No. 16/27/2010-PA (N), 248-280

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

PROJECT APPRAISAL ORGANIZATION

SEWA BHAWAN, R. K. PURAM, NEW DELHI-110 066

Date: 9 Feb., 2010

Sub: 102<sup>nd</sup> meeting of the Advisory Committee for consideration of technoeconomic viability of Irrigation, Flood Control and Multipurpose Project proposals held on 28.01.2010.

Enclosed please find herewith a copy of the summary record of discussions of the above meeting held at New Delhi on  $28^{th}$  January, 2010 at Sewa Bhawan, R. K. Puram, New Delhi for information and necessary action.

Encl.: As above.

(U. K. Ghosh) Chief Engineer (PAO)

Members of Committee:

Chairman, CWC, Sewa Bhawan, R. K. Puram, New Delhi.

- 2. Secretary (Expenditure), Ministry of Finance, (1st. Floor) North Block, (Gate No.3)New Delhi.
- 3. Secretary, Department of Power, S.S. Bhawan, Hnd 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, Room No 126, 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.
- Chairman, Central Ground Water Board, Jam Nagar House, Man Singh Road, New Delhi.
- 10. Sr. Principal Adviser (WR), Planning Commission, Room No-255, Yojana Bhawan, New Delhi.
- 11. Principal Adviser (Power), Planning Commission, Room No-230, Yojana Bhawan, New Delhi.
- 12. Financial Adviser, Ministry of Water Resources, 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, 3rd Floor, Sinchai Bhawan, Patna-800015
- 17. Commissioner (Projects), Room No-411, S.S.Bhawan, MoWR, New Delhi.
- 18. Commissioner (Ganga), Ministry of Water Resources, CGO Complex, New Delhi.
- 19. Commissioner (Indus), Ministry of Water Resources, CGO Complex, New Delhi.
- 20. Secretary, Water Resources Deptt, Govt of Maharashtra, Mantralaya, Mumbai, 400032.
- 21. Principal Secretary, Irrigation Department, Government of Uttar Pradesh, Sachivalaya Annexe, Lucknow-226 001 (U.P.).
- 22. Principal Secretary, Water Resources, Govt of Madhya Pradesh, Sachivalaya, Arera Hills, Bhopal
- 23. Secretary, Department of Irrigation & Flood Control, Government of Assam, Secretariat, Guwahati-781 006.
- 24. Secretary, P.W.D. & Irrigation, Government of Tamil Nadu, Scretariat, Chennai-600 009.
- 25. Principal Secretary, Water Resources Deptt, Govt of Bihar, Sinchai Bhawan, Patna- 800015.
- 26. Secretary, Irrigation & Waterways Directorate, Government of West Bengal, Writers Building, Kolkata -700 001.
- 27. Secretary (Irrigation), Government of Kerala Secretariat, Thiruvanthapuram-695 001.
- 28. Chief Engineer (FMO), CWC, New Delhi
- 29. Chief Engineer (PMO), CWC, New Delhi.

- 30. Chief Engineer (NBO),CWC, Paryawas Bhawan, Mother Teresa Marg, Arera Hills, Bhopai-462011.
- 31. Chief Engineer (UGBO), CWC, Jahnavi Sadan, 21/496, Indira Nagar, Lucknow-226 016 (UP)
- 32. Chief Engineer, Monitoring- Central, CWC, CGO complex, Seminary Hills, Nagpur

### Copy for information to:-

33. Sr. PPS to Secretary, Ministry of Water Resources, Room No-407, New Delhi.

SUMMARY RECORD OF DISCUSSIONS OF THE 102<sup>nd</sup> MEETING OF THE ADVISORY COMMITTEE ON IRRIGATION, FLOOD CONTROL AND MULTI PURPOSE PROJECTS, HELD ON 28<sup>th</sup> JANUARY, 2010 FOR CONSIDERATION OF TECHNO-ECONOMIC VIABILITY OF PROJECT PROPOSALS.

The 102<sup>nd</sup> meeting of the Advisory Committee for consideration of Techno-Economic viability of Irrigation, Flood Control and Multi-purpose Project proposals was held on 28.01.2010 at 1500 Hrs. in the Conference Room of Central Water Commission, Sewa Bhawan, R.K. Puram, New Delhi under the Chairmanship of Secretary (WR). List of participants is enclosed at Annexure-I.

At the outset, Chairman welcomed the Members of the Committee and other Officers present and thereafter requested the Member-Secretary to take up the agenda for discussion.

Before the item-wise discussion was initiated, JS &FA, MoWR observed that circulation of the TAC notes should be made well in advance so that more time could be devoted for examination of the notes. Thereafter, item wise discussion of the agenda note followed as under:

# A) CONFIRMATION OF THE MINUTES OF THE 101ST MEETING:

The Summary Record of Discussions of the 101<sup>st</sup> Advisory Committee meeting was circulated vide Letter No.16/27/2009-PA (N)/2423-2457, dated 19.12.2009. Member-Secretary informed the Committee that no comment on the same has since been received. The Committee confirmed the Summary Record of discussions of the 101<sup>st</sup> Advisory Committee meeting.

# B) PROJECT PROPOSALS PUT UP FOR CONSIDERATION OF THE ADVISORY COMMITTEE:

# 1) Emergent measures for protection of Rohmoria in Dibrugarh District, Assam:

CE (PAO), CWC briefly introduced the project. The proposed scheme envisages the following:

- i) Bank pitching along with launching apron for a length of 2600 m with Geo bags.
- ii) RCC porcupine screens (11 Nos. across the various river streams to retard the flow) and along the river bank (u/s and d/s of the bank pitching) for a reach length of 6400 m.
- iii) Excavation of pilot channel for a length of 2275 m.

The scheme benefits an area of 18,000 ha with population of 1.2 lakh. The estimated cost of the proposal has been finalized for Rs. 59.91 cr with B.C. ratio as 1.95:1. The scheme has been included in Prime Minister's economic

package announced for the state of Assam during 2004, 2006 and 2008 which is being monitored by the Ministry of DONER.

Member (RM) explained the proposal for emergent works requiring implementation before a long term/comprehensive scheme for which separate DPR has been proposed.

Commissioner (Ganga), MoWR observed that the two heads, namely, K-Building and R-Communication had been provided in the estimate for emergent nature of work.

The state representative informed that in order to reach the site, communication would be needed to be developed as well as some shelter would have to be constructed at the sites for supervisors as well as work force since there was no accommodation available at the site.

Commissioner (Ganga), MoWR further asked whether the works of the scheme would be completed before the onset of monsoon of 2010.

The state representative replied that porcupine works for closing the spill channels would be completed before the monsoon. Balance works would be executed after the monsoon season of 2010.

The State Finance Concurrence for the scheme has been obtained by the Project Authorities.

After brief discussion the Committee accepted the proposal.

# 2. Raising and Strengthening of existing left and right embankments in Lower Reach of Mahananda River in Bihar:

CE (PAO), CWC briefly introduced the project. The proposed scheme envisages the following:

### Strengthening of existing embankment:

i)	Mahananda right embankment - Bagdob Barsoi -	21.30 km.
ii)	Mahananda right embankment – Barsoi Kusidha –	18.24 km.
iii)	Mahananda right embankment Belgachhi –	
	Jhawa (Chain 524 to 1030) (Fulhar branch) -	15.40 km.
iv)	Mahananda right embankment – Jhawa Lava (Chain 0	
	to 478 and 624 to 911) (Right embankment Fulhar branch) -	23.37 km.
V)	Mahananda left embankment – Bagdob Jhawa	
·	(Fulhar branch) –	17.00 km.
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	•	95.31 km.
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- vi) Construction of brick-soling (0.12 x 3 m over 0.15 m sand filling) on top of embankment in 95.31 km length.
- vii) Construction of 5 Nos. new anti flood sluices.
- viii) Repair of existing 7 Nos. anti flood sluices.
- ix) The project benefits 85,090 ha with population of 12.95 lakh.

The estimated cost of the project has been finalized for Rs. 149.68 cr. with B.C. ratio: 1.83:1.

Commissioner (Ganga), MoWR observed that scheme for Flood Control Embankments in Mahananda basin/sub-basin in Bihar was cleared in earlier TAC meeting.

The Engineer-in-Chief (North Bihar) explained that the integrated scheme for Rs. 603.88 cr was cleared in principle only in November, 2007, of which the present proposal was a part only. As per the recommendation of the Advisory Committee, investment clearance was to be obtained separately for different parts of the integrated scheme.

The State Finance Concurrence for the scheme has been obtained by the Project Authorities.

After brief discussion the Committee accepted the proposal.

3. Raising, Strengthening of Left Burhi Gandak embankment u/s of Akharaghat Bridge from Minapur to Vijay Chapra (0.0 to 18.4 km) and in d/s from Akharaghat Bridge to Samastipur District border (0 to 45.5 km), Bihar:

CE (PAO), CWC briefly introduced the project. The proposed scheme envisages the following:

- i) Raising and strengthening of embankment in upstream of Akharaghat Bridge from Minapur to Vijay Chapra (0.0 km to 18.4 km).
- ii) Raising and strengthening of embankment in downstream of Akharaghat Bridge from 0.0km to 45.5 km.

The project benefits an area 30,000 ha.

The estimated cost of the project has been finalized for Rs. 22.40 cr with B.C. ratio: 2.72:1.

Member (RM), CWC intimated that the scheme was already under FMP finding.

Commissioner (Ganga), MoWR observed that techno-economic clearance was mandatory requirement before execution of any project which should not be linked to FMP funding.

The State Finance Concurrence for the scheme has been obtained by the Project Authorities.

After brief discussion the Committee accepted the proposal.

4. Anti Erosion work along the left bank of river Ganga (1) at Ramdiri-Sihama Erosion site near Gupta Embankment, (2) near Gupta Lakhminia Embankment and (3) near Sanaha Gorgama embankment and (4) Raising and strengthening of Gogari Narayanpur Embankment, Naya Gaon Ring Bunch & Akha-Khajraitha Ring Bundh, Bihar:

CE (PAO), CWC briefly introduced the project. The proposed scheme envisages the following:

## I) Gupta Embankment:

Anti erosion work at Ramdiri Sihama site with laying of RCC porcupine in 4 km stretch.

# II) Gupta Lakhminia Embankment:

- i) Construction of damaged boulder anchorage at 4.73 km.
- ii) Construction of boulder revetment in a length of 250 m.
- iii) Construction of 9 Nos. of bed bar between 4.73 km to 5.5 km.

### III) Sanaha Gorgama Embankment:

Construction of boulder revetment between 20.75 km to 21.30 km.

### IV) Gogari Narayanpur Embankment:

- i) Raising and strengthening of Gogari Narayanpur Embankment including its ring and link bundh for a total length of 53.47 km.
- ii) Stone boulder pitching on slope to protect the embankment against wave action for total length of 1.96 km.
- iii) 0.2 m thick brick pitching on important ramps.

The scheme benefits an area of 25,000 ha with population of 2.10 lakh.

The estimated cost of the project has been finalized for Rs. 29.32 cr with B.C. ratio: 4.06:1.

Chairman enquired to know about scope of the works.

The representative from the State government explained in detail each component of the works and necessity for the same.

The State Finance Concurrence for the scheme has been obtained by the Project Authorities.

After brief discussion the Committee accepted the proposal.

5. Construction of embankment along River Jhim and Jamura (Adhwara group) from Sonbarsa Bajar to Sonbarsa village on left bank (25.71 km) and right bank (26.06 km), Bihar:

CE (PAO), CWC briefly introduced the project. The proposed scheme envisages the following:

- i) Construction of right embankment on river Jhim along with brick soling road (from Sonbarsa bazaar to Sonbarsa village) 20.8 km.
- ii) Construction of left embankment on river Jhim along with brick soling road (from Sonbarsa bazaar to Bathuar village) 21.60 km.
- iii) Construction of left embankment on river Bankhe 1.0 km.
- iv) Construction of right embankment on river Bankhe 1.0 km.
- v) Construction of right embankment on river Jamura along with brick soling road (from village Singhrahia to village Sonbarsa) 5.18 km.
- vi) Construction of left embankment on river Jamura along with brick soling road (from village Singhrahia to village Sonbarsa) 4.11 km.
- vii) Anti flood sluice

10 Nos.

viii)Ramps

12 Nos.

ix) Turning Platforms 3 m x 15 m:

20 Nos.

The scheme benefits a total area of 17,400 ha. with population of 5.26 lakhs. The estimated cost of the project has been finalized for Rs. 64.52 cr with B.C.ratio:1.48:1.

