No. 16/27/2018-PA (N)/ 1698-1725

Central Water Commission Project Appraisal Organization

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7th Floor (S), Sewa Bhawan, R,K. Puram, New Delhi. Dated: 05/11/2018

Minutes of Meeting

A copy of Summary Record of Discussions of the 138th meeting of the Advisory Committee on Irrigation, Flood Control & Multipurpose Projects, held under the Chairmanship of Secretary, MoWR, RD&GR, on 31/10/2018 at New Delhi is enclosed herewith for information and further necessary action please.

Comments, if any, may kindly be forwarded to the undersigned within 15 days.

Encl: As above

(C. K. L. Das)
Chief Engineer (PAO) &

Member Secretary of the Advisory Committee

To,

Members of the Advisory Committee:

- 1. Chairman, CWC, Sewa Bhawan, R. K. Puram, New Delhi.
- 2. Secretary (Expenditure), Ministry of Finance, 1st Floor, North Block, New Delhi.
- 3. Secretary, Department of Power, Room No. 205, S.S. Bhawan, IInd Floor, New Delhi.
- 4. Secretary, Ministry of Environment & Forests & CC, 4th Floor, Prithvi Block, Indira Paryavaran, Jor Bagh, New Delhi.
- 5. Secretary, Department of Agriculture, Cooperation & Farmers Welfare, R.No. 126, Krishi Bhawan, New Delhi.
- 6. Secretary, Ministry of Tribal Affairs, Room No. 738, A-Wing, Shastri 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, New Delhi.
- 10. Adviser (Power), NITI Aayog, Room No. 248, Yojana Bhawan, New Delhi.
- 11. Adviser (WR), NITI Aayog, Room No. 230, Yojana Bhawan, New Delhi.
- 12. Joint Secretary & Financial Adviser, MoWR, RD & GR, Room No-401, S.S. Bhawan, New Delhi.

Special Invitees:

- 13. Additional Secretary, MoWR, RD&GR.
- 14. Member (RM), CWC, New Delhi.
- 15. Member (D&R), CWC, New Delhi.
- 16. Member (WP&P), CWC, New Delhi.
- 17. Joint Secretary (IC&GW), MoWR, RD&GR.
- 18. Principal Secretary, WRD, Govt. of Jammu & Kashmir, Jammu.
- 19. Principal Secretary, WRD, Govt. of Karnataka, Bengaluru.
- 20. Principal Secretary, WRD, Govt. of Maharashtra, Mumbai.

- 21. Principal Secretary, WRD, Govt. of Punjab, Chandigarh.
- 22. Chief Advisor (Cost), Department of Expenditure, Ministry of Finance, 2nd Floor, Lok Nayak Bhawan, New Delhi.
- 23. Commissioner (State Projects), MoWR, RD & GR, Room No-411, S. S. Bhawan, New Delhi.
- 24. Chief Engineer (IMO), CWC, New Delhi.
- 25. Chief Engineer (PPO), CWC, New Delhi with request to ensure participation of Project Authority in above meeting.
- 26. Chief Engineer (IBO), CWC, Chandigarh with request to ensure participation of Project Authority in above meeting.
- 27. Chief Engineer, Monitoring (Central), CWC, Nagpur with request to ensure participation of Project Authority in above meeting.

Copy for kind information to:

28. Sr. PPS to Secretary, MoWR, RD & GR, Room No. 407, Shram Shakti Bhawan, New Delhi.

Government of India

Ministry of Water Resources, River Development & Ganga Rejuvenation Central Water Commission

SUMMARY RECORD OF DISCUSSIONS OF THE 138th MEETING OF THE ADVISORY COMMITTEE FOR CONSIDERATION OF TECHNO-ECONOMIC VIABILITY OF MAJOR & MEDIUM IRRIGATION, FLOOD CONTROL AND MULTIPURPOSE PROJECT PROPOSALS HELD ON WEDNESDAY, OCTOBER 31ST, 2018 AT CENTRAL WATER COMMISSION, NEW DELHI:

The 138th meeting of the Advisory Committee of Ministry of Water Resources, River Development & Ganga Rejuvenation (MoWR, RD&GR) for consideration of techno-economic viability of major & medium irrigation, flood control and multi-purpose project proposals was held under the Chairmanship of Shri U. P. Singh, Secretary to the Government of India, MoWR, RD & GR on Wednesday, 31st October, 2018 at Central Water Commission, New Delhi. The list of members of the Committee or their representatives/nominees/special invitees and officers from various Ministries/Organizations and representatives of State Governments who attended the meeting is at Annexure.

