No. 16/27/2016-PA(N)/4409-41

## GOVERNMENT OF INDIA MINISTRY OF WATER RESOURCES

Central Water Commission (Project Appraisal Organization)

Room No. 510(S), Sewa Bhawan, R.K. Puram, New Delhi. Ph: 26103561, e-mail: panorth@nic.in Dated: 30.11.2016

Sub: 131<sup>th</sup> meeting of the Advisory Committee of MoWR, RD & GR for consideration of techno-economic viability of Irrigation, Flood Control and Multipurpose Projects proposals held on 16th Nov., 2016.

A copy of the Summary Record of Discussions of the subject meeting held on 16th Nov., 2016, Wednesday, in 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

Chief Engineer (PAO) & Member Secretary of the Advisory Committee

To

## Members of Committee:

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

## Special Invitees:

- 13. Member (WP&P), CWC, New Delhi.
- 14. Member (D&R), CWC, New Delhi.
- 15. Member (RM), CWC, New Delhi.
- 16. Chairman, GFCC, Sinchai Bhawan, Patna
- 17. Commissioner (State Projects), Room No-411, S. S. Bhawan, MoWR, RD & GR
- 18. Commissioner (FM), MoWR, CGO Complex, Lodhi Road, New Delhi
- 19. Chief Advisor (Cost), Department of Expenditure, Ministry of Finance, Lok Nayak Bhawan, New Delhi.
- 20. Principal Secretary, Water Resources Department, Government of Madhya Pradesh, Sachivalaya, Arera Hills, Bhopal.
- 21. Chairman, NVDA, 59, Arera Hills, Narmada Bhawan, Bhopal-462011
- 22. Principal Secretary, Water Resources Department Govt. of Rajasthan, Secretariat, Jaipur
- 23. Principal Secretary, Punjab, Civil secretariat 1, 6th floor, room no. 27 B, Sector 1,
- 24. Principal Secretary, Irrigation, J-Block, 7th floor, secretariat, Govt. of Andhra Pradesh, Hyderabad, 500022
- 25. Secretary, (PWD/ Irrigation & PHE), Govt. of Jammu & Kashmir, Civil Secretariat,
- 26. Secretary, Irrigation and Public Health, Govt. of Himachal Pradesh, Sachivalaya, Chota Shimla, Simla- 171002.
- 27. Principal Secretary, Irrigation and Water Resources Department, Government of U.P, Bapu Bhawan, Lucknow, Uttar Pradesh.
- 28. Principal Secretary, Water Resources Department, Govt. of Bihar, Sinchai Bhawan, Patna- 800015.
- 29. Chief Engineer, PPO, CWC, New Delhi.
- 30. Chief Engineer, FMO, CWC, New Delhi.
- 31. Chief Engineer, IMO, CWC, New Delhi.
- 32. Chief Engineer, IBO, CWC. Chandigarh.
- 33. Director, M&A, CWC, Jammu, J&K.
- 34. Director, M&A, CWC, Shimla, H.P.
- 35. Director, M&A, CWC, Hyderabad, A.P.
- 36. Director, M&A, CWC, Bhopal, MP.
- 37. Director, SM Directorate, CWC, The Summary Record of Discussions may please be uploaded in the CWC website on publications in TAC list.

## Copy for information to:

38. Sr. PPS to Secretary, Ministry of Water Resources, Room No-407, Shram Shakti

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

SUMMARY RECORD OF DISCUSSIONS OF THE  $131^{\rm ST}$  MEETING OF THE ADVISORY COMMITTEE FOR CONSIDERATION OF TECHNO-ECONOMIC VIABILITY OF MAJOR & MEDIUM IRRIGATION, FLOOD CONTROL AND MULTI-PURPOSE PROJECT PROPOSALS HELD ON WEDNESDAY, NOVEMBER  $16^{\rm TH}$ , 2016 IN NEW DELHI

The 131<sup>st</sup> 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 Shashi Shekhar, Secretary to the Government of India, MoWR, RD&GR on Friday, 16<sup>th</sup> November, 2016 at 10:30 Hrs at New Delhi. The list of members of the Committee or their representatives/nominees and Special Invitees and Officers from various Ministries/Organizations and representatives of State Governments, who attended the meeting, is at **Annex-I.** 

At the outset, the Secretary (WR, RD & GR) and Chairman, Advisory Committee welcomed the participants and asked the Member Secretary to take up the agenda items.