The state representative explained in detail various components of the scheme as well as scope of the works.

The State Finance Concurrence for the scheme has been obtained by the Project Authorities.

6. Extension of embankment on left and right bank of river Kamala Balan in lengths of 11.42 km and 5 km with brick soling road on top in left over reachesand protect6ion work at two points on extended portion of right Kamala Balan embankment, Bihar:

CE (PAQ), CWC briefly introduced the project. The proposed scheme envisages the following:

## I) Right Kamala Balan embankment:

- i) 5 inch thick brick soling on top of embankment from 0.0 km to 96.50 km. in width of 3 m.
- ii) Extension of Right Kamala Balan embankment from 91.50 km to 96.50 km.
- iii) Protection work at 91.71 km and 92.25 km in extended portion of right Kamala Balan embankment.

### II) Left Kamala Balan embankment:

- Brick soling with 3 m width on top of embankment from 0 to 3 km, 4 to 11.6 km and 88.0 km to 93.88 km.
- ii) Construction of embankment connecting left Kamala Balan embankment at 22.00 km with Western Kosi Canal embankment in a length of 2.30 km with 0.125 m brick soling on top of embankment.
- iii) Extension of left Kamala Balan embankment from 93.88 km to 103.12 km. with 0.125 m brick soling on top of embankment along with 4 Nos. of anti flood sluices.

The scheme benefits a total area of 3.16 lakh ha. The estimated cost of the project has been finalized for Rs. 56.11 cr with B.C. ratio: 2.01:1.

Commissioner (Ganga), MoWR observed that brick soling on top of embankments had been proposed for considerable stretches which was not important item of works.

The state representative explained that brick soling had been damaged in most places thereby hampering movement for inspection works. Therefore, it had been proposed as a necessary item of works along with extension of embankments.

The State Finance Concurrence for the scheme has been obtained by the Project Authorities.

# 7. Comprehensive Flood Management works to Vellar Basin in Cuddalore and Villupuram Districts, Tamil Nadu:

CE (PAO), CWC briefly introduced the project. The proposed scheme envisages the following:

i) Strengthening of flood banks at different locations	15 <b>7</b> .00 km
ii) Construction of revetment at different locations	18.60 km
iii) Reconstruction of retaining wall/RCC wall at different	7.325 km
Locations	
iv) Construction of inlet structures of drains	437 Nos.
v) Construction of earthen spurs	91 Nos.
vi) Construction of flood monitoring roads	12.822 km
vii) Construction of Platforms	76 Nos.

The scheme benefits a total area of 24,500 ha with population of 4.02 lakh. The estimated cost of the project has been finalized for Rs.164.32 cr. with B.C. Ratio: 2.36:1.

The project authorities explained the project proposal in detail and mentioned that the proposed works were of comprehensive nature for the entire basin and no further work would be required afterwards.

The State Finance Concurrence for the scheme has been obtained by the Project Authorities.

After brief discussion the Committee accepted the proposal.

8. Comprehensive Flood Protection works to Panruti and Cuddalore towns from rivers Pennaiyar, Gadilam, Uppanar, Paravanar and South Malattar in Cuddalore Districts, Tamil Nadu:

CE (PAO), CWC briefly introduced the project. The proposed scheme envisages the following:

### □ Bank Stabilisation;

(i)	Length in Right Bank	65.190 km
(ii)	Length in Left Bank	37.340 km
11	Construction of retaining wall	1367 m
	Drainage inlets	70 Nos.
IV	Spur	8 Nos.
V	Approach platforms	65 Nos.

The scheme benefits a total area of 19,347 ha with population size of about 74,500. The estimated cost of the project has been finalized for Rs.68.41 cr.B.C.Ratio:1.39:1.

The project authorities explained the project proposal in detail and mentioned that the proposed works were of comprehensive nature for the entire basin and no further work would be required afterwards.

Dy. Advisor, Planning Commission observed that the technical clearance should not be linked with FMP, while it was otherwise necessary for inclusion of the project under State Plan.

The State Finance Concurrence for the scheme has been obtained by the Project Authorities.

After brief discussion the Committee accepted the proposal.

# 9. Flood protection works along left and right bank of river Ganga in District J.P. Nagar, Shahajahanpur, Meerut and Bulandshahar, UP:

CE (PAO), CWC briefly introduced the project. The proposed scheme envisages the following:

- i) Construction of 8 Nos. Studs with 3.00 m top width, 18.5 m in length and spacing 50 m c/c.
- ii) Raising and strengthening of H.P. Bund Stage-II (length 21.3 km) in District J.P. Nagar.
- iii) Construction of toe wall and pitching with apron on right bank of river Ganga at Anupshahar, District Bulandshahar at a stretch of 700 m.
- iv) Construction of 4 Nos. studs and 3 Nos. dampners near village Farida Bangar on right bank of Ganga in district Bulandshahar.
- v) Construction of 8 Nos. spurs at Bhainsar Dhai ghat in village Kamaria, district Shahjahanpur.

The scheme benefits a total area of 14,360 ha. with population of 2.5 lakh. The estimated cost of the project has been finalized for Rs. 32.41 cr with B.C. ratio: 13.24:1.

Chairman enquired to know the reason for such high value of B.C. ratio.

The representative from State govt. explained that the scheme would cover the entire Upper Ganga reach due to which the B.C. ratio had been on higher side.

The State Finance Concurrence for the scheme has been obtained by the Project Authorities.

10. Project for Reconstruction, Remodelling and Improvement of embankments in Sundarban and adjoining areas in the districts of North & South 24 — Parganas, West Bengal damaged by severe cyclone 'Aila', West Bengal:

CE (PAO), CWC briefly introduced the project. The proposed scheme envisages the following improvement/reconstruction of embankments of different categories:

- 1A) Reconstruction/improvement of washed away sea dykes for a straight length of 10.20 km.
- 1B) Reconstruction/improvement of washed away river embankment for a straight length of 28.80 km in critical locations.
- 1C) Reconstruction/improvement of washed away or breached river embankments at other locations for a total length of 137.90 km.
- 2A) Reconstruction/improvement of severely damaged sea dykes for a straight length of 8.75 km.
- 2B) Reconstruction/improvement of severely damaged river embankments for a total length of 477.1 km.
- 2C) Improvement of severely damaged river embankments for a total length of 115 km.

The scheme benefits a total area of 2100 sq.km with population of 20 lakhs approximately. The estimated cost of the project has been finalized for Rs. 5032.00 cr with B.C. ratio: 2.88:1.

Member (WP&P) enquired to know about the average intensity of flood losses in comparison to damages caused by the 'Aila' cyclone.

The representative from State govt. intimated that 75% of 'Aila' damage would be average damage loss even with much lesser intensity flood magnitude due to low terrain and insufficient cross-sections of the existing embankments. The permanent nature of the proposed works components in the present proposal would provide protection against any such flood in future.

Commissioner (ER), MoWR enquired to know about the future maintenance for the present proposed works.

The representative from State govt. intimated that the present annual expenditure towards maintenance works was about Rs. 30 to 40 cr per year, which would be much less after the permanent measures were taken up and the same would be borne by the State govt. as necessary.

Dy. Advisor, Planning Commission enquired to know when the project could be completed.

The representative from State govt. replied that it would take three working seasons to complete the works.

Member (WP&P), CWC queried to know whether there was any local opposition towards the proposed works.

The representative from State govt. intimated that it was on contrary as the proposed works would provide much wanted relief to the local population.

The State Finance Concurrence for the scheme has been obtained by the Project Authorities.

After brief discussion the Committee accepted the proposal.

# 11. Scheme for Kaliaghai – Kapaleswari – Baghai Drainage Basin, West Bengal:

CE (PAO), CWC briefly introduced the project. The proposed scheme envisages the following:

- i) Excavation/resectioning of river Kaliaghai from 46.0 km to 109.00 km.
- ii. Excavation/resectioning of the tributaries, Kapaleswari (20.25 km), Baghai (24.00 km), Deuli (9.00 km), Chandia (24.00 km), Kalimandap Amrakhali, etc.
- iii. Realignment of the flood protective embankments of Khaliaghai, Kapaleswari and Baghai and construction of embankments as per standard specification.
- iv. Construction of Rubber dam type regulator on river Kaliaghai at Chabukia downstream of outfall of Kapaleswari/downstream of outfall of Duria dhighi Khal.
- v. Construction of three bridges across river Chandia at Sridharpur, Ejmali Chak and Chandipur.

The scheme benefits a total area of 621 sq. km. with population of 4 lakh approximately. The estimated cost of the project has been finalized for Rs. 650.38 cr with B.C. ratio: 1.91:1.

Commissioner (Ganga), MoWR enquired to know whether the project would require any private land acquisition or not.

The State representative intimated that small stretch of land would be required to be acquired for this scheme which would not be a problem as the local affected people were urging for such project to be taken up. It was further intimated that the project would be completed in three working seasons.

The State Finance Concurrence for the scheme has been obtained by the Project Authorities.

After brief discussion the Committee accepted the proposal.

## 12. Bansagar Unit-I Dam Project (Revised-Major), Madhya Pradesh:

CE (PAO), CWC briefly introduced the project. The Bansagar project is a multi-purpose river valley project on river Sone envisaging both irrigation and hydro power generation. The proposed benefits include irrigated area of 2.49 lakh ha in Madhya Pradesh, 1.5 lakh ha in Uttar Pradesh and stabilization of 0.94 lakh ha in Bihar, besides, 425 MW installed capacity for hydro power generation.

The original proposal was earlier approved by the Planning Commission in August, 1978 for Rs. 91.31 cr at PL-1977. The present revised estimate is without change in scope and the cost has been finalized for Rs. 1582.94 cr. at PL-2009 with B.C. ratio: 1.63:1.

Member (WP&P) observed that the project was almost in completion stage, therefore, the State govt. should declare this project as completed.

Principal Secretary, Water Resources Department, Madhya Pradesh intimated that the Unit-I dam had been fully completed but for some residual works like balance payment for land acquisition and rehabilitation works, installation of elevated shaft in the dam, catchment area treatment works, epoxy treatment of spillway buckets, etc. were yet to be completed. Besides, the proportionate balance share cost of dam would also required to be paid by the Govt. of UP and Govt. of Bihar. He further stated that since the project was being funded under AIBP, continuance of the project for at least one more year would be required to complete all the balance works.

The State Finance Concurrence for the scheme has been obtained by the Project Authorities.

After brief discussion the Committee accepted the proposal.

### 13. Khadakpurna River Project (Major), Revised Estimate, Maharashtra:

CE (PAO), CWC briefly introduced the project. Khadakpurna river project envisages construction of an earthen dam across river Khadakpurna, a tributary of river Godavari to irrigate a CCA of 25900 ha with irrigation intensity as 96%.

The original project proposal was approved by the Planning Commission in March 2007 for Rs. 578.56 cr (PL-2005-06). Present revised estimate cost is without any change in scope and has been finalized for Rs. 917.95 cr (PL-2008) with B.C. Ratio: 1.89.

CE (PAO) further intimated that the scheme was discussed in 100<sup>th</sup> TAC meeting held on 9.10.2009, but deferred due to non submission of State Finance Concurrence. The same has now been obtained.

After brief discussion the Committee accepted the proposal.

## 14. Tarali Irrigation Project (Major-Revised Estimate), Maharashtra:

CE (PAO), CWC briefly introduced the project. The project envisages construction of a 1096 M long masonry dam across Tarali River in Krishna basin with provisions of lift schemes to irrigate a CCA of 18,131 ha with annual irrigation of 19,198 ha.

The original project proposal was approved by the Planning Commission in March 2007 at an estimated cost of Rs. 504.96 cr (PL-2000-01). The present revised estimate without change in scope has been finalized for Rs. 870.90 cr (PL-2008-09) with B.C. Ratio: 1.37 (benefiting drought prone area).

CE (PAO) further intimated that the scheme was discussed in 100<sup>th</sup> TAC meeting held on 9.10.2009, but deferred due to non submission of State Finance Concurrence. The same has now been obtained.

Chairman enquired to know about the reason for low B.C. ratio.

The project authorities replied that 60% of the command area fell in drought prone area and therefore the B.C. ratio worked out was within the permissible limits.

Dy. Advisor, Planning Commission mentioned that the AIBP funding would be done in proportion to the command area falling in drought prone area.

After brief discussion the Committee accepted the proposal.

