

Minutes of the 12th Meeting of the Sub-Committee on “System Studies for Identification of Most Appropriate Alternative Plan” held on 27.07.2018 at 11.00 A.M in the Committee Room, NWDA, Palika Bhawan, New Delhi

The Twelfth meeting of the "Sub-Committee on System Studies for Identification of Most Appropriate Alternative Plan" was held on 27.07.2018(Friday) at 11:00 A.M in the Committee Room, NWDA, Palika Bhawan, New Delhi under the Chairmanship of Prof. P.B.S. Sarma, (Retd.) Chairman of Sub-Committee. The list of Members and other participants who attended the meeting is at Annex-I.

At the outset, Prof. P.B.S. Sarma welcomed all the Members, Invitees and other participants and requested Shri K. P. Gupta, Member Secretary to take up the agenda items for discussion.

Item 12.1: Confirmation of the Minutes of 11th Meeting of the Sub-Committee on System Studies for identification of most appropriate alternative Plan held on 26.02.2018.

The Member Secretary informed that the Minutes of the 11th meeting were circulated to all the Members vide letter dated 20.03.2018. As no comments have been received from any of the Members, the Minutes of 11th meeting of the Sub-Committee were confirmed as circulated.

Item 12.2: Follow up actions on important decisions taken during the 11th meeting of the Sub-Committee

Decision/ Follow up action:

The Member-Secretary informed that the Sub-Committee in its 9th and 10th meetings made certain observations on the Hydrological studies including water balance studies and multi-reservoir simulation analysis of Mahanadi-Godavari link project carried out by NIH. During 11th meeting the members of Sub-Committee desired to submit the compliance made by NIH while finalizing the report. Shri R.K.Jain, Chief Engineer (Hq), NWDA made presentation on the compliance on the observations of the Sub-Committee. After detailed discussions the Sub-Committee suggested the following:

- (i) The Mahanadi-Godavari link will provide the surface water for irrigation in its enroute command area. This will increase recharge to ground water. The Sub-Committee suggested to have additional study on the effect of link canal irrigation on the recharge of ground water through reputed agencies such as NIH, CGWB etc. The study should include i) the present ground

water scenario in the command area, ii) quantification of recharge to ground water due to link canal irrigation, iii) its impact on the water table levels over years say for 25-30 years, iv) the additional irrigation potential that may be created, and v) scope for conjunctive use of surface and groundwater in the command area so as to avoid water logging in future due to increased recharge to Ground water.

- (ii) While preparation of DPR, NWDA should plan conjunctive use of surface and Ground water in the command area.
- (iii) The committee desired that the draft TOR of the consultancy proposal for the above mentioned study may be presented to the committee for its suggestions.

The Sub-Committee further observed that in the NIH studies the regeneration has been considered as 30%, while in the guidelines of NWDA for preparation of water balance study the regeneration has been indicated as 20%. It was clarified that the regeneration considered by NIH is as per the decision taken by the Sub-Committee in its 7th meeting. The Committee desired that NWDA should inform the Odisha Government justification of considering 30% regeneration. Shri N.C. Jain, CE (N), NWDA reminded the members that this figure of 30% was taken due to the fact that the Odisha Govt proposed a very high delta of 90 cm.

Item 12.3: Hydrological studies including water balance and multi reservoir simulation for the proposed Mahanadi-Godavari Link

The Member- Secretary informed the committee that as per the decision of the Sub-Committee in its 10th meeting, the NIH duly considering the observations of the Sub-Committee has completed the study and submitted final report to NWDA during April, 2017. Shri R.K. Jain, CE(Hq), NWDA presented the outcome of the final study of NIH.

The Committee observed that the simulation studies carried out by NIH provided only the multi-reservoir simulation aspects. However, a comprehensive study of different possible scenarios arising out of i) climate change in the long term, ii) changes in food consumption and consequent changes in cropping pattern, iii) possible impact of improved water application and water use efficiency to adoption modern irrigation methods and other foreseeable factors need to be conducted so as to generate various likely scenarios and resulting alternatives. Further, as directed by the Honourable Supreme court, "the pros and cons of all possible alternatives optimizing the benefits to the society from the available water resources after considering all aspects of social, environmental and economic etc." need to be examined through comprehensive system studies. Only after examining the various scenarios generated considering the above factors, the

committee would be able to identify the most appropriate alternative plan for the link.

