Minutes of the fourth meeting of the Sub-Committee for system studies for identification of most appropriate alternative plan.

The fourth meeting of the Sub-Committee for system studies for identification of most appropriate alternative plan was held on 11.05.2015 at New Delhi under the Chairmanship of Prof. P. B. S. Sarma. Chairman of the Sub-Committee welcomed all the participants. The list of participants who attended the meeting is given at Annex.-I.

A Presentation was made by the Director General, NWDA on the Mahanadi (Manibhadra)-Godavari(Dowlaiswaram) link Project and alternative studies carried out by NWDA. It was brought out that the link project will help Odisha in avoiding recurrent floods, provide irrigation, domestic water supply and generate power. The following are the details in brief presented in the meeting.

I. Mahanadi(Manibhadra)-Godavari(Dowlaiswaram) Link Project(Original Proposal)

Director General, NWDA informed that the original proposal of the link Project envisages diversion of 12165 MCM of water from the proposed Manibhadra dam. The link canal is of 828 Km length (302 Km in Odisha and 526 Km in Andhra Pradesh and out falls at Dowlaiswaram barrage in Godavari basin. After meeting the enroute irrigation needs of 4.43 lakh ha (3.52 lakh ha in Odisha and 0.91 lakh ha) in Andhra Pradesh and domestic and industrial water needs enroute, the link Project delivers 6500 MCM of water in Godavari basin for further diversion. Power generation will be to the tune of 375 MW. The project involves submergence of 59400 ha area.

Director General, NWDA further mentioned that Govt. of Odisha was not agreeing to the original Mahanadi(Manibhadra)-Godavari (Dowlaiswaram) link due to large submergence under Manibhadra reservoir. Therefore, NWDA has made alternative studies to reduce submergence.

(i) Alternative –A

The first alternative proposal envisages a barrage at Manibhadra and Mahanadi-Godavari link alignment-and a Barrage at Barmul on river Mahanadi and Mahanadi (Barmul)-Rushikulya intra-State link alongwith two dams namely Raul at Tapang (Tel sub-basin) and Bagh (Mahanadi basin).

As per the preliminary studies carryout by NWDA the project will provide irrigation benefits of 3.04 lakh ha, domestic and industrial water supply in the enroute command and Hydropower of 849 MW besides there is a flood moderation of 1058 cumeecs. The project will deliver about 4519 MCM water in Godavari basin. The submergence involved will be about 23349 ha of area.

(ii) Alternative –B

Project components in the second alternative consist of a barrage at Baramul on river Mahanadi, Mahanadi (Baramul)-Godavari (Dowlariswaram) link Project and 5 dams in Tel sub-basin.
The Project will provide irrigation benefits of 3.52 lakh ha. in Odisha besides domestic and industrial water supply in the enroute command and hydropower of 1039 MW and flood moderation of 1108 cumecs. The submergence involved is 15558 ha.

Director General, NWDA mentioned that these studies of alternative A&B are very preliminary based on GIS and remote sensing data. These alternatives have been discussed with the officers of Water Resources Department, Govt. of Odisha who are considered to be positive in this regard. The above proposals need to be studied further by preparing Pre-Feasibility Report. Based on the response of State Govt., NWDA would take up preparation of feasibility report to establish techno-economic feasibility of the proposals. Thereafter the Detailed Project Report of the selected alternative could be taken up.

After detailed deliberation following recommendations/conclusions have emerged.

1. Prefeasibility Study of Alternative A&B to be carried out.

2. All the five dams involved in alternative B may also be included in alternative-A.

3. Benefits from the Rabi Irrigation and flood mitigation in both the alternatives A&B may be worked out and included in the PFR.

4. Feasibility of increasing the command area may be examined in the following condition:
   (a) Shifting the alignment westward and assessing the lift requirements and benefits of increased command area.
   (b) Scope for linking the five reservoirs (included in alternate B) with the link canal, its benefits to Odisha and increase of transferable water may also be worked out.

5. During the next meeting a presentation will be made by NWDA covering the link projects between Godavari and Krishna rivers.

The meeting ended with a vote of thanks to the Chair.
Participants of the fourth meeting of the Sub-Committee for system studies for identification of most appropriate alternative plan.

1. Prof. P. B. S. Sarma (Retd.), CED, IIT, Delhi  
   Chairman

2. Prof. Kamta Prasad, Chairman, IRMED, Delhi  
   Member

3. Dr. Sharad K. Jain, Scientist ‘G’, NIH, Roorkee  
   Member

4. Prof. Sanjeev Kapoor, IIM, Lucknow  
   Member

5. Shri M. Illango van, Retd. Chief Engineer, CWC  
   Member

6. Shri Sriram Vedire, Advisor, MoWR, RD &GR  
   Member

7. Shri N. C. Jain, Director (Technical), NWDA  
   Member-Secretary

Special Invitee

8. Shri S. Masood Husain, Director General, NWDA.

9. Shri H. N. Dixit, Chief Engineer (North), NWDA, Lucknow

10. Shri K. P. Gupta, Superintending Engineer, NWDA, New Delhi

11. Smt. Jancy Viyayan, Director (MDU), NWDA, New Delhi