# No. 16/27/2016-PA (N)/ 3939-73 Government of India Central Water Commission Project Appraisal Organization

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Room No. 510(S), Sewa Bhawan, R.K. Puram, New Delhi. - 110066

Date: 06.10.2016

#### **MINUTES OF MEETING**

Please find enclosed herewith a copy of minutes of 130<sup>th</sup> meeting of the Advisory Committee on Irrigation, Flood Control & Multipurpose Projects which was held under the Chairmanship of Secretary, Ministry of Water Resources, River Development & Ganga Rejuvenation on Friday, the 30<sup>th</sup> September, 2016 at 10.15 hrs at Shram Shakti Bhawan, New Delhi.

(Pradeep Kumar)

Chief Engineer (PAO) &

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, Room No. 205, S.S. Bhawan, II<sup>nd</sup> Floor, New Delhi.
- 4. Secretary, Ministry of Environment & Forests & CC, 4<sup>th</sup> 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. Member (WP&P), CWC, New Delhi.
- 14. Member (D&R), CWC, New Delhi.
- 15. Member (RM), CWC, New Delhi.

- 16. Chairman, GFCC, Patna.
- 17. Principal Secretary, Water Resources Department, Assam.
- 18. Principal Secretary, Water Resources Department, Bihar.
- 19. Principal Secretary, Water Resources Department, Chhattisgarh.
- 20. Principal Secretary, Water Resources Department, Jharkhand.
- 21. Principal Secretary, Water Resources Department, Madhya Pradesh.
- 22. Principal Secretary, Water Resources Department, Rajasthan.
- 23. Principal Secretary, Water Resources Department, Punjab.
- 24. Principal Secretary, Water Resources Department, Tamil Nadu.
- 25. Principal Secretary, Water Resources Department, Uttar Pradesh.
- 26. Chief Advisor (Cost), Department of Expenditure, Ministry of Finance, 2nd Floor, Lok Nayak Bhawan, New Delhi.
- 27. Commissioner (State Projects), MoWR, RD & GR, Room No-411, S. S. Bhawan, New Delhi.
- 28. Commissioner (FM), MoWR, RD & GR, CGO Complex, 11th Block, 8th Floor, Lodhi Road, New Delhi.
- 29. Chief Engineer, PPO, CWC, New Delhi.
- 30. Chief Engineer, FMO, CWC, New Delhi.
- 31. Chief Engineer, IMO, CWC, New Delhi.
- 32. Chief Engineer, NBO, CWC, New Delhi.
- 33. Chief Engineer, Design (N&W), New Delhi
- 34. Director, BCD (N&W), CWC, New Delhi.

#### **Copy for information to:**

35. 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 130<sup>TH</sup> MEETING OF THE ADVISORY COMMITTEE FOR CONSIDERATION OF TECHNO-ECONOMIC VIABILITY OF MAJOR & MEDIUM IRRIGATION, FLOOD CONTROL AND MULTI-PURPOSE PROJECT PROPOSALS HELD ON FRIDAY, SEPTEMBER 30<sup>TH</sup>, 2016 IN NEW DELHI

The 130<sup>th</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, 30<sup>th</sup>September, 2016 at 11:00Hrsin 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 129th meeting of the Advisory Committee

CE (PAO), CWC and Member Secretary informed that the 129<sup>th</sup> meeting of the Advisory Committee of MoWR, RD&GR on Irrigation, Flood Control and Multi-purpose Projects was held on 08.07.2016. Summary Record of Discussions was circulated vide letter No. 16/27/2015-PA(N)/3428-62 dated 04.08.2016. No comment has been received on the Summary Record of Discussion, hence Advisory Committee accordingly confirmed the Summary Record of Discussion of the 129<sup>th</sup> Meeting, as circulated.

- (ii) Project Proposals considered by the Advisory Committee
- A. Irrigation and Multi-purpose Projects
- 1. Burhai Reservoir Project, Jharkhand (New Major, Estimated Cost Rs. 1520.87 Cr.@ PL 2016-17), B.C. Ratio 1.08.

CE (PAO), CWC and Member Secretary informed the Committee that proposal envisages construction of an earthen dam across Pathro river near village Burhai in Deoghar district of Jharkhand. The project contemplates to provide Annual Irrigation of 33500 ha benefitting Deoghar district of Jharkhand.

