engineer	Direct w.e.f. 01.04.2022	ID, NWDA, Hyderabad
3.	Shri Deepanshu Panchal, Lower Division Clerk	Direct w.e.f. 02.04.2022	ID, NWDA, Kolkata
4.	Shri Nishant Nishu, Junior Account Officer	Direct w.e.f. 04.04.2022	ID, NWDA, Jhansi
5.	Shri Vishal Singh, Lower Division Ckerk	Direct w.e.f. 05.04.2022	NWDA (Hqs.), New Delhi
6.	Shri Abhishek Kumar, Junior Engineer	Direct w.e.f. 05.04.2022	ID, NWDA, Nagpur
7.	Shri Abir Sarkar, Junior Engineer	Direct w.e.f. 06.04.2022	NWDA (Hqs.), New Delhi
8.	Ms. Gopika Balagopal PC, Junior Engineer	Direct w.e.f. 07.04.2022	ID, NWDA, Bengaluru.
9.	Shri Akash Srivastava, Junior Engineer	Direct w.e.f. 07.04.2022	O/o CE(North), Lucknow
10.	Shri Subodh Kumar, Junior Engineer	Direct w.e.f. 08.04.2022	NWDA (Hqs.), New Delhi
11.	Shri Sunny Kumar, Junior Engineer	Direct w.e.f. 08.04.2022	ID, NWDA, Patna
12.	Shri Arghya Prasad Pramanik, Junior Engineer	Direct w.e.f. 08.04.2022	ID, NWDA, Kolkata
13.	Shri Aman, Junior Engineer	Direct w.e.f. 11.04.2022	NWDA (Hqs.), New Delhi
14.	Shri Yogesh Kumar, Junior Engineer	Direct w.e.f. 11.04.2022	ID, NWDA, Gwalior
15.	Shri Vikas Ranjan, Junior Engineer	Direct w.e.f. 12.04.2022	ID, NWDA, Bhubaneswar
16.	Shri Monu, Junior Engineer	Direct w.e.f. 18.04.2022	IC,NWDA, Gwalior
17.	Shri Prashant Kumar Singh, Junior Engineer	Direct w.e.f. 20.04.2022	ID, NWDA, Chennai
18.	Shri Nand Lal Chaudhary, Junior Engineer	Direct w.e.f. 20.04.2022	ID, NWDA, Lucknow
19.	Shri Akshit Rohilla, Hindi Translator	Direct w.e.f. 02.05.2022	NWDA (Hqs.), New Delhi
20.	Shri Dharm Singh Pakad, Junior Engineer	Direct w.e.f. 02.05.2022	ID, NWDA, Gwalior
21.	Shri Bhoga Shiva Prasad, Lower Division Clerk	Comp. Ground w.e.f. 10.05.2022	ID, NWDA, Valsad
21.	Shri K. Ramana Rao, Lower Division Clerk	Comp. Ground w.e.f. 11.05.2022	IC, NWDA, Bhubaneswar
22.	Shri Manoj Srivastava, Lower Division Clerk	Comp. Ground w.e.f. 23.05.2022	ID, NWDA, Jhansi

Promotions:

Sl. No.	Name & Designation	Post and Date of Promotion	Place of Posting on Promotion
1.	Shri B.S. Ucharia, Deputy Director	Superintending Eng. w.e.f. 21.03.2022	IC, NWDA, Patna
2.	Shri R. Vinod Kumar, Asstt. Ex. Engineer	Deputy Director w.e.f. 31.03.2022	NWDA (Hqs.), New Delhi
3.	Smt. M. Vasundhara, Head Clerk	Superintendent Gr.-II w.e.f. 04.04.2022	O/o the CE (South), NWDA, Hyderabad
4.	Smt. Mahadevi S.A. Biradar Draughtsman Gr-II	Draughtsman Gr.-I w.e.f.04.04.0422	ID, NWDA, Bangaluru
5.	Smt. N.S. Bhagya , Draughtsman Gr-I	Draughtsman Gr.-I w.e.f. 04.04.4022	ID, NWDA, Bangaluru
6.	Smt. Shimantika Mohanty, Draughtsman Gr-III	Draughtsman Gr.-II w.e.f. 05.04.4022	ID, NWDA, Bhubaneswar
7.	Smt. Sandhya Rani Mohapatra, Draughtsman Gr-II	Draughtsman Gr.-II w.e.f. 05.04.2022	IC, NWDA, Bhubaneswar
8.	Smt. S.K. Geetha, Upper Division Clerk	Head Clerk w.e.f. 05.04.2022	ID, NWDA, Bangaluru
9.	Shri K. Sekhar Naik, Upper Division Clerk	Head Clerk w.e.f. 05.04.2022	ID, Hyderabad
10.	Shri G. Veerjanand, Draughtsman Gr.-III	Draughtsman Gr.-II w.e.f. 06.04.2022	IC, NWDA, Hyderabad
11.	Shri B.K. Singh, Assistant Engineer	Assistant Ex. Engineer w.e.f. 08.04.2022	ID, NWDA, Patna
12.	Shri J.B. Jani, Junior Accountant	Jr. Accounts Officer w.e.f. 19.04.2022	ID, NWDA, Valsad

Retirements:

Sl. No.	Name & Designation	Date of Retirement
1.	Shri D. Mallick, Head Clerk, ID, NWDA, Kolkata	30.04.2022
2.	Smt. M. Vasundhara, Supt. Gr.-II, O/o the CE(S), NWDA, Hyderabad	30.04.2022
3.	Smt. Anju Gulati, UDC, NWDA (Hqs.), New Delhi	30.04.2022
4.	Shri Rameshwar, MTS, NWDA (Hqs.), New Delhi	30.04.2022
5.	Shri N.S.R. Reddy, IC, , SE, NWDA, Hyderabad	30.04.2022
6.	Shri K.C. Samal, MTS, IC, NWDA, Bhubaneswar	30.04.2022
7.	Shri R.K. Jain, Chief Engineer (Hqs.), NWDA, New Delhi	31.05.2022
8.	Shri B. Ravichandar, EE, ID, NWDA, Bhubaneswar	31.05.2022
9.	Shri R.A. Srinivas, DD, IC, Bhubneswar	31.05.2022
10.	Shri P.J. Dahyabhai, AE, ID, NWDA, Valsad	31.05.2022
11.	Shri P.K. Routray, Head Clerk, ID, NWDA, Kolkata	31.05.2022
12.	Shri A.K. Tagore, MTS, ID, NWDA, Kolkata	31.05.2022
13.	Shri J.B. Jani, Jr. Account Officer, ID, NWDA, Valsad	31.05.2022
14.	Shri H. Jayaramaiah, Jr. Accountant, ID, NWDA, Chennai	31.05.2022
15.	Shri V.M. Bhosale, UDC, ID, NWDA, Nashik	31.05.2022
16.	Shri V. Sukumaran, MTS, ID, NWDA, Chennai	31.05.2022
17.	Shri J.D. Patel, AE. IC, NWDA, Valsad	31.05.2022
18.	Shri T.B. Burde, Superintendent Gr.-II, ID, NWDA, Nagpur	30.06.2022
19.	Shri M. Satyanarayana, PS, O/o the CE (South), Hyderabad	30.06.2022
20.	Shri P.K. Sharma, EE, IC, NWDA, Gwalior	30.06.2022
21.	Shri S.K. Gawande, EE, ID, NWDA, Bhopal	30.06.2022
22.	Shri A.P. Patra, Head Clerk, IC, NWDA, Bhubaneswar	30.06.2022
23.	Shri C. Subramani, MTS, ID, NWDA, NWDA, Chennai	30.06.2022
24.	Shri Gopal Dutt, MTS, NWDA (Hqs.), New Delhi	30.06.2022
25.	Shri B.D. Sharma, AE, IC, NWDA, Gwalior	30.06.2022

Participation of NWDA Officials in Trainings/Workshops/Conferences

During the reporting period starting from 01.04.2022 to 30.06.2022, the five numbers of Trainings/Workshops/Conferences etc. were organised.