- (i) Confirmation of the minutes of 130<sup>th</sup> meeting of the Advisory Committee
- 1. CE (PAO), CWC and Member Secretary informed that the 130<sup>th</sup> meeting of the Advisory Committee of MoWR,RD&GR on Irrigation, Flood Control and Multi-purpose Projects was held on 30.09.2016. Summary Record of Discussions was circulated vide letter No. 16/27/2015-PA(N)/3939-73 dated 06.10.2016. CE(PAO) pointed out a minor correction in the Summary Record of 130<sup>th</sup> Meeting in respect of the project "Swan River Flood Management & Integrated Land Development Project starting from Punjab Boundary (D/S of Santokhgarh Bridge) to its Confluence Point with River Sutlej at U/S Thana Bridge near Sri Anandpur Sahib including D/S Flood Protection Works in Dist. Roopnagar (Punjab) (Estimated Cost Rs. 210.23 Cr. @ PL 2014), B.C. Ratio 2.36" which is given as under:

In line no. 2 "protect an area of 776 ha and approximately 367,900 people" **may be read as** "protect an area of 2227 ha and approximately 67,900 people".

No other comment on the Summary Record of Discussion was received, hence Advisory Committee accordingly confirmed the Summary Record of Discussion of the 130<sup>th</sup> Meeting, with above correction.

- (ii) Project Proposals considered by the Advisory Committee
- A. Irrigation and Multi-purpose Projects
- Andhra Pradesh Irrigation and Livelihood Improvement Project Phase II (APILIP-II) (New Major, Estimated Cost Rs. 2000 Cr.)

Director External Assistance Dte., CWC made a presentation on the above proposal. It was informed that the project consists of 2 major irrigation schemes, 18 medium irrigation schemes and 485 minor irrigation schemes.

The proposal was discussed in detail and it was observed that the inter-state issue regarding water sharing between the States of Andhra Pradesh and Telangana needs to be resolved. It was decided that the resolution of inter-state issue may be awaited. Accordingly the Project proposal was deferred to the next meeting of Advisory Committee.

## Sukhahar Medium Irrigation Project, Himachal Pradesh. (New ERM, Medium, Estimated Gost Rs. 153.80 Cr.@PL 2015, B. C. ratio 2.39:1)

CE (PAO), CWC and Member Secretary briefed the Committee that the project proposal envisages lifting the water of Gaj Khad to irrigate the agriculture field situated on the right and left bank of Gaj Khad with CCA of 2186 ha and an annual irrigation of 5572 ha to benefit approximately 24,120 persons in the command area in Kangra district of Himachal Pradesh.

The Project Authority made a detailed presentation on the proposal. The durability of HDPE pipe being used in distribution network was enquired. The Project Authority informed that HDPE pipe has been used by them in other similar projects and have been performing well for the last 5 years. After deliberation, the Advisory Committee accepted the Project proposal.

#### General Conditions:

- (i) Participatory irrigation Management (PIM) may be encouraged by State Govt. and Water Users Associations (WUAs) shall be formed at appropriate stage to ensure awareness and participation of farmers in order to achieve the specific objectives. Later on, once project is completed WUAs shall have the responsibility of Operation and Maintenance of canals, Warabandi etc. to ensure PIM.
- (ii) Water charges from the farmers shall be collected and part of this revenue shall be used for Operation & Maintenance (O&M) of the project.
- (iii) Minimum environmental flow in the downstream of the river may be ensured as per the prevailing law/as per the terms and conditions stipulated by MoEF&CC.
- (iv) Annual maintenance, de-weeding etc. should be ensured by deploying a dedicated team or through annual contract (Reach wise).
- (v) Option of pressurized piped network instead of canal network may be explored by the Project Authority wherever feasible.
- (vi) The micro irrigation shall be introduced and approximately 50% of command shall be covered under micro irrigation.
- (vii) Acceptance of project proposal by 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.
- (viii) The State should complete the project within 5 years and BC ratio and total cost will hold valid for this period only.

Medium Irrigation Project to various Panchayats of Jawalamukhi Area in Distt. Kangra, 3. Himachal Pradesh.