At the outset, the Secretary (WR, RD & GR) and Chairman, Advisory Committee welcomed the participants. He emphasized the importance of expeditious appraisal/examination of DPRs of the projects and their execution. He stressed on the need of good quality DPRs of the projects and stated that if needed, a seminar/workshop could be conducted on the preparation of DPRs of major & medium irrigation, flood control and multi-purpose projects. He also expressed his concern over the growing trend of submitting the proposals of project, which have already been started and substantial work on which is complete, for the consideration/acceptance by the Advisory Committee.

Thereafter, the agenda items were taken up one by one.

(i) Confirmation of the minutes of 137th Meeting of the Advisory Committee

CE (PAO), CWC and Member Secretary of Advisory Committee stated that the 137th meeting of the Advisory Committee of MoWR, RD&GR on Irrigation, Flood Control and Multi-purpose Projects was held on 28.08.2018. The Summary Record of Discussions was circulated vide letter No. 16/27/2017-PA(N)/1394-1417 dated 14.09.2018. The comments from the representative of Chief Advisor (Cost), Department of Expenditure, Ministry of Finance were received in respect of **Jihe Kathapur Lift Irrigation Scheme**, which is as given below:



"From the revised Appendix (F1) and (F2) it is observed that the yield of vegetable crop considered as 245 Qt/Ha and rate of produces of gram considered as Rs. 7750/= per Ha. seems to be on higher side. PAO, CWC may consider the views of Ministry of Agriculture and Farmers Welfare, Govt. of India in respect of crop yield, rates of produces and cost of cultivation considered by project authorities for the estimation of agricultural benefits in pre & post project conditions for the purpose of B.C. Ratio computation."

The Advisory Committee confirmed the Summary Record of Discussion of 137th meeting of Advisory Committee with above modifications.

(ii) Follow up action after the 137th meeting of the Advisory Committee

NIL

- (iii) Project Proposals considered by the Advisory Committee
- A. Irrigation and Multi-purpose Projects
- 1. Revised Cost Estimate (RCE) of Shahpur Kandi Dam Project, Punjab, National Project (RCE, Multipurpose; Estimated Cost Rs. 2715.70 Crore @ PL Feb, 2018, B.C. Ratio 1.75:1)

A presentation on above project was given by the Project Authority. It was informed that Shahpurkandi Dam Project is being constructed on River Ravi 11 km downstream of Ranjit Sagar Dam and 6 Km upstream of Madhopur headworks to provide a balancing reservoir to ensure maximum benefits both for Irrigation from the canal system taking off from Madhopur Headworks & Ravi Canal (J&K) and Power generation at Ranjit Sagar Dam Power House. The project was declared as National Project by Govt. of India in Feb., 2008. The earlier revised cost of the project was approved by the Advisory Committee in its 99th meeting held on 24th August, 2009 for Rs. 2285.81 Cr. at April, 2008 Price Level. The actual construction work on the Project started in March, 2013. However, the work got stopped on 30.08.2014 due to inter-state issues between Jammu & Kashmir and Punjab. Finally, an agreement was reached between Punjab and J&K states under the aegis of MoWR, RD&GR at New Delhi on 03.03.2017 & 08.09.2018.

The physical and financial progress of the project was presented during the meeting. It was stated that 12% of the work of Dam was complete and also the Head Regulator for Shahpurkandi Hydel Channel in Punjab territory was almost complete. The salient features of the project and the variation statement giving the head-wise difference in the cost of present cost estimate and last approved cost estimate and the reasons for the same were presented by the Project Authority.