The Project Authority made a detailed presentation on the proposal.

Secretary MoWR, RD&GR observed the following on above project:

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- 1) The project is Techno-economically accepted though Benefit Cost Ratio is only 1.08, being in the tribal area. It has already been decided that no new project shall carry water through open channel and open distributary system but only through pressure pipe system with sprinkler and drip system. Through this Land Acquisition cost can be completely obviated which will improve the Benefit Cost Ratio. Underground pipe network shall save water with farmers and agriculture dept. which will further increase the command and increase the B.C. ratio.
- 2) The Govt. of Jharkhand is advised to discuss with farmers in advance and set up system of micro irrigation which can further improve the command. Apart from this as already decided, the project should be handed over to WUA which should be mandatorily formed and their involvement should be right from the planning stage.
- 3) The command area development and project construction should go together.
- 4) Consultant will submit the revised DPR within one month replacing open channels with pipe network. This exercise will help in arriving the actual billing quantity for tendering.
- 5) State Govt. will approve the project with pipe network within the cost fixed by Advisory Committee.
- 6) The State Govt. will be advised to invite fixed cost turnkey tender to ensure timely completion of the project.

After deliberation, the Advisory Committee accepted the Project proposal subject to the following conditions:

- (i) The seismic parameters considered in the stability analysis, may be got approved by National Committee on Seismic Design Parameters (NCSDP) by Project Authority by December 2016 and Project Authority will accordingly ensure the required changes in design, if any.
- (ii) Design aspects shall be taken care by Project Authority during construction of the project.
- (iii) Construction material & soil aspects as suggested in note of CSMRS are to be taken care by Project Authority in construction stage.
- (iv) International clearance from FM Wing of MoWR, RD&GR, New Delhi has to be obtained by Project Authority.
- (v) Statutory clearance from MoEF&CC and MoTA has to be obtained by Project Authority.
- (vi) Concurrence of State Finance Department for amount Rs. 1520.87 crores has to be submitted by State Govt.

#### **General Conditions:**

(i) Participatory irrigation Management (PIM) shall be ensured 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

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- responsibility of Operation and Maintenance of canals, Warabandi etc. to ensure PIM.
- (ii) Water charges from the farmers shall be collected and 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) 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.
- (vi) The state should complete the project during 4 year period and the BC ratio and total cost will hold valid for this period only.
- 2. Revised Cost Estimate of Bateshwarsthan Ganga Pump Canal Scheme Phase I, Bihar & Jharkhand (Revised Major, Estimated Cost Rs. 828.80 Cr. @ PL 2015-16), B.C. Ratio 1.52.

CE (PAO), CWC and Member Secretary informed the Committee that proposal envisages lifting of water in two stages from river Ganga for Annual Irrigation of 27603 ha in Bhagalpur district of Bihar and Godda district of Jharkhand. The construction of the project was started in the financial year 1978-79 and an amount of Rs. 345.56 Cr. has been spent till March, 2016. 77% of Head works, 65% of Main canal & Branch canal and 25% of Distributaries & Minors have been completed.

The project was originally approved by Planning Commission (now NITI Ayog) in January, 1977 for Rs. 13.88 Cr. The scheme was subsequently accepted by the Advisory Committee of MoWR, RD&GR in its 90<sup>th</sup> meeting held on 26.09.2007 and investment clearance was accorded by Planning Commission (now NITI Ayog) for Rs. 389.31 Cr. on 10.03.2010.

The Project Authority made a detailed presentation on the proposal. After deliberation, the Advisory Committee accepted the Project proposal with condition that State Finance Concurrence for Rs. 828.80 crores shall be submitted by the State Govt before investment clearance as SFC for only Rs. 636.96 crores (of Bihar part) has been submitted.

#### **General Conditions:**

- (i) Participatory irrigation Management (PIM) shall be ensured 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) Option of pressurized piped network instead of canal network may be explored by the Project Authority wherever feasible for at least 20% of the command area.
- (iii) The micro irrigation shall be introduced and approximately 50% of command shall be covered under micro irrigation.



- (iv) Water charges from the farmers shall be collected and this revenue shall be used for Operation & Maintenance (O&M) of the project.
- (v) 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.
- (vi) Annual maintenance, de-weeding etc. should be ensured by deploying a dedicated team or through annual contract (Reach wise).
- (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 by March 2018 and the BC ratio and total cost will hold valid for this period only.