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

Sl. No.	Trainings/ Seminars/ Workshops/ Conferences etc.	Period	Venue	Organiser	Officials who attended
1.	Mandatory Cadre Training Programme (MCTP) on "Management in Govt."	18.04.2022 to 22.04.2022	IIM, Ahmedabad	IIM, Ahmedabad	DG, NWDA
2.	Mandatory Cadre Training programme for Central Water Engineering Services Group A Officers, at NWA, Pune	29.04.2022	NWA, Pune	NWA, Pune	DG, NWDA as Guest faculty- to deliver lecture on "e-Flow: Implementation, issues and challenges in India"
3.	Two weeks' Induction Training programme for newly recruited Junior Engineers of NWDA	13.06.2022 to 24.06.2022	NWA, Pune	NWA, Pune	21 Junior Engineers from NWDA
4.	Workshop on "Dam Safety Act 2021 for Dam Safety Governance in India	16.06.2022	Dr. Ambedkar International Centre, New Delhi	CWC	DG, NWDA attended the workshop along with other officers: <ol style="list-style-type: none"> 1. Shri S.R. Mahor, Superintending Engineer 2. Shri S.C. Awasthi, Superintending Engineer 3. Shri R. Chandrasekaran, Executive Engineer (HQ) 4. Shri S. James, Assistant Director 5. Smt. Vineeta Sharma, Assistant Director 6. Shri Manoj Dhimmarr, Assistant Engineer 7. Shri Lalit Kumar Siyania, Assistant Engineer
5.	Second Annual Conference on "Digital Technologies for Water Network Management"	28.06.2022 to 29.06.2022	Hotel Le Meridien, New Delhi	India Infrastructure Publishing Pvt. Ltd.	Dr. R.N. Sankhua, CE (S) and delivered a talk on "Digital Initiatives for National Water Development"

हिन्दी के बढ़ते कदम

1. दिनांक 21.04.2022 को भारतीय जनसंचार संस्थान, नई दिल्ली में नगर राजभाषा कार्यालय सदस्यों के लिए राजभाषा हिंदी सम्मेलन का आयोजन किया गया, जिसमें सहायक निदेशक (राजभाषा) राजविअ, नई दिल्ली ने भाग लिया।

2. दिनांक 29.04.2022 को अधिशासी अभियंता, राजविअ, वलसाड द्वारा भारतीय भाषा एवं संस्कृति केंद्र द्वारा राजभाषा के क्षेत्र में सर्वोत्तम कार्य निष्पादन के लिए राष्ट्रीय जल विकास अभिकरण, साकेत, नई दिल्ली को वर्ष 2020-21 के लिए प्रदत्त "राजभाषा दिंगत" पुरस्कार लोनावला के मेयरश्री से प्राप्त किया।



3. दिनांक 18.05.2022 को राजविअ में नव नियुक्त कर्मचारियों को एक कार्यशाला के माध्यम से अंग्रेजी प्रारूप तैयार करने के साथ-साथ हिंदी प्रारूप तैयार करने का व्यावहारिक प्रशिक्षण दिया गया।

4. दिनांक 09.06.2022 को उत्तरी क्षेत्रीय कार्यान्वयन कार्यालय-1, नई दिल्ली द्वारा राजभाषा के प्रगामी प्रयोग के संबंध में राजविअ मुख्यालय का भौतिक निरीक्षण किया गया। निरीक्षण अधिकारी ने हिंदी के कार्यों की प्रगति पर संतोष व्यक्त किया।

5. दिनांक 15.06.2022 को जल शक्ति मंत्रालय के हिंदी सलाहकार समिति की बैठक सी.जी.ओ कॉम्प्लेक्स, नई दिल्ली में ऑनलाइन आयोजित की गई। इस बैठक में महानिदेशक, राजविअ ने भाग लिया।

6. दिनांक 22.06.2022 को राजविअ मुख्यालय की राजभाषा कार्यान्वयन समिति की बैठक महानिदेशक महोदय की अध्यक्षता में ऑनलाइन आयोजित की गई। इस बैठक में सभी सदस्यों ने भाग लिया और हिंदी में कार्यों को और आगे कैसे बढ़ाया जाए इस पर सभी सदस्यों के विचार लेते हुए विचार विमर्श किया गया।