(New Medium, Estimated Cost Rs. 194.474 Cr. @ PL 2016, B. C. Ratio 1.49:1)

CE (PAO), CWC and Member Secretary informed the Committee that the proposal envisages lifting of water from Beas river and irrigate the agricultural field of Jawalamukhi area of Himachal Pradesh. The project contemplates to provide annual irrigation of 5957 ha benefitting Kangra district of Himachal Pradesh. 30% of total area is proposed to be irrigated using micro irrigation.

The Project Authority made a detailed presentation on the proposal. After deliberation, the Advisory Committee accepted the Project proposal subject to the following conditions which are mandatory for granting Investment Clearance:

- Clearance for diversion of total 4.47 ha of forest land from MoEF&CC. (i)
- No Objection Certificate (NOC) from Bhakra Beas Management Board (BBMB) to lift (ii) the water from Beas river.

#### General Conditions:

- (i) Participatory irrigation Management (PIM) may be encouraged by State Govt. and Water Users Associations (WUAs) shall be formed at appropriate stage to ensure awareness and participation of farmers in order to achieve the specific objectives. Later on, once project is completed WUAs shall have the responsibility of Operation and Maintenance of canals, Warabandi etc. to ensure PIM.
- Water charges from the farmers shall be collected and part of this revenue shall be (ii) used for Operation & Maintenance (O&M) of the project.
- Minimum environmental flow in the downstream of the river may be ensured as per the prevailing law / as per the terms and conditions stipulated by MoEF&CC.
- Annual maintenance, de-weeding etc. should be ensured by deploying a dedicated team or through annual contract (Reach wise).
- Acceptance of project proposal by 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.
- The State should complete the project within 3 years and BC ratio and total cost will hold valid for this period only.

#### Ujh Multipurpose Project, Jammu & Kashmir. 4. (New Multipurpose, Estimated Cost Rs. 3262.28 Cr. (PL 2013), B. C. Ratio 1.039:1)

Director, NP-II Directorate, CWC made a detailed presentation on the proposal. It was informed that the proposal envisages construction of a storage dam across Ujh river, tributary of Ravi near village Barbari in Kathua district of Jammu and Kashmir. A power house approximately 9.5 km downstream of dam site and a dam toe powerhouse are also proposed. A barrage has been proposed 1.5 km downstream of Powerhouse. The project contemplates to provide Annual Irrigation of 31380 ha benefitting Kathua and Samba districts of J&K. The proposed installed capacity of the project is 196 MW including 10 MW capacity

of Dam Toe Power House. 18.92 MCM of water is proposed for drinking water requirement of the enroute areas of canal. The Project has been declared as National Project by Gol.

It was observed that the price level is of year 2013. CE(PAO), CWC mentioned that as the Environment Clearance of the project is awaited, the cost of R&R has been taken provisionally.

Considering the importance of the project, this project was agreed "In Principle" by the Advisory Committee. However, the issue of large submergence by the project was also discussed. It was observed that there is submergence of 41.00 sq km of land which includes 16.94 sq km of culturable land, 3.0 sq km of irrigated land, 2.42 sq km of forest land; 11.3 km of road, 25.6 km of transmission line and 11498 persons etc.

The project was discussed in detail and after deliberation, it was decided that "a team consisting of concerned officers from CWC and other experts shall visit the project site/area and explore the alternate options with reduced submergence/displacement alongwith minimum loss of power and irrigation benefits, so that the potential of east flowing river may be utilized, as envisaged in Indus Water Treaty. This exercise should be completed within 2 months.

Accordingly, the project will be re-submitted after Environment and Forest Clearance alongwith optimization suggested by team for utilization of full potential as per Indus Water Treaty.

Morand & Ganjal Complex Project, Madhya Pradesh.
 (New Major, Estimated Cost Rs. 2427.02 Cr. @ PL 2016-17, B. C. ratio 1.54:1)

Director, PA(C) Dte., CWC made a presentation on the above project. The project envisages construction of two dams, one on Morand River and the other on Ganjal river, both tributaries of Narmada. Morand dam is proposed to be located near Morghat village, Hoshangabad district and the Ganjal dam is proposed near Jawardha village, Harda district. The project contemplates to provide Annual Irrigation of 70476 ha benefitting Hoshangabad, Harda and Khandwa districts of Madhya Pradesh. A provision of 6 MCM has been made from Morand reservoir for drinking water supply to Seoni Malwa town and also a provision of 9.18 MCM of water from Morand reservoir for drinking water supply to 211 villages in the command area which includes industrial use.