### 15. Upper Penganga Project (Revised Major), Maharashtra:

CE (PAO), CWC briefly introduced the project. The project envisages construction of two earthen dams, namely, Isapur and Sapli across the rivers Penganga and Kayadhu (a tributary of Penganga) respectively, two main canal systems from Isapur dam, and, one feeder canal and, one branch canal from the Sapli dam.

The original project was approved by the Planning Commission in June 1976 for Rs. 84.48 cr at PL-1975-76 for a CCA of 1.38 lakh ha with annual irrigation of 1.11 lakh ha. The present revised estimate is without change in scope and the cost has been finalized for Rs. 3038.42 cr with B.C. ratio as 1.57:1.

Chairman enquired to know about the status of the project.

Member (WP&P) intimated that the Isapur dam had already been completed while the works of Sapli dam should be taken up only after specific environmental clearance was obtained from MoEF.

Chief Engineer (PAO) enquired to know regarding the status of tribal population displacement.

The project authorities intimated that the project involved displacement of some tribal families but the area was not a notified tribal area. Therefore, MoTA clearance was not required.

Chairman mentioned that since the project involved displacement of tribal families, the clearance from MoTA would be mandatory. Therefore, the requisite statutory clearance might be obtained before undertaking works of Sapli dam.

The State Finance Concurrence for the scheme has been obtained by the Project Authorities.

After brief discussion the Committee accepted the proposal subject to the clearance from MoEF and MoTA before taking of actual works.

## 16. Lower Dudhana Irrigation Project (Revised Major), Maharashtra:

CE (PAO), CWC briefly introduced the project. The project envisages construction of an earthen dam on river Dudhana a tributary of river Purna in Godavari basin in district Parbhani, Maharashtra along with two main canal systems on either banks.

The original project was approved by the Planning Commission in March 1983 for Rs. 53.20 cr at PL-1982-83 for a CCA of 38,264 ha with annual irrigation of 44,482 ha subject to observations. The present revised estimate with minor changes in design parameters have been appraised in CWC and the cost has been finalized for Rs. 1349.50 cr at PL-2008-09 with B.C. ratio as 1.80:1.

Member (WP&P) pointed out that the dependable yield of the project had reduced to 65% instead of 75% as per original approval.

The project authorities intimated that the storage had already been created but reduction in the yield was due to increase in upstream utilization.

Director, Hydrology (South), CWC mentioned that although hydrological gauge and discharge site was supposed to be established at the project location, the same had not been done till date, hence the yield worked out was on the

basis of data of downstream G&D site. Project Authority should establish mechanism to observe the inflow data at project site.

The State Finance Concurrence for the scheme has been obtained by the Project Authorities.

After brief discussion the Committee accepted the proposal.

### 17. Umarhut Pump Canal – Phase-II (Major-New ERM), Uttar Pradesh:

CE (PAO), CWC briefly introduced the project. The ERM scheme envisages lifting of 300 cusecs water from River Yamuna at Umarhut village, District Kanpur Dehat from June to December to supplement Bhoganipur Branch under Lower Ganga Canal System through a 6.35 km long feeder canal to provide irrigation in the districts of Ferozabad, Etawah, Auriya and Kanpur Dehat. The water is proposed to be lifted in two stages for a lift of 34 m and 22 m respectively. CCA of the project is 51,311 ha with annual irrigation of 46,948 ha.

The total estimated cost of the project has been finalized for Rs. 73.69 cr at PL-2009 with B.C. ratio as 1.57:1.

Chairman observed that since the project was to divert water from Yamuna River in Ganga basin, the safeguard against withdrawal of water during lean season should be ensured.

The project authorities assured that as per the project proposal there would be no drawal of water during January to May.

The State Finance Concurrence for the scheme has been obtained by the Project Authorities.

- C) Other items:
- 1) "Mitigation of Floods in Group-I, 14 Padasekharams in Kuttanad Region of Kerala":

CE (PAO), CWC briefly introduced the project. The Kuttanad is a low lying area of Kerala extending over 1100 sq. km. having a population of over 1 million. There are a total number of 1436 paddy growing fields in this region which are called as 'Padasekharams'. During monsoon period water from the nearby lakes/water bodies spill over and causes inundation in the paddy fields thereby damaging crops. The State government and local farmers had in the past constructed small bunds at some locations to prevent the damage.

The present proposal is for raising and strengthening of the existing bunds around 14 'Padasekharams' (paddy fields) in Kuttanad area of Kerala. The proposed structures are about 2.3 m high and 2 m wide embankments without motorable inspection track and rubble masonry walls of about 3 m height with 45 cm top width near water facing surface of embankments.

The project would benefit 574.83 ha belonging to 872 farming families.

The estimated cost of the project has been finalized for Rs. 24.70 crore with B.C.ratio: 1.12:1.

The project authorities explained the project in detail emphasizing on the need for the proposed works in order to provide protection to the highly fertile paddy fields.

The State Finance Concurrence for the scheme has been obtained by the Project Authorities.

#### LIST OF PARTICIPANTS

### Members of the Committee:

S/ Shri		
1	U.N. Panjiar, Secretary (WR). Ministry of Water Resources	In the Chair
2.	A.K. Bajaj, Chairman, CWC, New Delhi	Member
3.	Mrs. Ananya Ray Financial Advisor, Ministry of Water Resources	Member
4.	Dr. R.K. Batta, Principal Scientist(NRM),ICAR, New Delhi (Representing Director-General, ICAR)	Member
5.	Dr. Man Singh. DAC (Representing Ministry of Agriculture)	Member
6.	Tanmoy Das, Chief Engineer, CEA (Representing Ministry of Power and Central Electricity Authority)	Member
7.	Avinash Mishra, Dy. Advisor (WR), Planning Commission, New Delhi (Representing Principal Advisor (WR), Planning Commission)	Member
8.	U. K. Ghosh, Chief Engineer, PAO, CWC, New Delhi	Member- Secretary

#### Special Invitees

#### a) Ministry of Water Resources

S/ Shri

1. A. B. Pandya, Commissioner (PR), McWR

W. 7/11 /

2. S. P. Kakran, Commissioner (Ganga), MoWR

#### b) Central Water Commission

S/ Shri

- 1. R. C. Jha, Member (RM), CWC, New Delhi, Holding additional charge as Chairman, GFCC, Patha.
- 2 Indra Raj, Member (WP&P), CWC, New Delhi.
- 3. G. S. Purba, CE (DSO) représenting Member (D&R)
- 4 S.K. G. Pandit. Chief Engineer(NBO), CWC, Bhopal
- 5. M.K. Sinha, Chief Engineer (PMO), CWC, New Dellhi
- 6 S.K. Chaudhuri, Chief Engineer, (FM), CWC, New Delhi
- 7. T. S. Patil, Chief Engineer, MCO, CWC, Nagpur
- 8. A. M. Patil, Director, Appraisal, CWC, Nagpur
- 9. Y. K. Sharma, Director Irrigation Planning (S), CWC, New Delhi
- 10. Bhopal Singh; Director (Hydrology), CWC, New Delhi
- 11. C. Lal, Director (UT&SS), CWC, New Delhi
- 12. C. P. Singh, Director, FM(I), CWC, New Delhi
- 13. S.K. Haldar, Director M&A, GWC, Bhopal
- 14. D. P. Mathurja, DD., M&A, CWC, Bhopal
- 15. P. C. Jha, DD (CA-I), CWC, New Delhi
- 16 G. Rambabul DD (Mon), CWC. Nagpur
- 17. M W Paunikar, DD, PA-N, CWC, New Delhi
- 18. Sudhir Kumar, DD, PA(S), CWC, New Delhi
- 19. B Rai, DD, PA-C, CWC, New Delhi
- 20 Punit Mittal, DD, PA-S. CWO, New Delhi
- 21. S S Bonal, DD, CA(I), CWC, New Delhi

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- 22. P. K. Sharma, DD (RMCD), CWC, New Delhi
- 23. Piyush Kumar, DD (FM-II), CWC, New Delhi
- 24. Kiran Pramanik, DD (CA-HWF), CWC, New Delhi

### c) GFCC

- 1. Shri M U Ghani, Member(C), GFCC, Patna
- 2. Shri S. Masood Husain, GFCC (Planning), Patna

#### d) State Government officers

#### Assam

Shri. A.K Sarmah, Chief Engineer, W.R, Irrigation Dept.

#### Bihar

Shri R. Dayal, Engineer-in-Chief, WRD, Patna

#### Tamil Nadu

Maharashtra

#### S/ Shri

- 1. S. Kumaresan, Chief Engineer, PWD Plan Formulation, Chennai.
- 2. M. Palanikumar, Executive Engineer, Vellore Basin Division, Tamilnadu
- N. Kandavel, AE, PWD, Chennai
   Madhya Pradesh

#### S/ Shri

- 1. A. Joshi, Principal Secretary, WRD, Govt of MP
- 2. M. P. Chaturvedi, CE, Bansagar Basin, Rewa

# S/ Shri

- 1. E. B. Patil, Secretary (WR), Govt of Maharashtra, Mumbai
- 2. D. R. Kandi, Executive Director, GMIDC, Aurangabad
- 3. P. C. Zapke, Executive Director, MKVDC, Pune
- 4. S M Upase, Chief Engineer, Irrigation Dept, Pune
- 5. R. B. Ghok, Chief Engineer, CADA, Aurangabad
- 6. G. S. Lokhande, Chief Engineer, Water Resources, Amravati
- 7. Rajendra Pawar, Superintending Engineer, WRD, Buldhana Circle
- 8. K. B. Kulkarni, Superintending Engineer, Satara Irrigation Circle, Satara Kerala.

#### S/ Shri

- 1. Lathika P., Chief Engineer, Irrigation, Govt. of Kerala.
- P Anil Kumar, SE, Irrigation Department, Kerala
   Uttar Pradesh

#### S/ Shri

- 1. Sabghan Ahmed, Engineer-In- Chief (D&P), Irrigation Department, Lucknow
- 2. A. K. Ojha, Chief Engineer, Irrigation Department, Lucknow
- R. S. Arya, EE, Umarhut Pump Canal Phase-II, Kanpur West Bengal.

#### S/ Shri

- 1 Anjan Kr Chatterjee, Chief Engineer, I&W, West Bengal.
- D Sengupta, Deputy Secretary, I&W Department, West Bengal

member p-9fcc@nic.in

No. 16/27/2010-PA (N)/ 50/-536

## GOVERNMENT OF INDIA CENTRAL WATER COMMISSION PROJECT APPRAISAL ORGANIZATION

407, SEWA BHAWAN, R. K. PURAM, NEW DELHI-110 066

Date: 19<sup>th</sup> March, 2010

Sub: 103<sup>rd</sup> meeting of the Advisory Committee for consideration of technoeconomic viability of Irrigation, Flood Control and Multipurpose Project proposals held on 11.03.2010.

Enclosed please find herewith a copy of the summary record of discussions of the above meeting held at New Delhi on 11<sup>th</sup> March, 2010 at Sewa Bhawan, R. K. Puram, New Delhi for information and necessary action.

Encl.: As above.

(UK. Ghosh) Chief Engineer (PAO) Member-Secretary

To

## Members of 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, S.S. Bhawan, IInd 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
- 6. Secretary, Department of Agriculture & Cooperation, Room No 126, 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. Principal Adviser (WR), Planning Commission, Room No-255, Yojana Bhawan, New Delhi.
- 11. Principal 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. Member (WP&P), CWC, New Delhi.
- 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. Commissioner (Ganga), Ministry of Water Resources, CGO Complex, New Delhi.
- 18. Commissioner (Indus), Ministry of Water Resources, CGO Complex, New Delhi.