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On a query with respect to change in scope of the project, Project authority stated that in the present proposal, the installed capacity of hydropower had been increased from 168 MW to 206 MW for optimum utilization of water and that there was no change with respect to Head Regulator and Canals. Further, as per the agreement dated 08.09.2018, siphon for the Kashmir Canal and balance portion of Ravi Canal shall be constructed within the scope of project cost. The cost of these two components had been assessed as Rs. 51.58 Cr as included in the Revised Cost Estimate.

The issue of a very large increase in the Establishment cost in the revised cost estimate from Rs. 160.35 Cr. to Rs. 382.4 Cr was comprehensively discussed. The CWC Guidelines allows 10-12% of I-works minus B-land for Establishment cost which works out to Rs. 210.80 crore at maximum rate of 12%. However, as the cost of Rs. 279.80 crore had already been incurred up to January, 2018, the Advisory committee of MoWR, RD&GR was requested to decide upon the admissibility of Rs. 382.40 crore. The Project Authority stated that the Establishment Cost was not included in the Central Assistance and not reimbursed to the State Govt. After due deliberations, the Committee agreed in respect of the Establishment Cost.

The proposal of revised cost estimate was accepted by the Advisory Committee.

General Conditions:

- 1. Participatory Irrigation Management (PIM) may be encouraged by the State Govt. by encouraging formation of Water Users Associations (WUAs) for raising awareness and participation of farmers in order to achieve project objectives. Once the project is completed, WUAs may be involved in Operation and Maintenance of canals, Warabandi etc. to ensure continuance of PIM.
- 2. Micro irrigation may be adopted in the command areas where feasible.
- 3. Water charges shall be collected from the farmers and this revenue may be utilized for Operation and Maintenance (O&M) of the project in future.
- 4. Annual maintenance, de-weeding etc. should be ensured.
- 2 Modernization of Vijayanagara Channels in Tungabhadra Project under Karnataka Integrated and Sustainable Water Resources Management Investment Program (KISWRMIP), Tranche-II, Karnataka (ERM, Major Irrigation, Externally Assisted (ADB); Estimated Cost Rs. 456.63 Crore @ PL 2017-18, B.C. Ratio 1.547:1)

A presentation on the Project was made by the project authority. It was informed that earlier, the KISWRMIP, Tranche-2 comprised of two sub-projects namely



Modernization of Canal System of Tungabhadra Project amounting to Rs.3161.35 crore and Modernization of Vijayanagara Channels in Tungabhadra Project amounting to Rs. 432.55 crore. KISWRMIP, Tranche-2 with total estimated cost of Rs. 3593.90 crore (Rs.3161.35 + Rs.432.55) (PL 2013-14) was considered and deferred by the Advisory Committee of MoWR, RD & GR on Irrigation, Flood Control and Multipurpose Project during its 126th meeting held on 16.07.2015.

In order to speed up the implementation of KISWRMIP, Tranche-2 works, Govt. of Karnataka had proposed to take up this project i.e. Modernization of Vijayanagara Channels in Tungabhadra Project under KISWRMIP, Tranche -2 separately and proposed to be funded by Asian Development Bank (ADB).

It was stated that Vijayanagara Channel (VNC) System was a run-of-the-river irrigation channel system built during the Vijayanagara Empire more than 400 years ago constructed within the Tungabhadra basin starting from the Tungabhadra reservoir in Koppal District of Karnataka. The project consists of Modernization of 16 Channels and its distribution system lies in K-8 sub basin within Karnataka, having a total CCA of 11,154 ha and is spread across 3 districts, namely, Bellary, Raichur and Koppal. Out of these 16 Channels, 2 channels take off from Tungabhadra Dam whereas all other channels except Kalaghatta and Belagodahalla take off from anicuts constructed across Tungabhadra river at various locations.

The Project Authority further stated that, at present, the condition of these channels and its associated structures had deteriorated over a period of time. On account of this, it is difficult to reach water to the tail end areas during irrigation season. As a result, standing crops at the tail end are not getting enough water. Therefore, proposed modernization work will help in improving the efficiency in the channel system and also achieve the desired savings in water.