It was observed that the following statutory clearances are yet to be obtained:

- Environment Clearance from MoEF&CC.
- (ii) Forest Clearance from MoEF&CC for the diversion of 2371.13 Ha of forest land.
- (iii) Clearance from Ministry of Tribal Affairs (MoTA) for the R&R plan of tribal population.
- (iv) The agriculture yield and rate for pre and post project needs to be duly vetted by State Agriculture Department.

The project was discussed in detail and after deliberation, it was decided that pipe network may be included in the project proposal. It was decided that the project proposal shall be resubmitted alongwith required Statutory Clearances.

 Project Estimate for Rehabilitation, Renovation and Modernisation of various Distributaries Systems along with allied works in Punjab State (UBDC System), Punjab (Major ERM, Estimated Cost Rs. 1112.34 Cr. @ PL 2015, B. C. ratio 2.04:1)

The Project Authority made a detailed presentation on the proposal. It was mentioned that Upper Bari Doab Canal (UBDC) system off-takes from river Ravi at Madhopur Head Works near Pathankot and commands the area in border districts of Gurdaspur, Amritsar and Tarn-Taran of Punjab. The ERM proposal envisages concrete lining of all main canals/branch canals on sides slopes, brick lining of all unlined distributaries, minors and sub-minors, rehabilitation work of already lined canals, construction of regulators, falls, outlets, bridges etc.

The issue of subsidy being paid by Govt. of Punjab for tube wells was discussed. It was mentioned that presently the State Govt. was paying subsidy for tube wells and after ERM of the project the commands served by tube wells shall start getting canal water and use of tube well will stop. It was however observed that the irrigation intensity being 92%, some of the command area will have to be served by tube wells and their use will not stop completely. The benefit in terms of subsidy has been calculated on pro rata basis considering the amount of subsidy being provided for entire State. This needs to be re-calculated for the command area of the project where the use of tube well shall be discontinued after its ERM. The subsidy should also be calculated considering the fact that tube wells will have to be operated for some period during the year and subsidy will have to be paid during the period of operation of tube wells. The revised BC Ratio will be calculated accordingly.

The project proposal after carrying out the above revisions will be considered in the next meeting of the Advisory Committee.

7. Rajasthan Water Sector Livelihood Improvement Project (RWSLIP), Rajasthan (Major ERM, Estimated Cost Rs. 2783.60 Cr. @ PL 2016, B. C. Ratio 1.71:1)

The Project Authority made a detailed presentation on the proposal. It was informed that the proposal envisages rehabilitation of 138 Irrigation projects (4 Major, 42 Medium and 92 Minor projects) in 25 districts of Rajasthan covering a CCA of 513767 ha with farmers participation.

It was mentioned that all major proposal have been examined on actual basis. However, out of 42 DPRs of medium projects only 14 DPRs have been examined on actual basis and 7 on pro-rata basis. DPRs of remaining 21 medium projects have not been submitted by the Project Authority. DPRs of Minor projects have also not been submitted by the Project Authority.

The water sharing issue in respect of one Major Irrigation Project i.e. Mahi Canal System was discussed. It was observed that certain issues in this regard needs to be resolved with the Govt. of Gujarat. Considering the inter state issue the Project Authority proposed to drop this component from RWSLIP project.

The project was discussed in detail and after deliberation the project was accepted "In Principle". As per decision taken in a meeting dated 11/09/2015, held under Chairmanship of OSD (the then Special Secretary), MoWR, RD&GR, WRD, Govt. of Rajasthan will prepare a sample DPR (24 medium and 48 minor irrigation projects). It was decided that all pending

DPRs as decided by the Ministry shall be submitted by the Govt. of Rajasthan and appraisal wherever not done shall be carried out as per the established procedure.