- Secretary, Water Resources Deptt, Govt of Maharashtra, Mantralaya, Mumbai, 400032.
- 20. Principal Secretary, Irrigation Department, Government of Rajasthan, Secretariat, Jaipur-302 005.
- 21. Principal Secretary, Water Resources, Govt of Madhya Pradesh, Sachivalaya, Arera Hills, Bhopal
- Principal Secretary, Irrigation Department, Government of Uttar Pradesh, Sachivalaya Annexe, Lucknow-226 001 (U.P.).
- 23. Secretary, Department of Irrigation & Flood Control, Government of Assam, Secretariat, Guwahati-781 006.
- 24. Secretary, (PWD/Irrigation & PHE), Government of Jammu & Kashmir, Civil Secretariat, Srinagar-190 001.
- 25. Secretary, Narmada & Water Resources Department, Government of Gujarat, 9/1, Sardar Bhawan, Sachivalaya, Gandhinagar-302 010.
- 26. Secretary, Irrigation Department, Govt. of Karnataka, M.S. Building, 6<sup>th</sup> floor Karnataka Government Secretariat, Dr. Ambedkar Veedhi, Bangalore-560 001.
- 27. Principal Secretary, Irrigation Department, Government of Punjab, Secretariat, Chandigarh-160 001
- 28. Secretary (I&CAD), Irrigation Department, Government of Haryana, Civil Secretariat, Chandigarh-160 017
- 29. Chief Engineer, Monitoring-South, CWC, Jalasudha, Near HMT Precision Machinery Division, H.M.T. Post, Bangalore-560031
- 30. Chief Engineer, Monitoring- Central, CWC, CGO complex, Seminary Hills, Nagpur
- 31. Chief Engineer (NBO), CWC, Paryawas Bhawan, Mother Teresa Marg, Arera Hills, Bhopal-462011.
- 32. Chief Engineer, IBO, CWC, Chandigarh
- 33. Chief Engineer (UGBO), CWC, Jahnavi Sadan, 21/496, Indira Nagar, Lucknow-226 016 (UP)
- 34. Chief Engineer (B&BB), Brahmaputra & Bank Basin, CWC, "Maranatha" Pohkseh P.O. Rynjah, Shillong 793006
- 35. Chief Engineer (PMO), CWC, New Delhi.

### Copy for information to

36. Sr. PPS to Secretary, Ministry of Water Resources, Room No-407, S.S.Bhawan, New Delhi

SUMMARY RECORD OF DISCUSSIONS OF THE 103<sup>rd</sup> MEETING OF THE ADVISORY COMMITTEE ON IRRIGATION, FLOOD CONTROL AND MULTI PURPOSE PROJECTS, HELD ON 11<sup>th</sup> MARCH, 2010 FOR CONSIDERATION OF TECHNO-ECONOMIC VIABILITY OF PROJECT PROPOSALS.

The 103<sup>rd</sup> meeting of the Advisory Committee for consideration of Techno-Economic viability of Irrigation, Flood Control and Multi-purpose Project proposals was held on 11.03.2010 at 1030 Hrs. in the Conference Room of Central Water Commission, Sewa Bhawan, R.K. Puram, New Delhi under the Chairmanship of Secretary (WR). List of participants is enclosed at Annexure-I.

At the outset, Chairman welcomed the Members of the Committee and other Officers present and thereafter requested the Member-Secretary to take up the agenda for discussion. Proceedings of the meeting followed as under:

# 1) CONFIRMATION OF THE MINUTES OF THE 102ND MEETING:

The Summary Record of Discussions of the 102<sup>nd</sup> Advisory Committee meeting was circulated vide Letter No.16/27/2010-PA (N)/248-280, dated 09.02.2010. Member-Secretary informed the Committee that no comment on the same has since been received. The Committee confirmed the Summary Record of discussions of the 102<sup>nd</sup> Advisory Committee meeting.

# II) PROJECT PROPOSALS PUT UP FOR CONSIDERATION OF THE ADVISORY COMMITTEE:

# 1. Champamati Irrigation Project (Major-Revised), Assam:

CE (PAO), CWC briefly introduced the project. The proposal comprises of a 258.50 M long barrage across river Champamati at Nagdolbari in Chirag district of Bodoland Territorial Council, and two canal systems on either bank for a total command area of 17,414 ha with annual irrigation of 24,994 ha.

The original proposal was approved by the Planning Commission in July 1980 for Rs. 15.32 cr at PL-1980. Subsequently, the first revised cost estimate was approved by the Planning Commission in Aug. 2007 for Rs. 147.24 cr at PL-2004.

The present revised cost estimate is without any change in scope and the cost has been finalized for Rs. 309.22 cr at PL-2009 with B.C. ratio as 1.33:1, which is acceptable as the project is located in North eastern region of the country. State Finance Concurrence for the revised estimate has been obtained by the Project Authorities.

Chairman observed that although the original project was approved in 1980, both physical and financial progress of the work was rather going on at slow pace. He enquired to know whether there was any land acquisition problem persisting or not.

The project authorities informed that the delay was mainly due to lack of fund and land acquisition problem. However, the main canals had been completed by about 80% while distribution system completed upto 30% which islikely to be completed in another two years. They further intimated that there was no land acquisition problem at present, and assured that the project would be completed within the stipulated time period of 2011-12 without further revision in the cost.

State Finance Concurrence for the project has been obtained and enclosed at Annexure II.

After brief discussion the Committee accepted the proposal.

# 2. Sardar Sarovar Project (Major-Revised), Gujarat:

CE (PAO), CWC briefly introduced the project. The project envisages construction of the following main works:

- A concrete gravity dam across Narmada near village Navagaon in Gujarat with gross storage of 0.95 Mham and a live storage of 0.58 Mham.
- ii) A central spillway to pass\_a design discharge of 87,000 cumec.
- Narmada main canal 458 km long up to the Gujarat- Rajasthan state border with capacity at Head as 1133 cumecs tapering down to 70.80 cumecs in order to provide irrigation to about 2.46 lakh ha in Rajasthan.
- iv) A river bed power house with installed capacity of 1200 MW (6 x 200 MW).
- v) Canal head power house on the right bank with installed capacity as 250 MW (5 x 50 MW).
- vi) 4 Nos. of natural ponds for regulation of release from canal head power house into the main canal.
- vii) The distribution network comprising of 38 branch/sub-branch canals, with a total length of 2585 km, distributaries and minors with a total length of 5112 km and sub-minors with a total length of 6647 km.

The original proposal was approved by the Planning Commission in Oct. 1988 for Rs. 6406.06 cr at PL-1986-87 for irrigation to a command area of 21.20 lakh ha with annual irrigation of 17.92 lakh ha.

The present revised cost estimate is without change in scope and the cost has been finalized for Rs. 39,240.45 cr at PL-2008-09 with B.C. ratio as 1.63:1.

Chairman observed that the cost escalation of the project had been about 6 times since 1986-87. He enquired to know;

- i) reason for delay in execution of the project,
- ii) physical progress of the project and
- iii) progress in command area development (CAD) works.

The project authorities informed that delay was mainly due to settlement of R&R issues which was further accentuated by the anti-dam agitations. Besides, stay order from the Supreme Court in May 1995 till Oct, 2000 halted physical progress of works although, dam height of 110 m was already attained by May 1995. Thereafter, the dam has been raised to 121.92 m till Dec. 2006. Further raising of dam was held up pending direction from the Narmada Control Authority. Meanwhile, works of major conveyance system had been completed which included 458 km long main canal up to Gujarat-Rajasthan border, 1833 km of branch canals out of total of 2585 km (28 branches operationalised out of total 38 branches), 1540 km of distributaries completed out of total of 5112 km and 5000 km of minors had been completed out of a total of 18,413 km and as a result, water could be supplied to water scarce areas of Saurashtra, Kutch and North Gujarat. CAD plan was earlier prepared in 2003 and was submitted to CADWM wing of the Ministry of Water Resources. The plan was re submitted and finalized in 2007 by the CADWM wing. The plan has been further updated as per the outline plan finalized by Committee of Experts of environment Sub group of Narmada Control Authority and has been submitted to the Environment Sub Group for approval.

Advisor (Costs), Dept. of Expenditure enquired about the funding arrangement to complete the remaining works of the project.

The project authorities replied that the necessary funds would be made available in the state budget out of state resources and stated that for the year 2010-11 the budgetary provision of Rs. 3625 cr had been made for the project. Besides, the SSNNL would borrow from the market, if necessary. Fund would be available under AIBP scheme of Central Govt. He clarified that as such funds would not be the constraint to complete the remaining works of the project and the project works would be completed by March 2014.

Chairman enquired about the details to accomplish the above target.

The project authorities responded that several initiatives had been taken in the recent past to materialize the above targets, some of which were as under:

- i) Land acquisition compensation to be paid at market rate.
- ii) Outsourcing of joint measurement and preparation of land acquisition proposal since about last 10 months.
- iii) Outsourcing of various survey and design works.
- iv) Major new works being taken up under EPC contract.
- v) To cope up with shortage of technical man power, project monitoring consultants being appointed.

vi) To facilitate resolution of local issues in the command area and to initiate participatory approach, a district level multi-disciplinary coordination committee has been operationalised in each district under the chairmanship of District Collector.

Advisor (Costs), Dept. of Expenditure, while appreciating the decentralized approach of district coordination committee, suggested that, if possible, the decentralized approach of district coordination committee might be extended upto block level.

The project authorities clarified that the concerned block level officers were already members of such committee and thus they were representing the issues relating to their blocks.

Chairman enquired about the initiatives being taken for micro irrigation in the project.

The project authorities informed that pilot projects were being taken up for pressurized irrigation network (PIN) as well as micro irrigation system (MIS) in certain areas and those were being examined for its feasibility. The project authorities further intimated that the state govt. had established a special purpose vehicle to implement MIS and it would be providing subsidy to the farmers who would implement the same.

Chief Engineer, CEA enquired about the status of Garudeswar Weir.

The project authorities informed that although Sardar Sarovar Construction Advisory Committee had given the administrative approval to this work, the implementation had not yet been possible as one of the participating states, Maharashtra was not agreeable to share the cost of pumping back the water from the Garudeswar Weir to Sardar Sarovar Reservoir after generation of power.

Chief Engineer, CWC, Bhopal enquired about the fitness of the radial gates to be installed over the crest of the spillway.

The project authorities responded that the gates had been fabricated and available at site and those would be subjected to sand blasting as well as anti corrosive paint would be applied before installation of those gates. He also clarified that the installation of gates was included in the contract of the main dam.

Member (WP&P), CWC suggested to get a view of the dam safety panel on the same.

State Finance Concurrence for the project has been obtained.

# 3. Rehabilitation, modernization of canals and renovation of drains to recharge the ground water (ERM-Major), Haryana:

CE (PAO), CWC briefly introduced the project. This present ERM scheme of Haryana is for restoration of lost irrigation potential of 28,822 ha due to gradual deterioration of the old canal systems in the state over the years. The project proposal envisages the following works;

- i) Restoration of six branch canal systems, namely Narwana branch, Fatehabad branch, WJC main branch, Hansi branch, Butana branch and Jawahar Lal Nehru feeder.
- ii) Improvement of 12 head regulators.
- iii) Improvement of 235 nos. of outlets.
- iv) Improvement of one aquaduct.
- v) Improvement of 113 cattle ghats.
- vi) Improvement of 102 nos. of bridges.

The estimated cost of the project proposal has been finalized for Rs. 67.28 cr at PL-2008-09 with B.C. ratio as 1.75:1.

Chairman enquired as to the status of physical and financial progress of the works.

The project authorities informed that about Rs. 43 cr had been spent till Dec. 2009 and physical progress commensurate with the expenditure had also been achieved.

Chairman enquired to know when the project would be completed and whether O&M fund would be provided after completion of the scheme.

The project authorities informed that the project works would be completed as per the schedule and it would be backed up with regular O&M fund.

State Finance Concurrence for the project has been obtained and enclosed at Annexure III.

# 4. Restoration and Modernization of main Ravi canal and its distribution network (New Major-ERM), Jammu & Kashmir:

CE (PAO), CWC briefly introduced the project. The existing Ravi canal project of J&K has 4 phases for implementation out of which first three phases have been completed.

The 4 phases are as under:

Phase I: a) Construction of Ujh barrage across the river Ujh.

- b) Main Ravi canal downstream of Ujh barrage for 34 kms upto off-take of distributary No. 17.
- c) Construction of distributaries from No. 5 to No. 17.

Phase II: a) Main Ravi canal from Lakhanpur to upstream Ujh barrage for 24.25 km.

- b) Main Ravi cnal from distributary No. 17 to tail end for 10.35 km.
- c) Distributary No. 1 to 4 and distributary No. 18 to 20.
- d) Lift station at Lakhanpur.

Phase III: a) Main Ravi canal from Basantpur lift station to Lakhanpur for 8.27 km.

b) Lift station at Basanpur.

Phase IV: a) Main Ravi canal from Shahpur Kandi dam to Basantpur. (yet to started)

Total CCA of the Ravi canal project is 26,600 ha with annual irrigation of 50,749 ha. The present proposal is for replacement of the lift pumps and restoration of canal network so as to stabilize the command area already created through completion of Phase-I, Phase-II & Phase-III of the Ravi canal project.

These proposed works will enable restoration of 15,016 ha of lost potential.