The State Finance Concurrence amounting to Rs. 432.55 Crore (Rs. 403.22 crore for Civil Works & 29.33 Crore for soft components) for the Modernization of Vijayanagara Channels has already been accorded vide G.O No.WRD/31/MTP/2015 Bengaluru Dated 24-06-2016 and the proposal for obtaining the SFC for total amount i.e. 456.63 Crore has already been submitted to State Finance Department for approval and expected to be obtained shortly.

The Secretary, MoWR, RD & GR enquired about the benefits associated with the project vis-a-vis the expenditure to be incurred in the project and how the project authority

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will assure implementation of the proposed cropping pattern in the command area of the project. He also stressed on active involvement of Water Users Associations to develop a system for regular operation and maintenance of Field Irrigation Channels and fully realise the expected benefit of the proposed work under modernization. Project Authority stated that the main objective of the Project was improving water use efficiency and to increase the intensity of irrigation from 108.7 % to 145.6 % using less water. Project Authority further stated that 30 Nos Water Users Cooperative Societies (WUCs) and 02 federation would be actively involved to promote ownership, ensure value for money through such ownership, and longevity of the irrigation assets created. The Project Authority also shared the experiences gained from the KISWRMIP, Tranche -1 (Modernization of Gondi Project).

After detailed deliberatation, the project was accepted by the Advisory Committee of MoWR, RD & GR subject to the submission of State Finance Concurrence for total cost of the project i.e. Rs. 456.63 Crore to the MoWR, RD & GR/CWC before signing of the loan agreement.

General Conditions:

- 1. Participatory Irrigation Management (PIM) may be encouraged by the State Govt. by encouraging formation of Water Users Cooperative Societies for raising awareness and participation of farmers in order to achieve project objectives. Once the project is completed, WUCS may be involved in Operation and Maintenance of canals, Warabandi etc. to ensure continuance of PIM.
- 2. Micro irrigation may be adopted in the command areas wherever feasible.
- 3. Annual maintenance, de-weeding etc. should be ensured.
- 4. Acceptance of the project proposal by the Advisory Committee of MoWR, RD&GR does not guarantee any eligibility towards release of fund under any existing scheme of MoWR, RD&GR such as AIBP, PMKSY, RRR, FMP etc., or funding from any external agency.
- 3. Revised Cost Estimate (RCE) of Tral Lift Irrigation Project, Jammu & Kashmir (RCE, Medium Irrigation; Estimated Cost Rs. 170.50 Crore @ PL 2016, B.C. Ratio 1.70:1)

A presentation on the scheme was given by Director (M&A), CWC, Jammu. It was stated that Tral Medium Lift Irrigation Project was located in Tral tehsil of Pulawama distt in Jammu & Kashmir. The CCA of the project is 3415 Ha and Annual Irrigation is 5122 Ha. The project envisages construction of an intake structure to draw water from the river,

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3 no. pump houses, 3 nos. delivery tanks and distribution system. It was also stated that this project was under 99 priority projects under PMKSY.

Secretary MoWR, RD&GR observed that even after the commissioning of stage-I & stage-II pump houses, a potential of only 1200 Ha had been created out of 5122 Ha. Project Authority clarified that it was due to the fact that no command was being catered to by the first stage pump house and the area lying right of the second stage pump house was being catered to by it and the potential utilized by second stage pump house up to September, 2018 was 1200 Ha. There is a carrier on the left side of the second stage pump house for the third stage beyond which the major command of the project lies. The third stage pump house has been constructed, however, the pumps are yet to be installed.

On a query regarding electricity required for running of pumps, Project Authority stated that the same shall be paid from the State budget for which sufficient provision had been kept in the current financial year. No electrical charges shall be collected from the farmers for running of pumps and also the O&M cost shall be borne by the State Govt. It was informed that sufficient electricity was available with State Govt. and a dedicated feeder for electricity supply was also under installation.

After detailed deliberations, the proposal was accepted by the Advisory Committee.