#### B. Flood Control Projects

 Project estimate for construction of ring bund for protection work of Sitabdiara village (Birth place of Loknayak Jayprakash Narayan), Bihar (Estimated Cost Rs. 92.3123 Cr @ PL 2015, B. C. Ratio 1.10:1)

Member (Coordination), GFCC made a detailed presentation and mentioned that the scheme is proposed to protect an area of 315 ha with approximately 12,600 population from the river Ghaghra in Chapra district of Bihar. The area has a special significance as birth place of Lok Nayak Jai Prakash Narayan falls within it.

The project area falls between jurisdiction of U.P and Bihar and, therefore, both the State Governments have formulated flood control schemes in their respective jurisdictions.

The project proposal of Bihar envisages construction of embankment in the middle reach along river Ghaghra for a length of 4 km (0.6 km geo tube and 3.4 km earthen). There are two anti flood sluices to ensure drainage of country side area.

After deliberation, the Advisory Committee accepted the project proposal "In-Principle" subject to the following:

- (i) The possibility of removal of Shoal in the river channel near the embankment may be explored.
- (ii) The possibility of Shifting the embankment towards bank of river Ghaghra may be explored.
- (iii) Optimization of cost estimate afresh.
- (iv) Submission of State Finance Concurrence for the Cost of Rs 92.3123 Cr. (PL 2015) finalized by GFCC.
- (v) "In-Principle" acceptance of project proposal by 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 FMP etc.
- (vi) The State should complete the project by 2017-18 and BC ratio and total cost will hold valid for this period only.
- (vii) The project will be implemented in an integrated manner with that of UP.
- Project estimate for construction of ring bund for protection of Sitabdiara village (Birth place of Loknayak Jayprakash Narayan) and village group of Ibrahimabad-Naubrar in district Ballia, Uttar Pradesh (Estimated Cost Rs. 40.4976 Cr @ PL 2013, B. C. ratio 3.61:1)

Member (Coordination), GFCC made a detailed presentation and informed that the scheme is proposed to protect an area of 5340 ha with approximately 57170 population from the rivers Ghaghra and Ganga in Ballia district of Uttar Pradesh. The area has a special significance as birth place of Lok Nayak Jai Prakash Narayan falls within it.

The project area falls between jurisdiction of U.P and Bihar and, therefore, both the State Governments have formulated flood control schemes in their respective jurisdictions in an integrated manner.

The project proposal of Bihar envisages construction of embankment in the initial reach along river Ghaghra followed by flood control scheme by Bihar. On river Ganga the flood management scheme has been formulated by Govt. of U.P.

After deliberation, the Advisory Committee accepted the project proposal "In-Principle" subject to the following:

- (i) The possibility of Shifting the embankment towards bank of river Ghaghra may be explored.
- (ii) Optimization of cost estimate afresh.
- (iii) Submission of State Finance Concurrence for the Cost of Rs 40.4976 Cr. (PL 2013) finalized by GFCC.
- (iv) "In-Principle" acceptance of project proposal by 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 FMP etc.
- (v) The State should complete the project by 2017-18 and BC ratio and total cost will hold valid for this period only.
- (vi) The project will be implemented in an integrated manner with that of Bihar.

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

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LIST OF OFFICERS PRESENT IN THE 131<sup>st</sup> MEETING OF THE ADVISORY COMMITTEE ON IRRIGATION, FLOOD CONTROL AND MULTI-PURPOSE PROJECTS ON WEDNESDAY, THE 16<sup>TH</sup> NOVEMMBER, 2016 AT 10:30 HRS IN MINISTRY OF WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION

Shri Shashi Shekhar , Secretary, MoWR,RD&GR

Chairman

## Members, Advisory Committee or their representatives / nominees S/Shri

1.	G.S.Jha, Chairman, CWC	Member
2.	Dr. E.Sampath Kumar, Member, Central Ground Water Board (Representing Chairman, Central Ground Water Board.	Member
3.	Jagmohan Gupta, Joint Secretary & Financial Advisor, MoWR, RD&GR.	Member
4.	Dr. S Prabhu, Scientist 'C', MoEF&CC	Member
5.	Dr. PV. Subbarao, MoEF&CC	Member
6.	Avinash Mishra, Jt. Advisor (Representing Advisor, NITI Aayog)	Member
7.	J. Bose, Director(Cost), M/o Finance, Deptt. Of Finance	Member
8.	Dr. Abdul Islam, Pr. Scientist, ICAR	Member
9.	R.A.S. Patel, Assistant Commissioner(WRM), MoA&FW	Member
10.	Pradeep Kumar, Chief Engineer, Project Appraisal Organization, Central Water Commission	Member Secretary