The estimated cost of the ERM proposal has been finalized for Rs. 62.27 cr at PL-2008-09 with B.C. ratio as 1.85:1.

As regards State Finance Concurrence in respect of the project, the project authorities intimated that the same had not been obtained yet due to ongoing annual plan discussion in Planning Commission. The same would be obtained shortly. The project authorities further intimated that 10% from state fund would be projected for the scheme in the budget of 2010-11.

After brief discussion the Committee deferred acceptance of the proposal due to non availability of SFC.

# 5. Modernisation of Chandrampalli Project-ERM (Medium-New), Karnataka:

CE (PAO), CWC briefly introduced the project. The Chandrampalli Project is located in Krishna basin on Sarnala near Chandrampalli village in Gulbarga district of Karnataka. The original project proposal was approved by the Planning Commission in 1976 at an estimated cost of Rs. 2.06 cr at PL-1975-76 for a CCA of 5223 ha with annual irrigation of 8446 ha (161.7% intensity of irrigation).

The project consists of an earthen embankment and a spillway on the left side saddle with gross storage of 34.21 MCM and live storage of 31.42 MCM and two canal systems on both the banks.

Due to deterioration of the canal system present annual irrigation has reduced to 6511 ha against potential of 8446 ha. The present ERM proposal is for restoration of the lost irrigation potential of 1935 ha. The proposed works include the following:

- i) Modernisation/renovation of the main canals and their distributary systems.
- ii) Improvement to inner/outer slope of bund.
- iii) Improvement of service roads.
- iv) Repair of CD works outlets, etc.

The cost estimate of the ERM proposal has been finalized for Rs. 14.93 cr (at PL-2009-10) with B.C. ratio as 2.63:1.

The State Finance Concurrence for the scheme has been obtained. The same is enclosed at Annexure-IV.

After brief discussion the Committee accepted the proposal.

## 6. Modernisation of Hattikuni Project – ERM (Medium-New), Karnataka:

CE (PAO), CWC briefly introduced the project. The Hattikuni Project is located in Krishna basin on Gazar kote branch of Hattikuni stream at Hattikuni village in Gulbarga district of Karnataka. The original project proposal was approved by the Planning Commission in 1961 at an estimated cost of Rs. 0.58 cr at PL-1960-61 for a CCA of 2145 ha 100 % intensity of irrigation.

The project consists of an earthen embankment and a left bank canal system only. Due to deterioration of the canal system present annual irrigation is only 1189 ha.

The present proposal is for restoration of the lost irrigation potential of 956 ha through ERM works.

The proposed works include the following:

- i) Repair of sluice.
- ii) Modernisation/renovation of main canal and distributary systems
- iii) Improvement to inner/outer slope of bund.
- iv) Improvement of service road.
- v) Repair of CDs and outlets.

The cost estimate of the ERM proposal has been finalized for Rs. 6.75 cr at PL-2009-10 with B.C. ratio as 1.96:1.

The State Finance Concurrence for the scheme has been obtained and enclosed at Annexure-V.

After brief discussion the Committee accepted the proposal.

# 7. Modernisation of Upper Mullamari Project – ERM (Medium-New), Karnataka:

CE (PAO), CWC briefly introduced the project. The Upper Mullamari Project is located in Krishna basin on Mullamari stream in Bidar district of Karnataka. The original project proposal was approved by the Planning Commission in 1978 at an estimated cost of Rs. 3.28 cr at PL-1975-76 for a CCA of 3229 ha with annual irrigation of 3279 ha.

The project consists of an earthen embankment, and ungated saddle spillway and two main canal systems on both the banks. Due to deterioration of the canal system present annual irrigation is only 1779 ha against potential of 3279 ha.

The present ERM proposal is for restoration of the lost irrigation potential of 1500 ha.

The proposed works include the following:

- i) Modernisation/renovation of main canal and distributary systems
- ii) Improvement to inner/outer slope of bund.
- iii) Improvement of service road.
- iv) Repair of CDs and outlets.

The cost estimate of the ERM proposal has been finalized for Rs. 8.21 cr at PL-2009-10 with B.C. ratio as 1.91:1.

The State Finance Concurrence for the scheme has been obtained. The same is enclosed at Annexure-VI.

# 8. Mahan (Gulab Sagar) Project (Revised Major), Madhya Pradesh:

CE (PAO), CWC briefly introduced the project. Mahan (Gulab Sagar) Project was originally approved by the Planning Commission in Sept. 2003 for Rs. 140.51 cr at PL-2002 for a command area of 14,000 ha with annual irrigation of 19,740 ha.

Mahan Irrigation Project is a major project across river Mahan, a tributary of river Banas in Sone basin near village Khadi in Sidhi district of Madhya Pradesh. The project envisages construction of a 182.50 M long masonry dam with gross storage of 104.61 MCM and a 57 km long right bank main canal along with its distribution system.

The present revised cost estimate is without any change in scope and the cost has been finalized for Rs. 486.96 cr at PL-2009 with B.C. ratio as 1.10 which is acceptable as the project is located in both tribal and drought prone area.

Chairman observed that expenditure incurred on the project so far had been only about Rs. 163 cr against estimated cost of about Rs. 487 cr He enquired to know whether it would be possible to achieve the required physical and financial progress for completion of the project by 2011-12.

The project authorities informed that in view of no land acquisition problem at present and the works had been awarded on EPC basis, it would be possible to meet the target.

Chairman enquired about the status of progress in command area development works.

The project authorities intimated that the activities relating to CAD are yet to be taken up.

Chairman advised to consider CAD works forthwith.

Member (WP&P) observed that the work programme under NREGA could be tied up with CAD works of this project.

The State Finance Concurrence for the scheme has been obtained and enclosed at Annexure-VII.

## 9. Jobat Project (Revised Medium), Madhya Pradesh:

CE (PAO), CWC briefly introduced the project. Jobat Irrigation Project was originally approved by the Planning Commission in Jan. 1985 for Rs. 30.75 cr at PL-1984 for a CCA of 9848 ha with annual irrigation of 12,507 ha.

Jobat Irrigation Project is located in Alirajpur district of Madhya Pradesh on the river Hatini, a tributary of river Narmada near village Waskal. The project consists of a 485.50 M long dam and a 29.73 km long left bank canal system. The present revised cost estimate is without any change in scope and the cost has been finalized for Rs. 230.61 cr at Pi-2009 with B.C. ratio as 1.52.

Director (M&A), CWC, Bhopal apprised Chairman about the current status of works of the project. He informed that the project was in advance stages of completion. There was no issue of land acquisition involved and only few residual works required to be completed for the project.

Chairman enquired to know about the status of CAD works in the command.

The project authorities intimated that the CAD works had also been going on simultaneously and part irrigation had already been introduced in the command benefiting the drought prone as well as tribal areas. He also informed that WUAs had also been established in the command. The project authorities also assured that the remaining residual works would be completed within the stipulated next two working seasons by 2011-12.

The State Finance Concurrence for the scheme has been obtained and enclosed at Annexure-VIII.

After brief discussion the Committee accepted the proposal.

### 10. Ghungshi Barrage Medium Irrigation Project, Maharashtra:

CE (PAO), CWC briefly introduced the project.

Ghungshi Barrage is a Medium irrigation Project proposed to be constructed across river Purna, a left bank tributary of river Tapi near village Parag in Akola district of Maharashtra to provide irrigation to a command area of 7048 ha with annual irrigation of 6660 ha. The project is located in drought prone areas of Akola district. The project envisages construction of a 185 M long barrage and provision of lift irrigation with total discharge of 3.758 cumec for a total lift of 21 M and a 15.18 km long left bank ridge canal to irrigate the command area available on the left bank of the river. The estimated cost of the project has been finalized for Rs. 170.15 cr at PL-2008-09 with B.C. ratio as 1.98:1.

Chairman observed that the project being in Tapi basin whether adequate water would be available or not.

The project authorities intimated that water would be available for the project being on the main tributary of Tapi river. Besides, the water requirement for the project was within the allocated share of Maharashtra.

Chairman, CWC enquired to know about the impact of ongoing Purna project on the proposed Ghungshi barrage project.

The project authorities informed that Purna project was located 40 km downstream of the proposed barrage site and there would be no effect on this project on account of Purna project.

Chairman enquired to know regarding provision in the state budget for the project.

The project authorities informed that the state govt. had made necessary provision in the budget. They further intimated that the land acquisition for the project had already been completed and the project would be completed within the stipulated period i.e., 2011-12.

The State Finance Concurrence for the scheme has been obtained.

After brief discussion the Committee accepted the proposal.

# 11. Extension, Renovation and Modernisation of canals being fed from river Sutlej – New ERM, Punjab:

CE (PAO), CWC briefly introduced the project. The present proposal of ERM scheme is meant for Extension, Renovation and Modernisation of Sirhind main canals and its three branch canals namely, Bathinda branch, Abohar branch and Sidhwan branch canals as well as branch canals and distributaries/minors of Bist Doab canal system in Punjab.

The proposed works include:

- i) Restoration/strengthening of the existing banks of the canals.
- ii) Lining of the banks.
- iii) Remodelling/repair of head regulators.
- iv) Remodelling/repair of falls on the canal system.
- v) Construction of catch water drains along with outfall drains of the canal system wherever necessary.
- vi) Remodelling/repair of cross drainage works, etc.

The project envisages restoration of 1.98 lakh ha of irrigation potential, besides additional irrigation of 8,144 ha. The estimated cost of the ERM scheme has been finalized for Rs. 734.46 cr at PL-2009-10 with B.C. ratio as 1.82:1.

Chairman observed that views of BBMB should be obtained before investment clearance by the Planning Commission. He further observed that BBMB would ensure that water for the scheme was drawn within the allocated share of Punjab.

The State Finance Concurrence for the scheme has been obtained and enclosed at Annexure-IX.

After brief discussion the Committee accepted the proposal.

## 12. Narmada Canal Project (Revised Major), Rajasthan:

CE (PAO), CWC briefly introduced the project. Narmada Canal Project was originally approved by the Planning Commission in July 2003 for Rs. 467.53 cr at PL-1996 for a CCA of 1.35 lakh ha with annual irrigation of 0.73 lakh ha. Subsequently, the first revised estimate of the project was approved by the Planning Commission in August, 2007 for 2.46 lakh ha and annual irrigation of 1.51 lakh ha.

The project envisages extension of the Narmada main canal from Gujarat-Rajasthan border for a length of 74 km along with 1719 km distribution system. The present revised cost estimate is without any change in scope and the cost has been finalized for Rs. 2481.49 cr at PL-2009 with B.C. ratio as 1.31 which is acceptable as the project is located in both tribal and drought prone area.

Member (WP&P) observed that the project was already under AIBP wherein the cost of the sprinkler system was not included in the cost of the project while in the present estimate the same has been included.

Chairman pointed out that funding of the project under AIBP would be limited to minor level only.

He further observed that in view of an expenditure of Rs. 1370 cr incurred only till March 2009 against the revised estimate of Rs. 2481.49 cr whether it would be possible to meet the remaining expenditure within next three years by 2012-13.

The project authorities intimated that they were planning to divide the remaining works into 11 packages and contract for the same would be awarded on turn-key basis for fixed rates.

Chairman enquired regarding the cost of the CAD works.

The project authorities intimated that the cost of CAD works under V-water course head worked out to Rs. 491.49 cr.

The State Finance Concurrence for the scheme has been obtained and enclosed at Annexure X.

After brief discussion the Committee accepted the proposal.

# 13. Saryu Nahar Pariyojna (Revised Major), Uttar Pradesh:

CE (PAO), CWC briefly introduced the project. Saryu Nahar Pariyojna was originally approved by the Planning Commission in April 1978 at an estimated cost of Rs. 78.68 cr for a CCA of 3.54 lakh ha with annual irrigation of 2.66 lakh ha. Thereafter, scope of the Saryu Pariyojna was substantially enlarged in which the CCA become 12 lakh ha with annual irrigation of 14.04 lakh ha.