### 3. Arpa Bhaisajhar Barrage Project, Chhattisgarh (New Major, Estimated Cost Rs. 1141.90 Cr.@PL 2014-15), B.C. Ratio 1.64.

CE (PAO), CWC and Member Secretary informed the Committee that the project proposal envisages construction of a Barrage near village Bhaisajhar in Bilaspur district of Chhattisgarh across Arpa river which is a left tributary of Seonath river in Mahanadi river basin. The project contemplates to provide Annual Irrigation of 25000 ha (only Kharif) from the project and 2000 ha (only Rabi) through tube wells benefitting 102 villages in Bilaspur district of Chhattisgarh.

The Project Authority informed that 60% of the Head works have been completed by the State Govt. before appraisal by CWC and acceptance by the Advisory Committee of MoWR,RD&GR.

The Project Authority made a detailed presentation on the proposal. After deliberation, the Advisory Committee accepted the Project proposal.

#### **General Conditions:**

- (i) Participatory irrigation Management (PIM) shall be ensured 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 will be handed over the responsibility of Operation and Maintenance of canals, Warabandi etc. to ensure PIM.
- (ii) Option of pressurized piped network instead of canal network may be explored by the Project Authority wherever feasible.
- (iii) The micro irrigation shall be introduced and approximately 50% of command shall be covered under micro irrigation.
- (iv) Water charges from the farmers shall be collected and this revenue shall be used for Operation & Maintenance (O&M) of project in the future.
- (v) 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.
- (vi) Annual maintenance, de-weeding etc. should be ensured by deploying a dedicated team or through annual contract (Reach wise).

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- (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 by March 2019 and the BC ratio and total cost will hold valid for this period only.

### 4. Pawai Irrigation Project, Madhya Pradesh (New Medium, Estimated Cost Rs. 261.54 Cr. (PL 2009), B.C. Ratio 1.7.

CE (PAO), CWC and Member Secretary informed the Committee that proposal envisages construction of a storage dam across Ken river, tributary of Yamuna, near village Pandheria in Panna district of Madhya Pradesh. The project contemplates to provide Annual Irrigation of 9952 ha benefitting Panna district of Madhya Pradesh.

The Director, M&A Directorate, CWC, Bhopal made a detailed presentation on the proposal. Joint Advisor, NITI Ayog asked how works have been started by the State Govt. before appraisal by CWC and acceptance by the Advisory Committee of MoWR,RD&GR.

After deliberation, the Advisory Committee accepted the Project proposal subject to the following:

- (i) No State Representative was present. Chairman of Advisory Committee expressed his displeasure and desired to convey this to concerned State Govt.
- (ii) Chairman also expressed deep concern on starting the project without appraisal.
- (iii) No future project as Major & Medium will be undertaken by M.P. without appraisal from MoWR, RD & GR
- (iv) The project on completion will be jointly regulated by a joint committee set up for such purpose with representative from MoWR, RD & GR, MP & party states.
- (v) Telemetry will be established by State Govt. for real time assessment of water storage available and releases.
- (vi) Submission of Stage-II Forest Clearance from MoEF&CC for diversion of 238.36 ha of forest land.
- (vii) Clearance from MoTA for the R&R plan of Tribal population, if applicable, may be submitted by the Project Authority.

#### **General Condition:**

- (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 may be involved in Operation and Maintenance of canals, Warabandi etc. to ensure PIM.
- (ii) Option of pressurized piped network instead of canal network may be explored by the Project Authority wherever feasible.
- (iii) The micro irrigation shall be introduced and approximately 50% of command shall be covered under micro irrigation.

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- (iv) Water charges from the farmers shall be collected and this revenue shall be used for Operation & Maintenance (O&M) of project in the future.
- (v) 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.
- (vi) 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.
- (vii) The state should complete the project by March 2018 and the BC ratio and total cost will hold valid for this period only.
- 5. ERM of Chandrakeshar Dam Project, Madhya Pradesh (NewMedium, ERM, Estimated Cost Rs. 15.63 Cr. @ PL 2015), B.C. Ratio 1.62.