General Conditions:

- 1. Participatory Irrigation Management (PIM) may be encouraged by the State Govt. by encouraging formation of Water Users Associations (WUAs) for raising awareness and participation of farmers in order to achieve project objectives. Once the project is completed, WUAs may be involved in Operation and Maintenance of canals, Warabandi etc. to ensure continuance of PIM.
- 2. Micro irrigation may be adopted in the command areas where feasible.
- 3. Annual maintenance, de-weeding etc. should be ensured.
- 4. Revised Cost Estimate (RCE) of Ghungshi Barrage Medium Irrigation Project, Maharashtra (RCE, Medium Irrigation; Estimated Cost Rs. 498.46 Crore @ PL 2016-17, B.C. Ratio 1.279:1)

A presentation on the Project was made by the Project Authority. Ghungshi Barrage Project is a Medium Irrigation Project across the river Purna in Tapi basin. The



project is situated near village Parad in Murtijapur Taluka of Akola district of Maharashtra to provide irrigation benefits to 6343 ha in drought prone areas. The project envisages construction of a barrage of 185 m length with 10 nos. of vertical gates across river Purna and earthen embankments on both the flanks. The irrigation is proposed to be provided through lifting of water from barrage pond through Pump House located on left bank of river and supply water in 6343 ha command area thorough Pressurized Distribution Network (PDN) in Murtijapur Taluka of Akola district. Annual irrigation of the project is 6660 Ha with intensity of irrigation being 105%. The estimated cost of the project is Rs. 498.46 Cr. @ PL 2016-17. The B.C ration of the project is 1.279. This project was earlier accepted by the Advisory Committee of MoWR, RD&GR in its 103rd meeting held on 11th March, 2010 for an estimated cost of Rs.170.15 Crore at Price Level of 2008-09.

A Variation Statement showing various reasons of increase of cost from Rs.170.15 Crore to Rs. 498.46 Cr. was presented. It was informed that the major increase of Rs 328.316 Crore is due to (i) increase in Land Acquisition cost amounting to Rs. Rs 44.66 Cr, (ii) Rs185.596 Crore due to SoR, Price escalation and change in design, (iii) Rs 104.055 Crore due to provision of PDN (Pipe Distribution Network) and other Miscellaneous work.

After detailed deliberations, the proposal was accepted by the Advisory Committee.

General Conditions:

- 1. Participatory Irrigation Management (PIM) may be encouraged by the State Govt. by encouraging formation of Water Users Associations for raising awareness and participation of farmers in order to achieve project objectives. Once the project is completed, WUAs may be involved in Operation and Maintenance of canals, Warabandi etc. to ensure continuance of PIM.
- 2. Micro irrigation may be adopted in the command areas where feasible.
- 3. Annual maintenance, de-weeding etc. should be ensured.

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

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LIST OF OFFICERS PRESENT IN THE 138th MEETING OF THE ADVISORY COMMITTEE ON IRRIGATION, FLOOD CONTROL AND MULTI-PURPOSE PROJECTS ON WEDNESDAY, THE 31st OCTOBER, 2018 AT 12:00 HRS IN THE COMMITTEE ROOM OF CENTRAL WATER COMMISSION, 2ndFIOOR, SEWA BHAWAN, R K PURAM, NEW DELHI.

Shri U.P. Singh, Secretary, MoWR, RD&GR

In Chair

Members of the Advisory Committee or their representatives/nominees

S/Shri

1. 2. 3.	S. Masood Husain, Chairman, Central Water Commission Jagmohan Gupta, JS & FA, MoWR, RD& GR S.K. Juneja, Scientist and officer I/C, Central Ground Water Board (Representing Chairman, Central Ground Water	Member Member Member
4.	Board). Sharvan Kumar, Director (HPA), CEA (Representing	Member
5.	Chairman, CEA) R.A.S. Patel, Assistant Commissioner, DAC&FW	Member
	(Representing Secretary, Deptt. of Agriculture Cooperation & FW)	
6.	C.K.L. Das, Chief Engineer, PAO, CWC	Member Secretary

