

No. 16/27/2013-PA (N)/ 866-893

GOVERNMENT OF INDIA  
CENTRAL WATER COMMISSION  
PROJECT APPRAISAL ORGANIZATION

510(S), SEWA BHAWAN,  
R. K. PURAM,  
NEW DELHI-110 066  
Date: 12.04.2013

Sub: 117<sup>th</sup> meeting of the Advisory Committee for consideration of techno-economic viability of Irrigation, Flood Control and Multipurpose Project proposals held on 21.03.2013.

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Enclosed please find herewith a copy of the summary record of discussions of the above meeting held on 21<sup>st</sup> March 2013 in the Conference Room of Ministry of Water Resources, Shram Shakti Bhawan, New Delhi for information and necessary action.

Encl: As above

Vinay Kumar  
12.04.2013  
(Vinay Kumar)  
Chief Engineer (PA)  
& Member Secretary of the  
Advisory Committee

To

Members of Committee:

1. Chairman, CWC, Sewa Bhawan, R. K. Puram, New Delhi.
2. Secretary (Expenditure), Ministry of Finance, (1<sup>st</sup> Floor) North Block, New Delhi.
3. Secretary, Department of Power, S.S. Bhawan, 11<sup>th</sup> Floor, New Delhi.
4. Secretary, Ministry of Environment & Forests, 4<sup>th</sup> Floor, Room No- 404/05, Paryavaran, Bhawan, CGO Complex, New Delhi.
5. Secretary, Ministry of Tribal Affairs, Room No. 738, A-Wing, Shastri Bhawan, New Delhi.
6. Secretary, Department of Agriculture & Cooperation, Krishi Bhawan, New Delhi.
7. Director General, ICAR, Room No-108, Krishi Bhawan, New Delhi.
8. Chairman, CEA, Sewa Bhawan, R. K. Puram, New Delhi.
9. Chairman, Central Ground Water Board, Jam Nagar House, Man Singh Road, New Delhi.
10. Adviser (WR), Planning Commission, Yojana Bhawan, New Delhi.
11. Sr. Adviser (Power), Planning Commission, Room No-107 Yojana Bhawan, New Delhi.
12. Financial Adviser, Ministry of Water Resources, Room No-401 S.S. Bhawan, New Delhi.

**Special Invitees:**

13. Chairman, GFCC, Sinchai Bhawan, Patna.
14. Member (D&R), CWC, New Delhi.
15. Member (RM), CWC, New Delhi.
16. Commissioner (Projects), Room No-411, S.S.Bhawan, MoWR, New Delhi.
17. Chief Advisor (Cost), Department of Expenditure, Ministry of Finance, Lok Nayak Bhawan, New Delhi.
18. Secretary, Department of Irrigation & Flood Control, Government of Assam, Secretariat, Guwahati-781006.
19. Principal Secretary, Water Resources, Govt of Madhya Pradesh, Sachivalaya, Arera Hills, Bhopal.
20. Secretary (Water Resources), Government of Odisha, Secretariat, Bhubaneswar-751 001 (Odisha).
21. Principal Secretary, Irrigation Department, Government of Uttar Pradesh, Sachivalay Annexe, Lucknow-226 001 (U.P.)
22. The Secretary (Irrigation), Government of Uttarakhand, Sachivalaya, Dehradun - 248 001.
23. CE, M&ERO, CWC, Bhubaneswar.
24. CE, FMO, CWC, New Delhi.
25. CE, UGBO, CWC, Lucknow.
26. CE, YBO, CWC, New Delhi.
27. CE, NBO, CWC, Bhopal.

**Copy for information to:**

28. Sr. PPS to Secretary, Ministry of Water Resources, Room No-407, Shram Shakti Bhawan, New Delhi.



**Summary Record of Discussions of the 117<sup>th</sup> Meeting of the Advisory Committee on Irrigation, Flood Control and Multi - Purpose Projects held on Thursday, March 21, 2013 for Consideration of Techno-Economic Viability of Water Resources Projects**

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The 117<sup>th</sup> meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects was held under the Chairmanship of Dr. S. K. Sarkar, Secretary to the Government of India, Ministry of Water Resources on Thursday, March 21, 2013 at 03:00 P.M. in the Conference Room of Ministry of Water Resources, Shram Shakti Bhawan, New Delhi. Names and Ministry / organizations of members and special invitees who attended the meeting is placed at Annex-I.

Dr. S. K. Sarkar, Secretary to the Government of India and Chairman of the Advisory Committee welcomed the members and invitees of the Committee and requested Member - Secretary, Advisory Committee to take up the agenda items. Member Secretary indicated that two proposals of revised cost estimates, one proposal of extension, renovation and modernization of existing irrigation project and two schemes of flood management formulated by Governments of Uttar Pradesh, Odisha, Madhya Pradesh, Assam, and Uttarakhand would be discussed in the meeting.