CE (PAO), CWC and Member Secretary informed the Committee that the Chandrakeshar project is located across river Chandrakeshar which is a tributary of Datuni river in Dewas district of Madhya Pradesh. The present ERM proposal envisages re-sectioning of canal system, concrete lining for the whole canal system, repairing of 415 nos of canal structures such as Drainage culvert, VRB, canal outlet, Syphon, Wells, Head regulator etc. The ERM proposal contemplates to provide Annual Irrigation of 5000 ha benefitting Dewas district of Madhya Pradesh.

The Member Secretary also stated that there is change in scope in the ERM proposal as CCA of the project increased from 5296.40 ha to 6213 ha. State Finance Concurrence, Environment Clearance, Forest Clearance, MoTA clearance for R&R of tribal population etc., if applicable, are yet to be obtained by Project Authority

The Director, M&A Directorate, CWC, Bhopal made a detailed presentation on the proposal. After deliberation, the Advisory Committee accepted the Project proposal subject to the following:

- (i) Submission of State Finance Concurrence for Rs. 15.63 Cr.
- (ii) Submission of Environment Clearance from MoEF&CC if applicable.
- (iii) Submission of Forest Clearance from MoEF&CC if applicable.
- (iv) Clearance for the R&R of tribal population from MoTA if applicable.
- (v) International clearance from MoWR, RD&GR.
- (vi) The state should complete the project during 3 year period and the BC ratio and total cost will hold valid for this period only.

#### **General Conditions:**

(i) Participatory irrigation Management (PIM) shall be ensured 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 may be involved in Operation and Maintenance of canals, Warabandi etc. to ensure PIM.

- (ii) Option of pressurized piped network instead of canal network may be explored by the Project Authority wherever feasible.
- (iii) The micro irrigation shall be introduced and approximately 50% of command shall be covered under micro irrigation.
- (iv) Water charges from the farmers shall be collected and this revenue shall be used for Operation & Maintenance (O&M) of project in the future.
- (v) 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.
- (vi) Annual maintenance, de-weeding etc. should be ensured by deploying a dedicated team or through annual contract (Reach wise).
- (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.
- 6. Rajasthan Water Sector Restructuring Project For Desert Area (RWSRPD) (Major ERM, Estimated Cost Rs. 3009.16 Cr. @ PL 2016), B.C. Ratio 1.6.

CE (PAO), CWC and Member Secretary informed the Committee that the proposal envisages relining of Indira Gandhi Feeder (IGF) from RD 496 to RD 671 & Indira Gandhi Main Canal (IGMN) from RD 0 to RD 200, ERM works in IGNP Stage-I excluding Kanwar Sain Lift (KSL), Rajasthan, reclamation of water logged area of Indira Gandhi Nahar Project Stage-I, Rajasthan, diversion of Drinking Water Supply in IGNP. The proposal contemplates to provide Annual Irrigation of 172988 ha benefitting Hanumangarh, Sriganganagar, Churu, Bikaner, Jodhpur, Sikar, Jhunjhnu, Jaisalmer, Barmer and Naguar districts of Rajasthan.

The Project Authority made a detailed presentation on the proposal. After deliberation, the Advisory Committee accepted the project subject to the following:

- (i) Haryana should be on board during lining work in Haryana portion.
- (ii) Statutory clearances such as Environment, Forest, Wildlife and R&R etc, as applicable, may be taken by Project Authority.
- (iii) The observations of CWC in respect of hydrology, inter-state, designs and cost etc may be adhered during implementation of the project.
- (iv) The state should complete the project during 5 year period and the BC ratio and total cost will hold valid for this period only.

#### **General Conditions:**

- (i) Participatory irrigation Management (PIM) shall be ensured 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 be handed the responsibility of Operation and Maintenance of canals, Warabandi etc. to ensure PIM.
- (ii) Option of pressurized piped network instead of canal network may be explored by the Project Authority wherever feasible.

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- (iii) The micro irrigation shall be introduced and approximately 50% of command shall be covered under micro irrigation.
- (iv) Water charges from the farmers shall be collected and this revenue shall be used for Operation & Maintenance (O&M) of project.
- (v) 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.
- (vi) Annual maintenance, de-weeding etc. should be ensured by deploying a dedicated team or through annual contract (Reach wise)
- (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.
- 7. ERM of Grand Anicut Canal System, Tamil Nadu (Major ERM, Estimated Cost Rs. 2298.75 Cr. @ PL 2014-15), B.C. Ratio 1.86.