Special Invitees:

MoWR, RD&GR S/Shri/Smt

- 1. T. Rajeshwari, Additional Secretary
- 2. Akhil Kumar, Joint Secretary (A&GW)
- 3. Rishi Kumar, Dy. Director, PMKSY-SPR Wing

O/o Chief Adviser (Cost) S/Shri

1. B. Bandyopadhyay, Adviser (Cost)

Central Water Commission S/Shri

- 1. N.K. Mathur, Member (D&R), CWC
- 2. S.K. Haldar, Member WP&P, CWC
- 3. Navin kumar, Chief Engineer, IMO, CWC
- 4. R.K. Pachauri, Chief Engineer, PPO, CWC
- 5. Atul Jain, Chief Engineer, IBO, CWC
- 6. Shiv Nandan Kumar, Chief Engineer, Monitoring (C), CWC, Nagpur
- 7. R.D. Deshpande, Director, CWC, Nagpur
- 8. N. Mukherjee, Director, PA(S) Dte., CWC
- 9. Rajiv Kumar, Director, PA(C) Dte., CWC
- 10. G.L. Bansal, Director, NP Dte., CWC
- 11. Anant Kumar Gupta, Director, EA Dte., CWC



- 12. Balram Kumar, Director, Cost Appraisal (Irrigation-1) Dte., CWC
- 13. Piyush Ranjan, Director, PA (N) Dte., CWC
- 14. Yoki Vijay, Director, M&A, Jammu
- 15. Dr. D.R. Mohanty, Dy. Director, PA (S) Dte., CWC
- 16. A.K. Madhok, Dy. Director, PA (C) Dte., CWC
- 17. Hradesh Kumar, Dy. Director, PA (S) Dte., CWC
- 18. K. Iyappan, Dy. Director, PA(N) Dte. CWC
- 19. Sanjay Meena, Dy. Director, PA(N) Dte. CWC
- 20. Mahesh Kumar Gupta, Dy. Director, NP Dte., CWC
- 21. Nagendra Kumar Singh, Dy. Director, NP Dte., CWC
- 22. Pradeep Kumar, Dy. Director, Cost Appraisal (HWF) Dte., CWC
- 23. S. Barman, AD, PA (S) Dte., CWC
- 24. Durgendra Singh, AD-II, PA (N) Dte., CWC

Officers from State Government

Punjab

S/Shri

- 1. Er. J.S. Nagi, Chief Engineer (SKD), WRD
- 2. Er. Japan Singh Pathania, Chief Engineer/Hydel PSPCL, Patiala
- 3. Er. S.K. Gupta, Superintending Engineer, WRD

Karnataka

S/Shri

- 1. Mallikarjun B. Gunge, MD, KNNL
- 2. Shankar Gowda, Superintending Engineer (TPC), Munirabad
- 3. S.B. Nagabhushan, ExecutiveEngineer, TR Division, Munirabad
- 4. Sandeep Nodiger, Consultant, EI Technologies, Technical Division, Bangaluru
- 5. K. Ashok, Consultant, Senior Project Manager, EI Technologies
- 6. Dr. Srinivas Mudrakartha, Dy. Team Leader, SMEC, PSC

Jammu & Kashmir

S/Shri

- 1. Abdul Wahid, Chief Engineer, I&FC, Kashmir
- 2. Mohammad Afzal, Executive Engineer, I&FC, Kashmir
- 3. Tariq Ahmed, Assistant Engineer, Irrigation Division TRAL, Kashmir
- 4. Zulfikar Ahmed Bhat, Assistant Engineer, MICD, Srinagar, Kashmir

Maharashtra

S/Shri

- 1. S.K. Ghanekar, Chief Engineer, Special Project Amravati, Maharashtra
- 2. Ashish T. Deogade, Superintending Engineer, Amravati Irrigation Project Circle, Maharashtra
- 3. G.K. Karpe, Sub Divisional Officer, Akola, Maharashtra
- 4. P.U. Ingle, Sectional Engineer, Akola, Maharashtra
