

राष्ट्रीय जल विकास अभिकरण

जल शक्ति मंन्नालय, भारत सरकार (जल संसाधन, नदी विकास और गंगा संरक्षण विभाग)

National Water Development Agency

Ministry of Jal Shakti, Government of India (Department of Water Resources, River Development and Ganga Rejuvenation)



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F. No. NWDA/SSC/08/2024/ 8/23-40

Dated: 25th October, 2024

Sub: Minutes of the 6th meeting of the "Sub Committee for Comprehensive Evaluation and System Studies on Interlinking of Rivers", held on 09.10.2024 at NWDA, Palika Bhawan, New Delhi in hybrid mode- reg.

Sir,

The 6th Meeting of the "Sub Committee for Comprehensive Evaluation and System Studies on Interlinking of Rivers", was held on 09.10.2024 at 11:30 A.M. at NWDA, New Delhi in hybrid mode, under the chairmanship of Sh. A.B. Pandya. A copy of minutes of the meeting, duly approved by the Chairman are enclosed for kind information.

It is requested to send your comments, if any, at the earliest, by e-mail to: dirsscell-nwda@gov.in and dirtech-nwda@nic.in.

Encl: As above.

Yours faithfully,

(Baleshwar Thakur)

Director General, NWDA

To

- 1. Shri A.B. Pandya, Secretary General, ICID & Chairman of the Sub-Committee, New Delhi. Email: abpandya@yahoo.co.uk, sec-gen@icid.org, Mob. No.: 09910264141.
- 2. Prof. S. Iqbal Hasnain, Eminent Environmental Expert, New Delhi. E-mail: hasnainsyed09@gmail.com Mob. No.: 09650576439
- 3. Shri M.K. Sinha, Former Assessor, Krishna Water Disputes Tribunal, 254, APR Pranav Antillia, Bachupally road, Hyderabad. E-mail: mksinhacwc@gmail.com, mksinhacwc@yahoo.co.in, Mob. No.: 09971686789.
- 4. Prof. Kamta Prasad, Chairperson Emeritus IRMED, 2-B, Institutional Area, Karkardooma, Delhi-110092. E-mail: irmed7@gmail.com, Ph: 011-22377199(o), 011-22374975 (R), Mob: 09810288036.
- 5. Prof. N.K. Goel, Deptt. of Hydrology, IIT, Roorkee. E-mail: nkgoel@hy.iitr.ac.in, goelhy@gmail.com, Mob. No.: 09412393851.
- 6. Dr. S. Mohan, Professor, EWRE 24, Deptt. of Civil Engineering, IIT, Chennai-600036. E-mail: smohan@iitm.ac.in, Ph. 044-22574261 (O), 044-22579296 (R), Mob.: 09837600444.
- 7. Chief Engineer (HQ), NWDA & Member Secretary of the Sub- Committee, New Delhi. E-mail: cehq-nwda@nic.in, Mob. No.: 9015404275.

Page 1 of 2

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Special invitees:

- 1. Chief Engineer (North), NWDA, Lucknow. E-mail: cenwdalko@rediffmail.com, cenlko-nwda@nic.in.
- 2. Chief Engineer (South), NWDA, Hyderabad. E-mail: ceshyd-nwda@nic.in, cesnwda@rediffmail.com.
- 3. Director (Tech.), NWDA, Palika Bhawan, New Delhi. E-mail: dirtech-nwda@nic.in
- 4. Superintending Engineer-N, NWDA, Palika Bhawan, New Delhi. E-mail: se2delhi-nwda@gov.in.
- 5. Superintending Engineer-S, NWDA, Palika Bhawan, New Delhi. E-mail: se1-nwda@nic.in.
- 6. Superintending Engineer-IC, NWDA, BBSR / Patna / Hyderabad / Valsad /Gwalior.
- 7. Director, National Institute of Hydrology (NIH), Roorkee- 247667. E-mail: dir.nihr@gov.in. Kind Attn.: Dr. M.K. Goel, E-mail: goel.mk1@gmail.com, Mob. No.-09410393347
- 8. Director, National Institute of Technology (NIT), Ashok Rajpath, Patna, Bihar- 8000005. E-mail: director@nitp.ac.in. Kind Attn.: Dr. Ramakar Jha, rjha43@gmail.com, Mob.: 08544401806.
- 9. The Head of Department, Department of Civil Engineering, IIT, Guwahati. E-mail:hodcivil@iitg.ac.in. Kind Attn.: Prof. Subashisa Dutta, E-mail: subashisa@iitg.ac.in. Phone: 0361-2582415 (O), 09435104598.
- 10. Prof. N.V. Ramana Rao, Director, NIT, Warangal, Telengana-506004. E-mail: director@nitw.ac.in. Kind Attn: Prof. N.V. Uma Mahesh, E-mail: mahesh@iitw.ac.in, uvnanduri@gmail.com. Mob.: 09849730834.