CE (PAO), CWC and Member Secretary informed the Committee that the Grand Anicut (Kallanai) was built across the Cauvery river in Thanjavur district of Tamil Nadu to divert the Cauvery water for irrigation in delta area. The Grand anicut canal system off takes from the Grand Anicut. The ERM proposal envisages lining of bed and banks of the entire canal system comprising of Main canal, Branch canals, Distributaries, minors and field channels, strengthening of banks in identified reaches, provisions of additional structures, repairs to structures, improvements in drainage, improvements to tanks etc. The ERM proposal contemplates to provide Annual Irrigation of 100191.09 ha benefitting Thanjavur and Pudukottai districts of Tamil Nadu.

The Project Authority made a detailed presentation on the proposal. After deliberation, the Advisory Committee accepted the project. The state should complete the project during 3 year period and the BC ratio and total cost will hold valid for this period only.

#### **General Conditions:**

- (i) Participatory irrigation Management (PIM) shall be ensured 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 may be involved in Operation and Maintenance of canals, Warabandi etc. to ensure PIM.
- (ii) The micro irrigation shall be introduced and approximately 50% of command shall be covered under micro irrigation.
- (iii) Water charges from the farmers shall be collected and this revenue shall be used for Operation & Maintenance (O&M) of project in the future.
- (iv) 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.
- (v) Annual maintenance, de-weeding etc. should be ensured by deploying a dedicated team or through annual contract (Reach wise)

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- (vi) 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.
- (vii) Steps suggested for improving productivity will be implemented in mission mode in entire command for which massive capacity building program should be implemented.

#### B. Flood Control Projects

1. Assam Integrated Flood and Riverbank Erosion Risk Management Project – Tranche – II, (Kaziranga Sub Project) (AIFRERMP) Golaghat District (Assam) Estimated Cost Rs. 125.995 Cr @ PL 2015-16), B.C. Ratio 2.52

CE (PAO), CWC and Member Secretary informed that the scheme is proposed to protect an area of 6271 ha and approximately 1,20,000 people from the river Brahmaputra in Golaghat district in Assam. The AIFRERMP project is planned to be implemented in two distinct different development phases i.e Tranche-I and Tranche-II. The main components of works are raising & strengthening of existing embankment for 19.880 km, construction of new embankment for 8.900 km, porcupine screens of different lengths, construction of Sluice Gates.

The Project Authority made a detailed presentation on the proposal. After deliberation, the Advisory Committee accepted the project. The state should complete the project by Dec 2018 and the BC ratio and total cost will hold valid for this period only.

2. Assam Integrated Flood and River Erosion Risk Management Project (AIFRERMP) – Tranche - II (Palasbari Area), Assam (Estimated Cost Rs. 74.9574 Cr. @ PL 2015-16), B.C. Ratio 3.081

CE (PAO), CWC and Member Secretary informed that the scheme is proposed to protect an area of 60,000 ha and approximately 60,000 people from the river Brahmaputra in Kamrup district of Assam. The main components of works are continuous bank revetment for a length of 5800m, recoupment of land spur, construction of a 5 shutter gated sluice etc.

The Project Authority made a detailed presentation on the proposal. After deliberation, the Advisory Committee accepted the project. The state should complete the project by Mar 2018 and the BC ratio and total cost will hold valid for this period only.

3. Assam Integrated Flood and Riverbank Erosion Risk Management Project (AIFRERMP) for Gumi and its downstream area – Tranch-II, Assam (Estimated Cost Rs. 74.3762 Cr. @ PL 2015-16), B.C. Ratio 3.26

CE (PAO), CWC and Member Secretary informed that the scheme is proposed to protect an area of 38,700 ha and approximately 3,00,000 people from the river



Brahmaputra in Kamrup district of Assam. The main components of works are recoupment of existing boulder deflectors, continuous bank revetments etc.

The Project Authority made a detailed presentation on the proposal. After deliberation, the Advisory Committee accepted the project. The state should complete the project by Mar 2018 and the BC ratio and total cost will hold valid for this period only.