The project proposal envisages construction of the following:

- i) Head regulator: two head regulators of discharging capacity of 195 cumecs and 240 cumecs upstream of Girija barrage across river Ghaghra.
- ii) Saryu Link canal: 47.135 km long channel with discharging capacity of 360 cumecs for diversion of water from Ghaghra river to Saryu river.
- iii) Saryu barrage: 243.5 m long barrage complex consisting of the inlet regulator for Saryu link channel on the right bank and outlet regulator from left bank for Saryu main canal.
- iv) Saryu main canal: 63.15 km long canal with head capacity of 360 cumecs.
- v) Rapti link channel: 21.4 km long channel with head capacity of 95 cumecs off-taking from Saryu main canal at 34.6 km.
- vi) Rapti barrage: 284.6 m long barrage across river Rapti.
- vii) Rapti main canal: 125.6 km long canal with head capacity of 95 cumecs off-taking from left bank of Rapti barrage.
- viii) Pump canals: 4 Nos. pump canal systems ramely Ayodhya pump canal (17 cumecs capacity channel), Dumaria ganj pump canal (25.5 cumecs capacity channel), Gola pump canal (8.5 cumecs capacity channel) and Utaraula pump canal (29.75 cumecs capacity channel).

The present revised cost estimate has been finalized for Rs. 7270.32 or at PL-2008-09 with B.C. ratio as 1.58:1.

Chairman enquired whether the revised project estimate with change in scope was earlier submitted by the project authorities or not.

Member (WP&P) intimated that the revised proposal with change in scope was examined in CWC and placed before the Advisory Committee on 18.01.2000

in its 72<sup>nd</sup> meeting in which the project proposal was accepted subject to environmental and forest clearance from MoEF. Subsequently, MoEF accorded environmental clearance vide their letter No. I-12011/16/96-IA-I, dt. 19.06.2000 and forest clearance was obtained on piece-meal basis till 2009 for a total of 431.9 ha as necessary. The present revised estimate has been submitted after updating the cost estimate as per PL-2008-09.

Chairman enquired to know about the remaining different component of works with respect to the balance amount of about Rs. 4800 cr yet to be spent.

The project authorities intimated that main component of works remaining to be completed were Rapti main canal system, tube wells and water courses in the command which were to be undertaken by the state irrigation department itself as well as some drainage works. The project authorities further intimated that land acquisition problem had been solved. Therefore, the remaining works would be completed within the stipulated time period of 2015-16.

The State Finance Concurrence for the scheme has been obtained and enclosed at Annexure-XI.

After brief discussion the Committee accepted the proposal.

# III. Projects of Jammu & Kashmir deferred due to non submission of State Finance Corporation(SFC):

# a) Tral Lift Irrigation Scheme (Medium-Revised), Jammu & Kashmir:

CE (PAO) briefly introduced the project and intimated that this proposal at an estimated cost of Rs. 140.75 cr was considered in 100<sup>th</sup> TAC meeting held on 09.10.2009 but acceptance of the proposal was deferred due to non submission of State Finance Concurrence. The state govt. had subsequently submitted State Finance Concurrence for the project for Rs. 140.75 cr vide letter No. FD/Res/25/Fincon/2009/185, dt. 30.11.2009.

After brief discussion the Committee accepted the proposal.

## b) Rajpora Lift Irrigation Scheme (Medium-Revised), Jammu & Kashmir:

CE (PAO) briefly introduced the project and intimated that this proposal at an estimated cost of Rs. 70.20 cr was considered in 100<sup>th</sup> TAC meeting held on 09.10.2009 but acceptance of the proposal was deferred due to non submission of State Finance Concurrence. The state govt. had subsequently submitted State Finance Concurrence for the project for Rs. 70.20 cr, vide letter No. FD/Res/25/Fincon/2009/185, dt. 30.11.2009.

# c) Modernisation of Lar Canal Project (Medium-ERM), Jammu & Kashmir):

CE (PAO) briefly introduced the project and intimated that this proposal at an estimated cost of Rs. 47.72 cr was considered in 101<sup>st</sup> TAC meeting held on 30.11.2009 but acceptance of the proposal was deferred due to non submission of State Finance Concurrence. The state govt. had subsequently submitted State Finance Concurrence for the project for Rs.46.86 cr, as against the finalized cost of Rs. 47.72 cr, vide letter No. FD/Res/25/Fincon/2009/223, dt. 4.3.2010.

After brief discussion the Committee observed that the reason for sanction of SFC for a lesser amount than the finalized cost by CWC might be clarified by the project authorities.

# d) Modernisation of Grimtoo Canal Project (Medium-ERM), Jammu & Kashmir:

CE (PAO) briefly introduced the project and intimated that this proposal at an estimated cost of Rs. 99.09 cr was considered in 101<sup>st</sup> TAC meeting held on 30.11.2009 but acceptance of the proposal was deferred due to non submission of State Finance Concurrence. The state govt. had subsequently submitted State Finance Concurrence for the project for Rs.85.30 cr, as against the finalized cost of Rs. 99.09 cr, vide letter No. FD/Res/25/Fincon/2009/186, dt. 24.2.2010.

After brief discussion the Committee observed that the reason for sanction of SFC for a lesser amount than the finalized cost by CWC might be clarified by the project authorities.

# IV Any other item:

### Modernisation of Soudagar Project – ERM (Medium-New), Karnataka:

The above mentioned ERM scheme was received in CWC for appraisal. In course of examination, it was observed that the original project was approved by the Planning Commission in 1977 for Rs.1.49 cr for a command area of 1417 ha with 100% irrigation intensity. The present ERM scheme is without any change in scope and proposed for restoration of 442 ha only.

Since the proposed scheme comes under minor irrigation sector as per the prevalent classification, the scheme has not been placed for consideration by the Advisory Committee.

### LIST OF PARTICIPANTS

### Members of un. Committee:

S/Shri	ong . of	
1.	U.N. Panjur, Secretary (WR), Ministry of Water Resources	In the Chair
2.	A.K. Bajaj, hairman, CWC, New Deihi	Member
3.	Mrs. Ananya Ray, Financial Advisor, Ministry of Water Resources	Member
4,	P. K. Aggarwal, Advisor (Cost) (Representing Secretary (Expenditure), Ministry of Finance	Member
5	Dr. R.K. Batta, Principal Scientist(NR./I),ICAR, New Delhi (Representing Director-General, ICAR)	Member
6	Dr. Man Singh, DAC (Representing Ministry of Agriculture)	Member
7.	Tanmoy Das, Chief Engineer, CEA (Representing Ministry of Power and Central Electricity Authority)	Member
.5	Saidul Haq, AHG (Representing Chairman CGWB)	Member
9.	U. K. Ghosh, Chief Engineer, PAO, CWC, New Delhi	Member- Secretary

### Special invitees

### a) Central Water Commission

S/ Shri

- 1. R. C. Jha, Member (RM), CWC, New Delhi, Holding additional charge as Chairman, GFCC, Patna.
- 2. Indra Raj, Member (WP&P), CWC, New Delhi.
- 3. A. K. Ganju, Member (D&R), CWC, New Delhi.
- 4. S. K. G. Pandit, Chief Engineer(NBO), CWC, Bhopal
- 5. A. M. Patil, Director, Appraisal, CWC, Nagpur
- 6. M. S. Gupta, Director (Mon), CWC, New Delhi
- 7. Bhopaí Singh, Director (Hydrology), CWC, New Delhi
- 8. R K Gupta, Director, M&A, CWC, Jammu
- 9. M. S. Dhillon, Director M&A, CWC. Chandigarh
- 10. D Ranga Reddy, Dir (App), Monitoring (South), CWC, Bangalore
- 11. S K. Haldar, Director M&A, CWC, Bhopal
- 12. P. C. Jha, DD (CA-I), CWC, New Delhi
- 13. M W Paunikar, DD, PA-N, CWC, New Delhi
- 14. Sudhir Kumac-
- 'S), CWC, New Delhi
- 15. BP-

New Delhi

VC, New Delhi

rigation, Govt. of Assam, Dispur.

Chief, Govt of Haryana, Panchkula ser, Govt of Haryana

#### Karnataka

### S/ Shri

Sadashiva Reddy B. Patil, CE, IPZ, Gulbarga.

K G Mahesh, Executive Engineer, Bidar

### Punjab

### S/ Shri

- 1. Amarjeet Singh Dullet, CE Canals, Govt. of Punjab
- 2. Rajinder Singh Saini, EE, Ludhiana

### Madhya Pradesh

#### S/ Shri

- 1. O. P. Rawat, Vice Chairman, NVDA, Bhopal
- 2. Rajan Shrivastava, E-in-C, BODHI, WRD
- 3. M. P. Chaturvedi, CE, Ganga Basin, Rewa
- 4. K. C. Chauhan, CE, Lower Naramada Project, NVDA, Indore Maharashtra

### S/ Shri

- 1. H. Y. Kolawale, Executive Director, VIDC, Nagpur
- 2. G. S. Lokhande, Chief Engineer, WRD, Amravati
- 3. S. D. Kulkarni, SE, Akola Irrigation Circle, Akola
- 4. R. K. Dhawle, EE, Amravati Irrigation Div, Amravati Gujarat

### S/ Shri

- 1. S. J. Desai, Secretary (WR), Govt. of Gujarat
- 2. S. Jagdeshan, MD, SSNNL, Gandhinagar
  - K. S. Srinivas, Director(Civil), SSNNL, Gandhinagar
  - P. M. Shah, GM (Tech), SSNNL, Gandhinagar
  - S. D. Vora, CCF, SSNNL, Gandhinagar

### Rajasthan

### S/ Shri

- R. K. Nigam, CE, Narmada Canal Project
- V. K. Ostwal, EE, Narmada Canal Project

### Uttar Pradesh

### S/Shri

- 1. Sabghan Ahmed, E-in- C (D&P), Irrigation Department, Lucknow
- 2. A. K. Ojha, CE I&P, UP Irrigation, Lucknow
- 3. Suresh Tiwari, CE, Saryu Pariyojna, Faizabad

Tanvir Haider, EE, UP Irrigation, Bahraich

### Jammu & Kashmir

### S/ Shri

- 1 Ashwani Sharma, CE, Ravi Tawi Irrigation, Jammu
- 2. Mir Najib Ullah, CE, Kashmir I&FC Deptt, Srinagar

BODOLAND TERRETORIAL COUNCIL SECRETARIAT ::::::::KOKRAJUAJE : IBRIGATUON DEPARTMENT.

No. BTC/frri-204/2009/pt-IJ/20

Dated Kokrajher the 5th March/2010.

From

Sti P. K. Hazonti ACS

Secretary.

Bodoland Territogial Council

Kokrajher.

To

The Cluef Engineer,

Project Appraisal Organisation, Central Water Complesion

R. K. Purain, New Delhi.

Sub

Revised estimate clearance of Champamati

Irrigation Project (Major) Hodoland Territorial Council, Assan.

Sir.

The Planning and Development and Finance Deptt. Govt. of Bodoland Territorial Council, Kokrajhar have accorded elearance of the 3<sup>rd</sup> revised estimate of Champannati Impation Project (Major) in the District of Kokrajhar and Chimpag in Bodoland Territorial Council Area District, Assam, for Rs. 109-22 Crores.

This is for favour of your kind information and respossary action.

Yours faithfully

Thank

Secretary

Bodoland Torritorial Council

Dated Kokrajhar the 5th March/2010.

Memo No. BTC/lrri-204/2009/pt-11/20

Copy to :-

01. PS to Chief, BTC, Kokmihar.

02. PS to EM, Irrig. Deptt. BTC, Kokrajhar.

03. The Commissioner (Project) Ministry of Water Resources. Spraint Saidti Bhavan, Raff Marg, New Delhi-1.

04. The Chief Engineer, Irrigation, Deptt Assam, Chandmari, Guwahadis) for information.

05. The CHD, Irrigation, Deptt. BTC, Kokrajhar for information.

Secretary

Bodoland Territorial Commit

Kokrajbar

Annexure - III

grg --- 1/2

No.65/5/2010-5FICW/715

From

The Financial Commissioner& Principal Secretary to Government Haryana, Finance Department.

To

The Director PA-N

Central Water Commission, Govt. of India,

Project Appraisal (N) Directorate,

Sewa Bhawan, R.K. Puram,

New Delhi.

Dated, Chandigarh the 10th March, 2010.

Subject:-

Project Estimates for Irrigation Works for Rehabilitation Modernization of Canals and Renovation of Drains to Recharge Ground Water-amounting to Rs.67.28 grare under AIBP.

Sir,

I am directed to refer your letter No. 28/70/2010-PA(N)/350-351, dated 02.03.2010 on the subject noted above and to convey the concurrence of Finance Department for placing the Project Proposal as mentioned above before Advisory Computate of Ministry of Water Resources, Govt. of India.

Commissional & Special Secretary to Government Harvane, Finance Department,

A copy is forwarded to the Financial Commissioner & Principal Secretary to Government Haryana, Irrigation Department for information and necessary action. His file is also returned herewith.