Copy for information to:

- 1. SPS to DG, NWDA, Palika Bhawan, R.K. Puram, New Delhi.
- 2. PS to JS (RD & PP), DoWR, RD & GR, Ministry of Jal Shakti, New Delhi.
- 3. PS to Sr. Joint Commissioner, BM, MoJS, New Delhi.

Minutes of the 6th Meeting of the "Sub Committee for Comprehensive Evaluation and System Studies for Interlinking of Rivers" held on 9.10.24 at NWDA HQ New Delhi.

The 6th Meeting of the "Sub Committee for Comprehensive Evaluation and System Studies on Interlinking of Rivers" was held on 9.10.2024 at NWDA HQ, New Delhi, in hybrid mode, under the Chairmanship of Sh. A.B. Pandya. The list of the participants is given at Annexure -I. Prof Kamta Prasad and Prof S. Iqbal Hasnain could not attend the meeting due to pre-occupations.

At the outset of the meeting, Sh. A.B. Pandya, Chairman, Sub - Committee welcomed all the participants and briefed about the objective of conducting regular meetings of Sub Committee, so that status of progress made by Institutions that are carrying out system studies for Interlinking of Rivers (ILR) Projects, shall be reviewed regularly to find out if the work /study is progressing in right direction or some modifications are needed to get proper outcomes from these studies. He, then requested to take up agenda items.

It was informed to the Sub-committee that Member Secretary is not available today due to some urgent official works, so Sh. D.K. Sharma, Consultant; NWDA presented the agenda items on behalf of Chief Engineer (HQ), NWDA & Member Secretary of the Sub-Committee.

Item No. 6.1: Confirmation of the Minutes of 5th meeting of the Sub-Committee held on 12.3.2024

All the members were apprised that minutes of the 5th meeting were circulated on 10.4.24.

As no comments were received from any of the members, so Members of the Sub-Committee confirmed the minutes of the 5th meeting.

Item No. 6.2: Follow up Action of the previous meeting:

As per decision of 5th meeting, Sh. D. K. Sharma, made a presentation on status of ILR Projects.

Sh. R.N Singh, Superintending Engineer (North), NWDA explained about detailed status of Manas – Sankosh – Tista - Ganga Link project.

Chairman, Sub Committee suggested to plan MSTG by considering augmentation of water in link canal from Manas dam too.

Sh. M.K. Sinha requested to add some more details in presentation of ILR Projects.

The suggestions were noted.

Item no. 6.3: System Studies of four links viz; Manas-Sankosh-Tista-Ganga (MSTG) Link Project, Ganga-Damodar-Subernarekha (GDS), Subernarekha-Mahanadi (S-M) and Farraka-Sundarbans (F-S) link project.

Members were apprised of brief status of system studies of four link projects.

Thereafter, representatives from the four Institutes carrying out these system studies were requested to present their studies, outcomes and status of their Draft Final Reports.

Prof. Subashisa Dutta, from IIT, Guwahati made a power point presentation covering description about study area taken by them, surface water availability, climate analysis, water demands, groundwater trend, analysis of various possible scenarios and socio economic analysis being done by them.