4. 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

CE (PAO), CWC and Member Secretary informed that the scheme is proposed to protect an area of 776 ha and approximately 367,900 people in 47 villages from the rivers Swan & Sutlej in Una district of Himachal Pradesh and Roopnagar district of Punjab. The main components of works are providing embankments with launching apron on the downstream of HP-Punjab boundary upto confluence of river Swan and Sutlej in a length of 18.288 km on left bank and 15.488 km on right bank of river Swan and 6.0 km on right side tributaries of river Swan as well as 1.83 km on left bank of river Sutlej.

The Project Authority made a detailed presentation on the proposal. After deliberation, the Advisory Committee accepted the project. The Project Authority made a detailed presentation on the proposal. After deliberation, the Advisory Committee accepted the project. The state should complete the project by June 2018 and the BC ratio and total cost will hold valid for this period only.

5. Scheme for raising & strengthening of Kharagpur – Shahpur- Sopai (KSS) Bund on left bank of river Ghaghara & right bank of river Kuwano in District-Gorakhpur, Uttar Pradesh (Estimated Cost Rs. 37.4956 Cr. @ PL 2013), B.C. Ratio 8.52

CE (PAO), CWC and Member Secretary informed that the scheme is proposed to protect an area of 8217 ha and approximately 10,000 people from the rivers Ghaghara & Kuwano in Gorakhpur district of Uttar Pradesh. The main components of works are raising and strengthening of embankment along left bank of Ghaghara and right bank of Kuwano, two new single barrel regulators with gate along Ghaghara, three new single barrel and two new double barrel regulators with gate along Kuwano, resoling brick on edge 9.60 km, laying brick on edge 5.10 km.

The Project Authority made a detailed presentation on the proposal. After deliberation, the Advisory Committee accepted the project. The state should complete the project during 2 years and the BC ratio and total cost will hold valid for this period only.



6. Project estimate for construction of Pumping Station for Drainage of Flood water from Protected side near Tarkulani Regulator at Km. 30.300 of Maluni Bund on Left Bank of river Rapti in District- Gorakhpur, Uttar Pradesh (Estimated Cost Rs. 38.15 Cr. @ PL 2013), B.C. Ratio 4.49

CE (PAO), CWC and Member Secretary informed that the scheme is proposed to protect 2838 ha of agricultural land and 32,000 people of 47 villages from floods of river Rapti in Gorakhpur district of Uttar Pradesh. The proposal envisages installation of 11 pumps of capacity 30 cusec and 03 pumps of capacity 10 cusec so as to discharge flood water. Sump has been proposed to collect the flood water and ensure silt free water flow into the pumps.

The Project Authority made a detailed presentation on the proposal. It was advised to have electricity connection for operation of pumps for usual working hours and diesel generator sets shall be used in case of power cuts only.

After deliberation, the Advisory Committee accepted the project with following conditions:

- 1) The state should complete the project by 2 years and the BC ratio and total cost will hold valid for this period only.
- 2) The project authority will constitute a committee to study the possibility of utilizing this pumped water in water deficient area.
- 3) To provide water to each field this pumped water will be treated as precious and will be gainfully utilized.

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

LIST OF OFFICERS PRESENT IN THE  $130^{TH}$  MEETING OF THE ADVISORY COMMITTEE ON IRRIGATION, FLOOD CONTROL AND MULTI-PURPOSE PROJECTS ON FRIDAY, THE  $30^{TH}$  SEPTEMBER, 2016 AT 10:15 HRS IN THE COMMITTEE HALL OF 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.	Umesh Dongre, Advisor (Cost), DEA, M/o Finance	Member
5.	Avinash Mishra, Jt. Advisor (Representing Advisor, NITI Aayog)	Member
6.	J.S. Bawa, Chief Engineer, CEA	Member
7.	J. Bose, Director(Cost), M/o Finance, Deptt. Of Finance	Member
8.	Bhajan Lal, Assistant Commissioner, NRM Div., M/o Agriculture	Member
9.	Rajiv Prakash, Director, M/o Tribal Affairs	Member
10.	V. Kishore, Join Director, M/o Tribal Affairs	Member
11.	Dr. S. Kerketta, Director, MoEF&CC	Member
12.	Manmeet Singh, Manager (Environment), MoEF&CC	Member
13.	Pradeep Kumar, Chief Engineer, Project Appraisal Organization, Central Water Commission	Member Secretary