Superintendent FICW,

for Financial Commissioner & Frincipal Secretary to Government Haryana, Finance Department &

To

The Financial Commissioner & Frincipal Secrets Covernment Hayana, Irrigation Department.

U.O. No. 65/3/2019-5FICW/715 Endst No.65/3/2010-5FICW/715

1:

Dated: 10.03.1.

Dated: 10.03.1

A copy is forwarded to the Engineer-in-Chamble Department Haryona, Sinchak Bhawan, Seema 5, Panchkulla for in the necessar, action.

Superintendent TCW,
for Financial Commissioner & Princi Commissioner & Princi Coverancet Heryana, Finance D

Tourist Work Tool

Annexure IV

### PROCEEDINGS OF THE GOVERNMENT OF KARNATAKA

Sub: According approval to the Modernisation of Chandrampalli Project (Medium Irrigation) proposed under AIBP for ERM programme-reg.

\*\*\*\*

Read:

Chief Engineer, Irrigation Project Zone, Gulbarga's letter No.KNNL/IPZ/CEG/TA-3/AE-5/2008-09.2950 dated. 04/102008.

### Preamble:

The Sarnala in a tributary of Mullamari River its origina mear Talmadai village. It flows in Gulbarga district for about 34 miles and joins Mullamari river near Chincholi village. There are Right bank and Left bank canals to provide irrigation for 5223 Ha. of scarcity affected Chincholi Talak of Gulbarga district. The sanctioned estimated cost of the project at 1962-63 price level was Rs.99.84 lakhs vide G.O.No.PWD.MMI/159 dated 16/12/1965 and the revised estimated cost of the project is Rs.201,00 lakhs.

In this project, the canals were partially lined. It is now informed by the Chief Engineer that the canals both in lined & unlined reaches have become irregular & there is leakage. Because of the leakages and irregularity in the cross sections the discharge in the canal is not satisfactory & the farmers in the tail end are not receiving water whereas in the upper reaches farmers are using more water, therefore modernisation of the project has been proposed.

The following items of work have been proposed under the modernisation for Chandrampalli project.

- > Modernisation/renovation of main canal and distributaries system.
- > Improvement of service road.
- > Repairs of CD outlets.
- > Renovation of FIC minors.

The estimated cost of modernisation—is Rs.12.50 crores at revised S.R. of 2007-08. The benefit cost ratio works out to 1.88.

This modernisation is now proposed to be taken up under AlBP-ERM programme. The proposals have been submitted to the Chief Engineer, Monitoring (South), Central Water Commission, Bangalore for consideration as the project is in the drought prone area & for recommending the proposal.

Now, this proposal has been recommended to the Project Appraisal Organisation, Central Water Commission, New Delhi.

(South), Central Water Commission, Bangalore for consideration as the project is in the drought prone areas & for recommending.

(4mc) 6/3/2010

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The grant proposed under AIBP-ERM for 2009-10 is Rs.3.42 and for 2010-11 is Rs.10.03. The State share is Rs.0.38 and Rs.1.11 respectively.

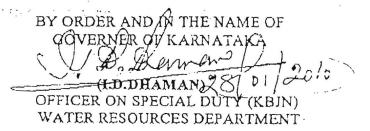
The ultimate irrigation potential is 5223 Ha, and the potential as on today is 4251 Ha. The project has been examined in the Central Water Commission.

The Proposal has been examined at the Government level and hence the following order.

### Government Order No.WRD 31 MTZ 2007, BANGALORE, DATED: 28/01/2010.

In principle approval is hereby accorded to the estimate amounting to Rs. 12.50 crores at 2007-08 price level for the modernisation of Chandrampalli Medium Irrigation Project proposed to be taken up under AIBP-ERM programme.

This order is issued with the concurrence of the Finance Department vide Note No. PW:91 FC-1/2010 dated 27/01/2010.



- 1. The Accountant General (Accounts / Audit), Karnataka, Bangalore
- 2. The Chief Engineer, Water Resources Development Organisation, Anandaras Circle, Bangalore-9.
- 3. The Chief Engineer, Irrigation Projects Zone, Gulbarga.
- 4. The Private Secretary to the Hon'ble Water Resource Minister, Vidhana Soudha, Bangalore..
- 5. The Private Secretary to the Principal Secretary to Government, Water Resource Department. Vikas Soudha, Bangalore...
- 6. The Deputy Secretary (KBJN), Water Resource Department.
- 7. The Special Officer and Ex-Officio Deputy Secretary to Government PWD (Finance Cell) PWD, Bangalore...
- 8. SGF / Spare Copies.

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For approval

p/ 5 6/3/2010 ThateD 3010

Annexure - I



### PROCEEDINGS OF THE CONTRINGENT OF KARNATAKA

Subset According approval to the Modernisation of Hattikuni
 Project (Modium Irrigation) projected under AJBP for ERM programme-reg.

Read:

Chief Engineer, Irrigation Project Zone, Gulbarga's letter No. KNNL/IPZ/CEG/TA-3/AE-5/2008-09/2950 dated. 04/10/2008

### Preamble:

The Hattikuni stream is a tributary of Bnima in Krishna basin. Hattikuni project comprises of construction of dam across Gazarkote branch at Hattikuni village near Yadgir town, Gulbarga district. There is only left bank canal to provide irrigation for 2145 Ha, of scarcity affected Yadgir taluk of Gulbarga district. The sanctioned estimated cost of the project at 1957-58 was Rs.22.08 lakks & in 1975 the revised estimated cost of the project is Rs.57.84 lakks.

In this project, the canal is partially lined. It is now informed that the canal both in lined & unlined reaches have become irregular & there is leakage. Because of the leakages and irregular cross sections the discharge in the canal is not satisfactory & the farmers in the tail end are not receiving water, therefore modernisation of the project has been proposed.

The following items of work have been proposed by the Chief Engineer under the modernisation for Hattikuni project.

- > Modernisation/renovation of main canal and distributaries system.
- > Improvements to inner/outer slope of bund.
- > Improvement of service road.
- > Repairs of CD outlets.
- > Repairs to longitudinal and cross drains down stream side of the dark.

The estimated cost for modernisation is Rs.6.75 crores at price level of 2007-10. The benefit cost ratio works but to 1.96.

This modernisation is now proposed to be taken up under AibFFRE of programme. The proposels have been submitted to the Chief Engineer. Atomobile

NR 9/3/10" -

(South), Central Water Communition, Bungalore for consideration as the project is in the design proper areas at for reasonmending the proposal.

Now, this proposal has been recommended to the Project Appraisal Organisation, Central Water Commission, New Delhi.

The grant proposed under AIBP-ERM for 2009-10 is Rs.0.957 crores and for 2010-11 is Rs.5.12 crores. The State share is Rs.0.106 crores and Rs.0.57 crores respectively.

The ultimate originion potential is 2145 Ha. And the potential as on today is 1189 Ha. The project has been examined in the Central Water Commission.

The Proposal has been examined at the Government level and hence the following order.

### Government Order No. WRD 39 MTZ 2008, BANGALORE, DATED: 09/03/2010-

In principle approval is hereby accorded to the estimate amounting to Rs.6.75 crores at 2009-10 price level for the modernisation of Hattikuni Irrigation Project proposed to be taken up under AIBP-ERM programme.

The Government Order No. WRD 39 MTZ 2008 dated: 28/01/2010 issued earlier in this regard is hereby cancelled.

This order is issued with the concurrence of the Finance Department vide Note. No. PW:92 FC-1/2010.dated 27/01/2010.

GOVERNER OF KARNATAKA

OFFICER ON SPECIAL DUTY (KBJN).
WATER RESOURCES DEPARTMENT

1. The Accountant General (Accounts / Audit), Karnataka, Bangalore.

2. The Chief Engineer, Water Resources Development Organisation, Anandarao Circle, Bangalore-9.

3. The Chief Engineer, Irrigation Projects Zone, Gulbarga.

4. The Private Secretary to the Hon'ble Water Resource Minister, Vidhana Southa, Bangalore.

5. The Private Secretary to the Principal Secretary to Government, Water Resource Department, Vikas Soudha, Bangalore.

6. The Deputy Secretary (KisJN), Water Resource Department.

 The Special Officer and Ex-Officio Deputy Secretary to Government PWD (Finance Cell) PWD, Bangalore.

8. SGF / Sparg Copies.

### PROCEEDINGS OF THE CONTENNENT OF KARNATAKA

Annexure - VI

Sub: According approval to the Medernisation of Upper & Mullamari Project (Medium Infigation) proposed under AIDP for ERM promamme-reg.

Read: Chief Engineer, Imigation Project Zone, Gulbarga's letter No. KNNL/CEG/TA3/AE2/(1)1P/2008-09/5674.dated.07/03/2009

### Preamble:

The Mullamari stream is a tributary of Kagina River which joins river Bhima, which in turn is a tributary of the river Krishna. It takes its origion in the hilly range near Mantala village of Basavakalyan taluk of Sidar district. In this project the Right bank and Left bank canals provide irrigation for 3279 Ha, in the scarcity affected in Basavakalyan taluk of Bidar district. The sunctioned estimated cost of the project at-1972-73 was Rs.1.90 crores vide G.O.No.PWD 130 GPI 69 dated 11/05/1973 and the revised estimated cost of the project is Rs. 19.92 crores.

In this project, the canal were partially lined. It is now informed that the canal in the lined & unlined the canal section have become irregular & there is leakage. Because of the leakages and irregular cross sections, the discharge in the canal is not satisfactory & the farmers in the tail end are not receiving water & in the upper reaches farmers were using more water, therefore modernisation of the project has been proposed.

The following items of work have been proposed under the modernisation for Upper Mullamari, project.

- > Modernisation/renovation of main canal and distributary system.
- > Improvements to inner/outer slope of bund.
- > Improvement of service road.
- > Repairs of CD outlets.

The estimate cost for modernisation is Rs. 8.21 crores at revised S.R. of 2002-10. The benefit cost ratio works on to 191.

This modernisation is unit proposed to be taken not under ALST-ER programme. The proposals have being sobjected to the Chief Engage, Niconview (South), Central Water Commission, Laugelous for seeins ideration last 195 drought prome areas to for recommendate

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Now, this proposal has been recommended to the Project Appraisal Organisation, Central Water Commission, New Delhi.

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The grant proposed under AIBP-ERM for 2009-10 is Rs.1.09 crores and for 2010-11 is Rs.6.30 crores. The State share is Rs.0.10 crores and Rs.0.99 crores respectively.

The ultimate irrigation potential is 3279 Ha, and the potential as on today is 1779 Ha. The project has been examined in the Central Water Commission.

The Proposal has been examined at the Government level and hence the following order.

### Government Order No. WRD 27 MTZ 2009, BANGALORE, DATED: 09/03/2010.

In principle approval is hereby accorded to the estimate amounting to Rs. 8.21 crores at 2009-10 price level for the modernisation of Upper Mullamari Medium Irrigation Project proposed to be taken up under AIBP-ERM programme.

The Government Order No. WRD 27 MTZ 2009 dated: 28/01/2010 issued earlier in this regard is hereby cancelled.

This order is issued with the concurrence of the Finance Department vide UO Note No. PW :93 FC-1/2010 dated, 27/01/2010.

BY ORDER AND IN THE NAME OF COVERNER OF KARNATAKA

(I.D.DHAMAN)

OFFICER ON SPECIAL DUTY (KBJN)
WATER RESOURCES DEPARTMENT

1. The Accountant General (Accounts / Audit), Karnataka, Bangalore.

2. The Chief Engineer, Water Resources Development Organisation, Anaudarao

Circle, Dangalore-9

3. The Chief Engineer, Irrigation Project Zone, Gulbarga.

4. The Private Secretary to the Hon'ble Water Resource Minister, Vidham Soudha, Bangalore..

5. The Private Secretary to the Principal Secretary to Government, Water Resource Department, Vikus Soudha, Bangalate.

6. The Deputy Secretary (KBJN), Waser Resource Department.

मभाष । ष्रर्भाष्ट्रम

जल संसाधन विधाग

लिमिन-मिन्ध विल्लान-मिन्सि .