#### MoWR, RD & GR S/Shri

- Akhil Kumar, Joint Secretary (Admn), MoWR,RD&GR
- J. Chandrashekhar Iyer, Commissioner (FM), MoWR,RD&GR

#### Central Water Commission S/Shri

- Narendra Kumar, Member (RM)
- 2. S. Masood Husain, Member (WP&P)
- 3. CKL Das, CE (PPO)
- 4. Navin Kumar, CE (IMO)
- 5. Rajesh Kumar, Director, IP(N)
- Goverdhan Prasad, Director (EA)
- Ashis Banerjee, Director, Project Appraisal (Center)
- 8. Piyush Ranjan, Director, Project Appraisal (North)
- G.L.Bansal, Director, IP(S)
- 10. B.P. Pandey, Director, ISM
- 11. A.K.Singh, Deputy Director, Project Appraisal (North)
- 12. M.S.Saravana Kumar, Deputy Director, Project Appraisal (Center)
- Sharad Kumar Kaushal, AD, Project Appraisal (North)
- Durgender Singh, AD-II, Project Appraisal (North)

### Ministry of Finance

Pawan Kumar, Adviser, O/o Chief Adviser (Cost)

#### Ganga Flood Control Commission S/Shri

- Gorakh Thakur, Member, GFCC, Patna
- 2. Manoj Kumar, Director, Patna

## Officers from State Governments:

#### Bihar

#### S/Shri

- 1. Jitendra Prasad Singh, Superintending Engineer, WRD, Bihar
- 2. Abhinav Anand, Assistant Engineer, WRD, Bihar

### Himachal Pradesh

#### S/Shri

- 1. Naveen Puri, Chief Engineer (IPH), H.P.
- 2. Suresh Mahajan, Executive Engineer, (IPH), H.P.
- 3. Rajesh Kumar, Executive Engineer, (IPH), H.P.
- 4. Vipan Kumar, Assistant Engineer, (IPH), H.P.
- 5. Baljinder Kumar, JE, (IPH), H.P.
- 6. R.S. Minhas, Consulting Engineer, Minhas Tech.Pvt.Ltd. H.P.

#### Jammu & Kashmir

#### S/Shri

- 1. Sameer Kumar Shukla, Director, CWC, Jammu
- 2. Anand Prakash Kandiyal, Dy. Director, CWC, Jammu

#### Madhya Pradesh

#### S/Shri

- 1. Rajjan Rohit, Chief Engineer, ISP Canal, Bhopal
- 2. H.S. Kataria, Assistant Engineer, NVDA, Govt. of MP, New Delhi
- Manikant Sharma, Consultant to NVDA, MP
- 4. R. Krshnamoorthy, Consultant to NVDA, MP

#### Punjab

#### S/Shri

- 1. Jatinder Pal Singh, Chief Engineer (Canals), Chandigarh, Punjab
- 2. Jagdish Raj, Xen, UBDC, Punjab
- 3. Varinder Kumar, Superintending Engineer, UBDC, Punjab
- 4. Mahesh Kumar, PA to SE, UBDC, Punjab

#### Rajasthan

#### S/Shri

- 1. Anil Kumar Sharma, Chief Engineer, WRD, Rajasthan
- Ravi Solanki, Additional Chief Engineer, WRD, Rajasthan
- Vinod Shah, Additional Secy, WRD, Rajasthan
- 4. Jagdeep Singh, Superintending Engineer, WRD, Rajasthan
- 5. Dilip Jain, Superintending Engineer, WRD, Rajasthan
- Mukesh kumar Gupta, Executive, Engineer, WRD, Rajasthan
- 7. M.P. Samria, Executive, Engineer, WRD, Rajasthan

#### Uttar Pradesh

#### S/Shri

- Sandeep Agrawal, Engineer-in-Chief (Design &Planning), U.P.
- 2. R.P. Yadav, Chief Engineer (Gandak), UP Irrigation, U.P.
- Kumar Gaurav, Executive, Engineer, WRD, U.P.
- 4. Ajay Kumar Rai, Superintending Engineer, WRD, U.P.