7. दिनांक 24.06.2022 को नगर राजभाषा कार्यान्वयन समिति की ऑनलाइन बैठक आयोजित की गई इस बैठक में महानिदेशक महोदय, राजविअ ने भाग लिया।

कविता

केन बेतवा जोड़ नहर

* सतीश चन्द्र अवस्थी

धरती के लाल छत्रसाल ने बनाये ताल
किंतु न उनमें अब पानी अंश है।
पानीदार लोग बूंदेलखण्ड वासी सब पानी बिन तरस रहे
प्रकृति नृसंश है।

प्राणी निज प्राण से भटक रहे यत्र-तत्र
सरवर के तट पर न वगुला न हंस है।
येन केन विधि केन बेतवा बहा दो यहाँ
जैसे भागीरथी भागीरथ प्रशंस है।

जल के बिन जीवन वन उपवन अस्तित्व हीन
सारे जल स्रोंतों की दिशा मोडिये
केन्द्र और राज्य सभी जनहित को ध्यान करें।

मरुथल जल पर मनोबल न तोडिये
कंकरीली पथरीली पहेली सी बूंदेली भूमि
इसके विकास की न योजनायें छोडिये।

आप सब प्रबुध्य युद्ध स्तर पर काम करो
येन केन विधि केन बेतवा को जोडिये
जल से जलाशय जन पूर्ण संतूस होंगे
आशय स्पष्ट है खुशहाली गांव आयेगी।

घर घर में पानी और खेत खेत पानी से
मुदिता यह मेदनी मनोहरता लायेगी
मस्ती से मस्तक तक हिलेंगे जड़ चेतन के।

हर्ष से सतीश प्रजा परचम लहरायेगी
येन केन विधि केन बेतवा उतारो यहाँ
भव्य भाव भरी भारत माता मुस्कायेगी।

माँ गंगा की पुकार

* बिमलेश गोस्वामी

गंगा आज चीख रही,
गंगा आज पुकार रही।
सबको जीवन देने वाली,
अपनी सांसे हार रही।
कब से राह निहार रही
फिर से कोई भागीरथ आए,
माँ गंगा आज पुकार रही।

कलयुग के इस कालखंड में,
मानव विकृतियों का हुई शिकार।
मानव जाति के दानव ने,
भर दिए मुझ में कई विकार।
रो रो के गंगा कब से,
अपनी व्यथा गुहार रही।
फिर से कोई भागीरथ आए,
माँ गंगा आज पुकार रही।

मेरे कल कल करते प्रवाह को,
जगह जगह पर मानव रोक रहे।
मेरे अमृत से जल में,
दिन पर दिन विष घोल रहे।
मंद पड़ गई नाडी मेरी,
करो कोई उपचार सही।
कब से राह निहार रही
फिर से कोई भागीरथ आए,
माँ गंगा आज पुकार रही।

नगर बस्तियों का कचरा,
मुझ में कब से डाल रहे।
औद्योगिक रसायनों से,
सब मेरा रूप बिगाड़ रहे।
पतित पावनी कहने वाली,
अपना तारणहार निहार रही।
कब से राह निहार रही
फिर से कोई भागीरथ आए,
माँ गंगा आज पुकार रही

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Activities of NWDA during the Quarter at a Glance



DG, NWDA along with Officers of CWC & WRD of UP and MP visited site of Daudhan Dam and existing Gangau weir on 19.05.2022.



Meeting of DG, NWDA with Collectors of Panna and Chhatarpur Districts regarding progress of Land Acquisition for KBLP on 19.05.2022.



Meeting to finalize the location & other parameters of two proposed barrages of UP under KBLP held on 30.05.2022. Officers of NWDA, CWC, Govt. of UP participated.

Jal Vikas can also be accessed at www.nwda.gov.in
राष्ट्रीय जल विकास अभिकरण, 18-20 सामुदायिक केन्द्र, साकेत,
नई दिल्ली-110017 द्वारा प्रकाशित