Thereafter, the agenda items were discussed and the following decisions were taken.

**I. Confirmation of the Summary Record of Discussions held during 116<sup>th</sup> Meeting of the Advisory Committee.**

The Summary Record of Discussions of the 116<sup>th</sup> meeting of the Advisory Committee of Ministry of Water Resources on Irrigation, Flood Control and Multi-purpose Projects were circulated vide letter No. 16/27/2012 - PA (N) / 08-32 dated 03.01.2013. No comments on the record of discussions were received. Summary Record of discussions of the 116<sup>th</sup> meeting of the Advisory Committee was confirmed by the Committee.

**II. Project Proposals Considered by the Advisory Committee**

**a) Madhya Ganga Canal Project, Stage-II, Uttar Pradesh (Major-Revised, Estimated Cost Rs. 2865.11 Crore at 2011 Price Level):**

Madhya Ganga Canal Project, Stage-II envisages construction of 66.2 km long lined main canal, 50 km long Bahjoi and 60 km long Chandausi unlined branch canals and 1653 km long distribution system for providing Kharif irrigation to 2,25,433 ha CCA in J P Nagar (Amroha), Sambhal and Moradabad districts of Uttar Pradesh. Investment clearance was accorded to the project by the Planning Commission in December 2008 for Rs.1060.76 crore at 2004 price level. Construction of the project was started in 2006-07 and as reported by the Project Authorities, an expenditure of Rs.737.52 crore has been incurred up to March 2012. Revised estimated cost of the project is Rs.2865.11 crore at 2011 price level.

Members discussed about reasons for delay in completion of the project and escalation of project cost. Regarding query about delay in completion of the project, project authorities informed that the main reason behind delay was slow pace of land acquisition, changes in State



and acquisition policy etc. It was indicated by the project authorities that the land was now being purchased by negotiation from land owners. Project authorities also indicated that the increase in cost of the project was Rs.1625.06 crore of which (i) increase in land cost was Rs.954.78 crore, (ii) additional provision of bridges / cross drainage works as per site condition was Rs.94.02 crore, (iii) increase in cost of earth work & tile lining in the canal was Rs.238.55 crore, (iv) increase in cost of distributaries and minors was Rs.92.55 crore, and (v) increase in cost of other components due to price escalation was Rs.245.16 crore.

After discussion, the committee accepted the Madhya Ganga Canal Project, Stage-II, Uttar Pradesh (Major-Revised, Estimated Cost Rs.2865.11 crore at 2011 Price Level).

**b) Integrated Anandpur Barrage Project, Odisha (Major-Revised, Estimated Cost Rs.1603.40 Crore at 2010-11 Price Level):**

Integrated Anandpur Barrage Project consists of revised estimate of two projects namely Anandpur Barrage Project Phase-II for estimated cost of Rs. 1457.63 crore and Salandi Sanskar Project for estimated cost of Rs. 145.77 crore. The proposal was earlier discussed in the 115<sup>th</sup> meeting of the Advisory Committee held on 24<sup>th</sup> July 2012 wherein it was decided that the reasons of variations in cost would be examined by CWC in consultation with State officers.

Member Secretary indicated that the increase in project cost had since been analyzed in consultation with project authorities and the same had been presented in the supplementary note. It emerged that out of about 202% increase in cost of the Anandpur Barrage Project Phase II; about 123% was attributable to price rise, about 46% was attributable to inadequate provision in the cost estimate, change in design was about 7%, additional requirement was about 7%, and remaining 19% was due to other reasons. In respect of Salandi Sanskar Project, the increase in cost was about 74%. Price escalation alone was about 93% of the total increase.

After discussion by Members, the project authorities were requested to indicate about progress made in land acquisition and more productivity of crops compared to Punjab and Haryana. Project authorities informed that acquisition of land for head works was almost complete and the same was under progress in respect of canal system. About yield rates of the proposed crops, the project authorities informed that cropping pattern, yield rates and cost of input etc have been approved by the State Agriculture Department. They also indicated that in general the productivity of rice in the commands of the project was higher than that of Punjab and Haryana. The project authorities also indicated that State Department of Water Resources had a separate Directorate for implementation of command area works which was headed by Additional Secretary and rules and regulation framed by Government of India would be followed in this project also.

After discussions, the Advisory Committee accepted the Integrated Anandpur Project at a total cost of Rs.1603.40 crore (price level 2010-11) i. e. (i) Anandpur Barrage Project Phase II at a cost of Rs.1457.63 crore (price level 2010-11), and (ii) Salandi Sanskar Project at a cost of Rs.145.77 crore (price level 2010-11).