Sh. M.K. Sinha, Member, Sub-Committee pointed out that there may be some overlapping of command area beyond Katihar for MSTG link project and Kosi-Mechi Link project, so, it is opined to check command area for this overlapping portion. Also, he suggested to consider water availability at 75% dependability only for irrigation projects in the study. He emphasised that main objective of this system study is to firm up quantum of water to be transferred to Ganga after that planning part will be dealt by NWDA.

Chairman, Sub-Committee appreciated the work done by IIT, Guwahati.

He commented on e-flows taken during the study by IIT, Guwahati and suggested to revise the calculations as per guidelines of CWC for e-flows. Also, regarding climate change effects, he opined to consider rainfall in North-East region and exclude contribution of rainfall from Bangladesh in this analysis. He suggested to provide month wise data of Rainfall intensities scenario in addition to annual data for more clarity.

He suggested that NWDA should thoroughly study the Report submitted by IIT, Guwahati and thereafter, conduct two days workshop / brainstorming session exclusively for MSTG Link, along with participation of IIT, Guwahati, for having more clarity about the study including alternatives of MSTG Link project and then only system study may be finalised and incorporated in the Final DPR of the project.

Prof. N.V. Umamahesh, NIT, Warangal made presentation on system study carried out for Subernarekha - Mahanadi Link project. He explained about data collected and its source and scale, methodology and data used for estimation of realistic water demand, crop water requirements, new command area as identified, groundwater recharge etc.

Sh. M. K. Sinha, Member, Sub Committee suggested NIT, Warangal to add tables showing total crop water requirement for existing as well as proposed cropping pattern in Report.

Chairman, Sub-Committee emphasised the need of considering minor irrigation schemes in new command area for calculating total demand of water and suggested NIT, Warangal to obtain data of minor irrigation census and include that data for calculation of demand in Final Report of study. In all the links downstream of MSTG

link, the contribution of minor irrigation projects to the irrigation in the command of the link concerned should be accounted for.

He also suggested to conduct next meeting of Sub Committee in second week of November after receiving Draft final reports, to discuss the issues with individual Institutes.

Prof. Ramakar Jha, from NIT, Patna made presentation on progress made in system study of Ganga - Damodar - Subernarekha Link project. He briefed about study area, methodology adopted, various scenarios generated for study, cropping pattern, groundwater scenario and hydrological models used during the study.

Sh. M. K. Sinha suggested NIT, Patna to arrange a meeting with NWDA to firm up the command area, which is most significant factor for this study.

Dr. M.K. Goel, NIH, Roorkee initiated the presentation and Dr. Surjeet Singh explained details of system study carried out by them for Farrakka - Sunderban Link project.

Sh. M.K. Sinha suggested that NWDA may hold a meeting with Calcutta Port Authority for firming up water requirement for flushing of Calcutta Port, as this Port has been renovated about 8 to 10 years back, so it is expected that water requirement for flushing of Calcutta Port might have been reduced. This information of water requirement will decide how much extra water would be available for transfer from G-D-S, F-S and S-M Link projects to Mahanadi and for further onward transmission to Mahanadi – Godavari Link project.

SE, BBSR, NWDA was requested to take action in this regard.

Meeting was concluded by endorsing the suggestion of Chairman of Sub Committee to conduct an exclusive workshop for MSTG link project and thereafter, conducting separate meetings with these four Institutes before finalisation of their Reports.

It was observed that the supplies that can be made available from MSTG Link have to match with the demands being projected for the downstream links extending up to Cauvery. At present, the individual links studies are being carried out with projections of unconstrained demands while the supply that can be made available from the link at its upstream end is yet to be firmed up. Hence, to freeze the sizing and benefits in the individual links the iterative approach will have to be adopted for all the southern India links including MSTG Link. The reports will have to be modified accordingly after this exercise.