Item 12.4: Preparation of DPR of Godavari (Akinepalli)-Cauvery (Grand Anicut)

The Member- Secretary informed that NWDA has taken-up the works for preparation of DPR of this link. Shri Sriram Vedire, Member of Sub-Committee suggested that NWDA may study the alternate possibilities of transferring water from Inchampalli (with reduced dam height to minimize submergence) and present to the committee.

Item 12.5: Extension of tenure of the Sub-Committee

The Member-Secretary informed that the Special Committee on ILR in its 13th meeting held on 27th July, 2017 has agreed to extend the tenure of the Sub-Committee up to 12th February, 2018. Accordingly, the proposal has been sent to the Ministry for issue of necessary orders in this regard. Further extension of tenure i.e. beyond 12th February, 2108 is to be put up in the forthcoming meeting of SCILR which will be held soon.

Item 12.6: Any other item with the permission of the chair.

- (i) The Chairman of the Sub-Committee indicated that Manas-Sankosh-Teesta-Ganga link is very crucial link which will make available surplus water of Brahmaputra basin for use in Ganga, Damodar, Subarnarekha and Mahanadi basins for utilization in its enroute and further in the Southern India. As such, he advised NWDA to make a presentation in the next meeting of Sub-Committee on the progress on planning of MSTG link.
- (ii) Shri M. Illangovan, Member of the Sub-Committee has tendered his resignation vide his letter dated 18.07.2018 due to unavoidable personal reasons. The members of the Sub-Committee suggested that the membersecretary may send a formal letter to S. Illangovan, conveying the appreciation by the members of the committee, of the contributions of Sh. Illangovan to the efforts of the Committee. He also requested NWDA to send the resignation of Shri M. Illangovan to Ministry for acceptance by the Competent Authority. Sub-Committee suggested to include Shri M.K. Sinha, Assessor, Krishna Water Disputes Tribunal & (Retd.) Chief Engineer, CWC, New Delhi as Member in the Sub-Committee in place of Sh. Illangovan.
- (iii) Further, as suggested in the earlier meetings, Prof. S. Mohan of IIT Madras may be included as a member of the committee in place of Dr. D K

Srivastava, who did not attend a single meeting of the committee since its inception in Feb 2015.

NWDA may please putup appropriate proposal to the competent authority for its approval of the above two names.

- iv) Prof. Kamta Prasad enquired about the information, if any, from the outcome of the exercise of the Sub- Committee-1, for use of this committee. Member secretary assured the committee that he would find out if there is any such material available.

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

Annex-I

List of Members, Special Invitees and other participants of the Twelfth Meeting of the “Sub-Committee on System Studies for identification of most appropriate alternative plan” held on 27.07.2018, New Delhi.

1.	Prof. P.B.S. Sarma, (Retd.), CED, IIT Delhi	In Chair
2.	Prof. Kamta Prasad, Chairman, IRMED, New Delhi	Member
3.	Shri Sriram Vedire, Advisor, Ministry of WR, RD & GR, New Delhi	Member
4.	Shri K. P. Gupta, Director (Tech.), NWDA, New Delhi	Member-Secretary
Special Invitees		
5.	Shri M. K. Srinivas, Director General, NWDA, New Delhi	
6.	Shri R. K. Jain, Chief Engineer (HQ), NWDA, New Delhi	
7.	Shri N.C. Jain, Chief Engineer (N), NWDA, Lucknow	
8.	Shri Muzaffar Ahmad Superintending Engineer, NWDA, New Delhi	
9.	Shri B.L. Sharma Superintending Engineer, NWDA, Bhubaneswar	
10.	Shri Afroz Alam Superintending Engineer, NWDA, New Delhi	
Other Officers from NWDA		
11.	Shri Anil Kumar Jain, Deputy Director(SCILR), New Delhi	
12.	Shri N. P. Sahu, Assistant Director, New Delhi	
13.	Shri R. K. Agrawal, Consultant, New Delhi	
14.	Shri S. L. Jain, Consultant, New Delhi	