**c) Extension, Renovation & Modernization of (ERM) Dejala Dewada Medium Irrigation Project, Madhya Pradesh (Medium-ERM, Estimated Cost Rs.17.49 Crore at 2009 Price Level):**

Dejala Dewada irrigation project was accepted by the Advisory Committee on Irrigation, Flood Control and multi-purpose Projects in its 21<sup>st</sup> meeting held on July 1982 at a cost of Rs.1643 lakh. Planning Commission accorded investment clearance in January 1983. Construction work of the project was completed in 1992. However, during operation of the project, 6.50 MCM of water was allocated for supply of drinking water to Khargone town by curtailing irrigation requirement. With passage of time, irrigation capacity of the project has also reduced due to seepage, deterioration of canal, silting and damage to structures etc. Government of Madhya Pradesh had formulated the ERM Proposal for restoration of lost potential.

Extension, Renovation and Modernization of Dejala Dewada Project envisages (i) concrete lining in 79.63 km of the unlined minor and sub minors, (ii) repair of 493 numbers of canal structures and construction of new road bridges etc, (iii) concrete lining of the damaged portion of main canal, and (iv) repair of downstream boulder toe and upstream pitching of main dam. The cost of ERM project is Rs.17.49 crore at 2009 Price Level. The measures proposed would result into saving of about 17.563 million cubic meter. The water thus saved would be utilized for providing Rabi irrigation in 3600 hectare area thus bringing a total of 7200 hectare under Rabi irrigation. There is no proposal to provide irrigation during Kharif.

During discussion on the project proposal, issue of price level of 2009, improvement in efficiency of water use, participation of water users' association etc came up. Regarding query about increase in irrigation benefits, the representative of Govt. of Madhya Pradesh informed that about 17.5MCM water would be saved after lining of minors and distribution system which would be utilized to increase the irrigation potential apart from restoration of existing irrigation potential. It was also indicated by the State representatives that 14 water users' associations were established in the command area. In reply to query about cost estimate of project at 2009 price level, they informed that the same price level was still valid in the State and hence no updating of cost estimate was required.

After discussion, the committee accepted the proposal of extension, renovation and modernization of Dejala Dewada medium irrigation project at a cost of Rs.17.49 crore at 2009 price level (valid for 2012-13).

**d) Protection of Brahmaputra dyke from Sissikalghar to Tekeliphuta at different reaches from Lotasur to Tekeliphuta from the erosion of river Brahmaputra, Assam (Flood Control, Estimated Cost Rs. 155.87 Crore at 2011-12 Price Level):**

The scheme envisages restoration of existing embankment in a length of 15300m at upstream and downstream of existing Geo-tube dyke, Sand filled mattress in a length of 15604m at river side slope, Geo-tube apron in a length of 7204 m and Reinforced Concrete porcupines as pro-siltation device at different reaches to prevent floods and erosion in



Dhakuakhana Civil Sub-division of Lakhimpur district and Majuli Sub-division of Jorhat district. The project would provide benefit to an area of 10,117 ha comprising cultivated and homestead land including thickly populated villages of Dhakuakhana, Matmara and Majuli areas from the flood devastation of Brahmaputra. The cost of the scheme is Rs 155.87 crore at 2011-12 price level.

During deliberation, it was opined by members that incremental benefit and incremental cost should be considered for estimation of benefit cost ratio. It was explained that the earlier scheme namely "Raising & Strengthening of Brahmaputra dyke from Sissikalghar to Tekeliphuta including closing of breach by retirement and anti-erosion measures (to protect Majuli and Dhakuakhana areas against flood devastation by the Brahmaputra)" was taken up primarily for closure of breach in the then existing embankment including raising of embankment around the breach area only. The proposed works in the present scheme were in the same river reach, and these would be required to protect the bank from further erosion and provide flood protection. On occurrence of flood, the area which would get submerged and damage the agricultural land, would include the area protected by earlier scheme and hence total benefit would be considered for benefit cost analysis. For cost part, total cost of new work and depreciated cost of the old work were considered in the benefit cost analysis.

After discussions, the committee accepted the proposal on "Protection of Brahmaputra dyke from Sissikalghar to Tekeliphuta at different reaches from Lotasur to Tekeliphuta from the erosion of river Brahmaputra, Assam (Flood Control, Estimated Cost Rs. 155.87 Crore at 2011-12 Price Level).

**e) River Training Works (Marginal Bunds & Studs) for Protection of Population and Agricultural Land, situated along both banks of River Solani of villages Rampur, Ibrahimpur, Solanipuram, Jamalpur etc. in district Haridwar (Flood Control, Estimated Cost Rs.33.19 crore at 2012-13 Price Level):**

The proposal envisages construction of five km long earthen embankment along with one hundred and fifty two studs as anti-erosion works along river Solani in the stretch between villages Ibrahimpur to Jamalpur near Roorkee. The scheme would provide flood control benefit to about forty thousand people living in village Ibrahimpur, Rampur, Malakpur, Khanjarpur, Kanharpur and Jamalpur in Roorkee Block of Haridwar District of Uttarakhand in 475 ha area at a cost of Rs. 33.19 crore at 2012-13 price level.