It was also suggested that, system studies of Southern linkage may be taken up after finalisation of quantity of water that can be transferred from MSTG, GDS, FS and SM Link projects to Mahanadi River, as per system studies. So Agenda item no 6.4 pertaining to awarding of work for southern linkage has been deferred to next meeting.

The meeting ended with a vote of thanks to the chair and all the participants.

Annexure - I

List of participants of the $6^{\rm th}$ Meeting of the "Sub Committee for Comprehensive Evaluation and System Studies"

Sl. No.	Name of the Participant	Mode
1;	Shri A.B. Pandya, Secretary General, ICID & Chairman of the Sub-Committee	Physical
2.	Sh. M.K. Sinha, Member	Physical
	Special Invitees	
1,	Sh. Shiva Prakash, CE (N), NWDA	Online
2.	Sh. P. Devender Rao, CE(S), NWDA	Online
3.	Sh. Shajatnan K.H, Director(Tech)	Physical
4.	Dr. Dilip Jha, Director (MDU)	Physical
5.	Sh. R.N. Singh, SE (N), NWDA	Physical
6.	Sh. Akhilesh Prasad, SE(S), NWDA	Physical
7.	Sh. Pradeep Kumar, SE, Patna	Online
8.	Sh. Upanand Rath, SE, BBSR	Online
9.	Dr. Ramakar Jha, Director, NIT Patna	Online
10.	Prof. N.V. Umamahesh, NIT, Warangal	Online
11,	Prof. Subashisa Dutta, IIT, Guwahati	Online
12.	Prof. M. K. Goel, Director, NIH, Roorkee	Online
	Other Officers	
I ₀	Dr. Surjeet Singh, NIH, Roorkee	Online
2.	Sh. Abhishek Gaurav, DC (BM), MoJS	Online
3,	Sh. D.K. Sharma, Consultant, NWDA	Physical

4.	Sh. P. Srinivasulu, DD, NWDA	Online
5.	Sh. J. D. Pande, DD, NWDA	Physical
6.	Ms. Deepika Sharma, DD, NWDA	Physical
7.	Ms. Jaswinder Kaur, DD, NWDA	Physical
8.	Ms. Deepti Verma, DD, NWDA	Online
9.	Ms. K. Lalitha, DD, NWDA	Online
10.	Sh. Mahesh Kumar Raman, EE, NWDA	Online
11.	Sh. Ashok Kumar Prasad, EE, NWDA	Online
12.	Sh. Satya Prakash Tomar, AD, NWDA	Online
13.	Sh. K. H. Rehman, AD, NWDA	Physical
14.	Sh. Pramod Kumar Roy, AEE, NWDA	Online
15.	Sh. Hari Om Varshney, AE, NWDA	Online
16.	Sh. Ankit Kumar, AE, NWDA	Physical
17.	Sh. Prashant Kumar, AE, NWDA	Online
18.	Sh. Shubham Kumar, JE, NWDA	Online
19.	Sh. Dharm Singh Bairwa, JE, NWDA	Online
20.	Sh. Subodh Kumar, JE, NWDA, Delhi	Physical
21.	Sh. Shivam Sharma, JE, NWDA	Physical
22.	Ms. Santosh Vishnoi, JE, NWDA, Delhi	Physical
23.	Ms. S. Pramila, JE, NWDA	Physical
24,	Sh. Shubham Gupta, JE, NWDA	Online
25.	Sh. Arghya Prasad Pramanik, JE, NWDA	Online
26.	Sh. Ashish Varshney, JE, NWDA	Online

27.	Sh. Anil Kumar, LDC, NWDA	Physical
28.	Sh. Rahul, Young Professional, NWDA	Physical
29.	Ms. Suvashree Sahoo, Young Professional, NWDA	Physical
30.	Sh. Abdul Rahman, IIT, Guwahati	Online
31.	Sh. Arpita Das, IIT, Guwahati	Online
32.	Sh. Suresh A. Kartha, IIT, Guwahati	Online
33.	Dr. Jew Das, NIT, Warangal	Online