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

1. M.S. Şahare, SJC (FM), MoWR,RD&GR

### Central Water Commission S/Shri

- 1. Narendra Kumar, Member (RM)
- 2. S. Masood Husain, Member (WP&P)
- 3. R.K.Sinha, CE (PPO)
- 4. Navin Kumar, CE (IMO)
- 5. S. Ghosh, Director (CMDD)
- 6. N. Mukherjee, Director, Project Appraisal (South)
- 7. Ashis Banerjee, Director, Project Appraisal (Center)
- 8. Piyush Ranjan, Director, Project Appraisal (North)
- 9. G.L.Bansal, Director, IP(S)
- 10. Rajesh Kumar, Director, IP(N)
- 11. Piyush Kumar, Director, FMP
- 12. A.K.Singh, Deputy Director, Project Appraisal (North)
- 13. D.R.Mohanty, Deputy Director, Project Appraisal (South)
- 14. M.S.Saravana Kumar, Deputy Director, Project Appraisal (Center)
- 15. Sharad Kumar Kaushal, AD, Project Appraisal (North)
- 16. Durgender Singh, AD-II, Project Appraisal (North)
- 17. J.S. Rajput, AD-II, Project Appraisal (South)

### Ganga Flood Control Commission S/Shri

- 1. Arun Kumar Sinha, Member (Planning), Patna
- 2. Vivek Pal, Director, Lucknow

#### Officers from State Governments:

#### <u>Assam</u>

#### S/Shri

- 1. S.G. Goswami, Additional Chief Engineer, WRD, Dispur, Assam
- 2. B.N Thakuria, Executive Officer, FREMAA
- 3. Kishur Konwar, Consultant, FREMAA

#### <u>Bihar</u>

#### S/Shri

- 1. Arun Kumar Sinha, Principal Secretary, WRD, Patna (Bihar)
- 2. Indu Bhushan Kumar, Engineer-in-Chief (HQ), WRD, Bihar
- Yogendra Malakar, Executive Engineer, Ganga Pump Canal Div, Bihar

#### Chhattisgarh

#### S/Shri

- 1. H. R. Kutare, Engineer-in-Chief, WRD, Raipur, Chhattisgarh
- 2. V.K. Shrivastava, S.E., WRD, Bilaspur, Chhattisgarh
- 3. R.K. Rajput, S.E., WRD, Kota, Chhattisgarh
- 4. R.S.Naidu, Executive Engineer, WRD, Kota Bilaspur, Chhattisgarh
- 5. B.L. Swarnkar, Sub- Engineer, Kota, Chhattisgarh

#### Punjab

#### S/Shri

- 1. B.P.S. Brar, S.E., Patiala Drainage Circle, Punjab
- 2. Narinder Singh Jit Ram, SDO, Punjab

#### Rajasthan

#### S/Shri

- 1. Anil Sharma, Chief Engineer, WRD, Rajasthan
- 2. Raj Kumar Choudhary, Chief Engineer, WRD, Rajasthan
- 3. Jgdeep Singh, Executive, Engineer, WRD, Rajasthan
- 4. Lekh Ram, Executive, Engineer, WRD, Rajasthan

#### **Tamilnadu**

#### S/Shri

- 1. S. Thinakaran, Chief Engineer (Plan Formulation)WRD, Tamil Nadu
- 2. C.T. Sankar, S.E., PWD, LCBC Circle, Tamil Nadu
- 3. D. Revathy, Executive, Engineer, PWD, LCBC Circle, Tamil Nadu
- 4. T. Shanmugame, Astt. Executive, Engineer, PWD, LCBC Circle, Tamil Nadu

#### **Uttar Pradesh**

#### S/Shri

- 1. Sandeep Agrawal, Engineer-in-Chief (Design &Planning), U.P.
- 2. R.P. Yadav, Chief Engineer (Gandak), UP Irrigation, U.P.
- 3. R.D. Yadav, S.E., UP Irrigation & Water Resources, Gorakhpur, U.P.
- 4. Maheshwari Prasad, S.E., UP Irrigation (Gandak), U.P.

#### **WAPCOS**

#### S/Shri

- 1. H.S. Sandhu, Chief Engineer, Gurgaon
- 2. Animesh, Dy. Chief Engineer, Gurgaon