The rehabilitation and resettlement (R&R) aspects, land acquisition for construction works, non inclusion of indirect charges in the cost estimate and concurrence of State Finance to the project were discussed. Regarding query about R&R issues, the representative of Government of Uttarakhand informed that R&R issues were not involved in the project. It was also indicated by them that there would not be any difficulty in land acquisition for construction of the proposed scheme. In reply to query about non-inclusion of indirect charges in the cost estimate, they informed that the indirect charges are nominal and the same would be borne by the State Government.

After discussions, the committee accepted the proposal "River Training Works (Marginal Bunds & Studs) for Protection of Population and Agricultural Land, situated along both banks of River Solani of villages Rampur, Ibrahimpur, Solanipuram, Jamalpur etc. in district Haridwar" (Flood Control, Estimated Cost Rs. 33.19 Crore at 2012-13 Price Level) subject to the condition that concurrence of State finance would be furnished by the Project Authorities.

Administrative finance concurrence to the Project has since been submitted by the Secretary, Government of Uttarakhand to Ganga Flood Control Commission and a copy of the same is placed at Annex II.

Meeting ended with the vote of thanks to the chair.



**List of Members and Invitees who participated in the 117<sup>th</sup> Meeting  
of the Advisory Committee of MoWR on 21.03.2013**

Dr. S. K. Sarkar, Secretary to the Government of India, Ministry of Water Resources      In Chair

**Member of the Committee:**

S/Shri		
1.	Rajesh Kumar, Chairman, CWC, New Delhi	Member
2.	S. K. Kohli, JS&FA, MoWR, New Delhi	Member
3.	Ashok Kumar Jain, Advisor (RD&WR), Planning commission New Delhi.	Member
4.	Jagat Veer Singh, DC (HRM), Min. of Agriculture, New Delhi (Representing Secretary, Ministry Of Agriculture)	Member
5.	Dr. S. K. Gupta, Scientist-D, CGWB, (Representing Chairman, CGWB), New Delhi.	Member- Secretary
6.	Vinay Kumar, Chief Engineer, PAO, CWC, New Delhi	

**Special Invitees**

**Ministry of Water Resources**

7. N. K. Mathur, Commissioner (Ganga)
8. Pradeep Kumar, Commissioner (SP)
9. Shiv Nandan Kuamr, Sr. Joint Commissioner (Ganga)

**Ministry of Finance.**

10. P. K. Aggarwal, Advisor (Cost),

**Ministry of Agriculture.**

11. R. A. S. Patel, ASCO(HRM), Min. of Agriculture, New Delhi

**Central Water Commission**

12. A. S. P. Sinha, Chief Engineer, M&ERO, CWC,  
Bhubaneswar, Orissa
13. C. P. Singh, Director, FM-I, CWC, New Delhi.
14. S. K. Haldar, Director, CWC, Bhopal.
15. R. K. Kanodia, Director, PA(S), CWC, New Delhi
16. Ajay Kumar, Director, PA(N), CWC, New Delhi
17. M. S. Sahare, Director, PA(C), CWC, New Delhi
18. Rajesh Yadav, Director, FMP, CWC, New Delhi
19. B. Rai, Deputy Director, PA(C), CWC, New Delhi
20. Sudhir Kumar, Deputy Director, PA(S), CWC, New Delhi
21. A. K. Singh, Deputy Director, PA(N), CWC, New Delhi

**Ganga Flood Control Commission, Patna**

22. Bibhash Kumar, Chairman, GFCC, Patna



**State Government Officers**

**Assam**

**S/Shri**

1. Haren Kakati, Chief Engineer, Water Resources Department
2. Satya Gopal Goswami, Executive Engineer, Water Resources Division

**Madhya Pradesh**

3. M. G. Choubay, Engineer-in-Chief, Water Resources Department
4. V. P. Bhogola, S.E., Water Resources Department Circle, Khargone

**Odisha**

5. Smt. Debjani Chakrabarthy, Addl. Secretary, Water Resources Department
6. Baidhar Panda, Engineer-in-Chief, Water Resources Department

**Uttar Pradesh**

7. Dipak Singhal, Prinipal Secretary, Irrigation Department
8. A. K. Ojha, Engineer-in- Chief, Irrigation Department
9. G. K. Sirothia, Chief Engineer, Madhya Ganga Pariyojna, Aligarh.
10. V. K. Singh, SE, Madhya Ganga Canal Circle, Roorkee.

**Uttarakhand**

11. D. P. Jugran, Chief Engineer (Ganga Ghati), Irrigation Department
12. Purshottam, E.E., Irrigation Division, Haridwar