फरवरी, २०१० कांम्त्री , जार्गाय /इकतास

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मुख्य अभिमयंता,

, नाप्रकड्ठानिगार जिल्लाप्रास्ट उक्तिर

िग्गिन हेम् केंद्रीय जल आयीत,

योजना आयोग, न्यू दिल्लो द्वारा स्वीकृति बाबत् । कि जाराल काशीरिनपृ कि एर्ड्रप्रध्यम ,।नकिप्रीप (ग्रागाश्रवाता) नाइम -: khb

महान (गुलाबसागर) महिममा मध्यप्रदेश, किसको पुनरिक्षित लागान

कि नभाष्र एर्ड्सप्रथम हुई तीक्किन कि (19-000) ई कािर इंप्रिक ३६.३८४

(राधेश्याम जुलानिया) 01.70.10

गिष्मि निष्माप्ते निर्मा, निष्माष्ट्र प्रमा घमीस घमिर

करवरी, 2010 कांम्झे , जार्गाय हु ३३ \ मिलिक्ड्रे ५६८ ८९ १ १ भागक

नई दिल्ली -110001 सीयव, जल संसाधन मंत्रालय, भारत सरकार, अम शिक्त भवन, रफी मागे, -: मिलितिए

निदेशक, केंद्रीय जल आग्रीग, पयीवास भवन, थीपाल

01,50.55

प्रमुख सचिव

गिष्ठि मधिस लिए, मुधाष्ट्र प्रथाप

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### मध्य प्रदेश शासन नर्मदा घाटी विकास विभाग गंत्रालय, वल्लभ-भवन,भोपाल 462004

क्रमॉक एफ.11- 03/10/27-1,

भोपाल, दिनॉक 9 मार्च 2010

प्रति.

मख्य अभियंता. प्रोजेक्ट अप्रायजल आर्गेनाईजेशन, केन्द्रीय जल आयोग, नई दिल्ली - 110066

विषय:- जोवट मध्यम सिंचाई परियोजना की पुनरीक्षित लागत की वित्तीय स्वीकृति बाबत्। संदर्भ:-भारत सरकार, केन्द्रीय जल आयोग, नर्मदा कछार संगठन भोपाल का पत्र क्र0 2/7/2009-M&A/283 दिनांक 26.02.2010

उपरोक्त विषयांतर्गत संदर्भित पत्र का कृपया अवलोकन करें । जोबट मध्यम सिंचाई परियोजना की पुनरीक्षित लागत रू. 230.61 करोड़ (दिसंबर –2009 की दरों पर) की रवीकृति हेतु विभाग सहमत है। पुनरीक्षित लागत पत्रक संलग्न है। संलग्न:- पूनरीक्षित लागत पत्रक

> (ओ०पी०रावत) अपर मुख्य सचिव मध्यप्रदेश शासन, नर्मदा घाटी विकास विभाग भोपाल दिनॉक मार्च 2010

पु०क्र० एफ.11-/10/27-1प्रतिलिपि:-

- (1) सचिव, जल संसाधन मंत्रालय, भारत सरकार श्रम शक्ति भवन, नई दिल्ली।
- (2) संचालक (एम.एण्ड ए.) केन्द्रीय जल आयोग, पर्यावास भवन भोपाल।
- (3) सदस्य (अभियांत्रिकी) नर्मदा घाटी विकास प्राधिकरण भोपाल।

अपर मुख्य सचिव मध्यप्रदेश शासन. नर्मदा घाटी विकास विभाग

- Mar. 10 2010 04:0洋州 8

25172- j---- 5 (TEND CARAL FAX NO. :017227240

Annexure - IX

### Irrigation Works Punjab Head Office

To

The Director,
Project Appraisal (North) Directorate,
Central Water Commission,
New Delhi.

Memo No.2010/Canals(2) 3376 Dat

Dated: (10) 3/10

Sub:- Financial concurrence of State Finance Department for Rs.734.46 Crores regarding.

未水水

In reference to your office letter No.1/104/2008-PA(N)296-97 dated 12/2/2010, it is intimated that if this project is approved by the Central Govt., the State Finance Department has given its concurrence to make appropriate budget provision as State Share vide his letter No.1/5/51/07-4 FE4/804 dated 10/3/10.

Chief Engineer/Canals, Irrigation Works, Punjab, Chandigarh.

FIMO ATTM: MP PIN CII. 26103561 Annexum. Z

Government of Rajasthan Water Resources Department,

No. F3(52)/ AS/I/Cell/84/

Date: (6 Warch, 2010

The Chief Engineer (PAO), Central Water Commission, Greet, of India, 5" Floor, Sewa Shawan, R.K. Puram NEW DELHI.

> Sub: Revised Investment Clearance for Narmada Canal Project, Rajasthan -Teh Sanchore, Distt. Jalore & Teh- Gudarnalani, Chauhtan Disti: Barmer

Ref: Your Office letter No. Raj/48/2006/PA (C)/67 Dated 01.02.2010

Sir

The Finance Department, Govt. of Rajasthan has accorded the revised investment clearance vide their ID 104000705 dated 16.03.2010 for Narmada Canal Project, Rajasthan, Teh-Sanchore, Distt. Jalore & Teh-@ idemalani, Chaulitan Distt. Barmer for Rs. 2481.49 crore. This is for your information please.

Yours faithfully,

Deputy Secretary & TA To Chief engineer, Water Resources, Rajasthan, JAIPUR.

No. F.3(52)/As/1/64/84/492 Copy Submitted to:

Dated 16. Marci 10

The Director, Project Appraisal (C), Central Water Commsission, New Delhi. The Chief Engineer, Narmada Canal Project, Sanchore Distt. Jalore.

> Deputy Secretary & TA To Chief engineer, Water Resources, Rajasthan, JAIPUR.

1) (2

रांख्या-1323/10-27-चिं0-4-19(द्वल्यू)प्रि०/10

प्रेपक,

जय प्रकाश नारायण, विशेष सचिव, उत्तर प्रदेश शासन।

सेवा में,

निदेशक, प्रोजेक्ट एप्रेजल (नार्थ) निदेशालय, केन्द्रीय जल आयोग, भारत सरकार, नई दिल्ली।

सिंचाई अनुभाग-4

लखनकः दिनांकः।2 मार्च, 2010

विपयः सरयू नहर परियोजना हेतु राज्य की वित्तीय सडमित प्रदान किये जाने के संबंध में।

महोदय,

उपर्युक्त विषयक अपने पत्र संख्या-2/286/2010-पीए(एन०)/325-327, दिनांक 19-02-10 का कृपया संदर्भ ग्रहण करने का कष्ट करें, जिसके द्वारा केन्द्रीय जल आयोग में परीक्षणाधीन प्रश्नगत परियोजना की अनुमानित लागत क0 7270.32 करोड़ पर राज्य की वित्तीय सहमति प्रदान करने की अपेक्षा की गयी है।

2- इस संबंध में शासन के पत्र संख्या-1253/10-27-सिं-4, दिनांक 08-03-10 एवं संख्या-1281/10-27-सिं-4, दिनांक 10-03-10 द्वारा सरसू परियोजना के संबंध में भेजी गयी सहमति के कम में सरसू नहर परियोजना की पुनरीकित लागत ७० 7270.32 करोड़ पर 30प्र0 राज्य की वित्तीय सहमति संलग्न कर प्रेषित की जा रही है।

संलञ्नक-यथोपरि।

×0 10

( जय प्रकाश नारायण ) विशेष सचिव।

संख्या एवं दिनांक तदेव।

प्रतिलिपि-प्रमुख अभियन्ता (परि० एवं नियो०), सिंचाई विभाग, उ०प्र०, लखनऊ को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

आज्ञा से,

( क्य क्रमण साराहण ) विशेष श्रीवेष

P

### STATE FINANCE CONCURRENCE

Sarryu Nahar Pariyojna Costing Rs. 7330.68 Caror , Submitted to Central Water Commission. New Delhi has been evaluated by them for Rs. 7270.32 caror is hereby accoreded State Finance Concurrence for Rs. 7270.32 Caror.

Chief Enginder 71 Saryu Patiyojna-1

Faizabad

Engineer -in-Chief

{Design & Planning}

Irrigation Department, U.P.

Lucknow

Principal Secretary Irrigation , Govt. of U.P.

( किसम सिंग वाटोरिया )

क्रमुख । ज्यार विकास खनाम

**४० ४० थासन।** 

Principal Secretary

Finance, Govt. of U.F. ( more 1885)

मनुष्य अधिक

धनुस कामन

ानिगाइ ०५ ० व

SUMMARY RECORD OF DISCUSSIONS OF THE 104<sup>th</sup> MEETING OF THE ADVISORY COMMITTEE ON IRRIGATION, FLOOD CONTROL AND MULTI PURPOSE PROJECTS, HELD ON 12<sup>th</sup> MAY, 2010 FOR CONSIDERATION OF TECHNO-ECONOMIC VIABILITY OF PROJECT PROPOSALS.

The 104<sup>th</sup> meeting of the Advisory Committee for consideration of Techno-Economic viability of Irrigation, Flood Control and Multi-purpose Project proposals was held on 12.05.2010 at 1630 Hrs. in the Conference Room of Central Water Commission, Sewa Bhawan, R.K. Puram, New Delhi under the Chairmanship of Secretary (WR). List of participants is enclosed at Annexure-I.

At the outset, Chairman welcomed the Members of the Committee and other Officers present and thereafter requested the Member-Secretary to take up the agenda for discussion. Proceedings of the meeting followed as under:

### I) CONFIRMATION OF THE MINUTES OF THE 103RD MEETING:

The Summary Record of Discussions of the 103<sup>rd</sup> Advisory Committee meeting was circulated vide Letter No.16/27/2010-PA (N)/501-536, dated 19.03.2010. Member-Secretary informed the Committee that no comments on the same have since been received. The Committee confirmed the Summary Record of discussions of the 103<sup>rd</sup> Advisory Committee meeting.

## II) PROJECT PROPOSALS PUT UP FOR CONSIDERATION OF THE ADVISORY COMMITTEE:

### 1. Karra Nalla Irrigation Project (New Medium), Chhattishgarh:

CE (PAO), CWC briefly introduced the project. Karra Nalla is a new Medium irrigation Project proposed to be constructed across river Karra Nalla, a tributary of Seonath River in Mahanadi Basin near Kawardha town in Kabirdham district of Chhatishgarh. The project envisages construction of a 68 m long barrage head regulator and canal system, etc. The estimated cost of the project has been finalized for Rs. 99.19 cr at 2009-PL with B.C. ratio of 1.21 which is well within the approved norms as the project benefits Drought Prone areas of Rajnandgaon and Kabirdham districts. Forest clearance for 88.87 ha of forest land and State Finance Concurrence has been obtained and it will provide irrigation to a command area of 4100 ha with 100% Irrigation intensity. The project serves drought prone areas of Kabirdham and Rajnandgaon districts of Chhattisgarh. State Finance Concurrence has been received from the State govt. for this project.

After brief discussion, the Committee accepted the proposal.

### 2. Ghumariya Nalla Irrigation Project (New Medium), Chhattisgarh:

CE (PAO), CWC gave a brief account of the project. Ghumariya Nalla is a new Medium irrigation Project proposed to be constructed across Ghumaria Nalla, a tributary of Seonath river in Mahanadi Basin near village chhuria in Rajnandgaon district of Chhattishgarh. It will provide irrigation to a command area of 4173 ha with an annual

irrigation of 3200 ha. The project is located in drought prone areas of Rajnandgaon district of Chhattisgarh.

The project envisages construction of a 96.60 m long Barrage with afflux bund on right and left flanks of 1123 m long with a maximum height of 9,50 m to create live storage of 2.72 MCM. It has two canal systems off taking from either bank of the Barrage. The estimated cost of the project has been finalized for Rs. 47.79 cr at 2009-PL with B.C. ratio 1.87. There is no Forest submergence. State Finance concurrence for Rs. 99.19 cr has already been obtained for this project.

Chairman observed that the B.C. ratio of this project is better than that of earlier one i.e., Karra Nalla Irrigation project.

Secretary, WRD, Govt. of Chhattisgarh also confirmed that the project will be fully completed by March 2012 within the Estimated Cost of Rs. 99.12 cr, thus leaving no scope for further revision of the cost.

After brief discussion the Committee accepted the proposal with the condition that the project will be completed by March 2012 positively and no further cost/time revision will be considered by this Committee.

### 3. Sutiapat Irrigation Project (Revised Medium), Chhattisgarh:

CE (PAO), CWC briefly introduced the project proposal. Sutiapat Irrigation Project was originally approved by Planning Commission in April, 2007 for Rs. 46.95 cr (2002-03-PL) for CCA of 6,571 ha and Annual Irrigation of 6960 ha. to Kawardha district, a tribal and backward district of Chhattisgarh. The Project envisages construction of 30 m high and 450 m long earthen dam across river Silheti, a tributary of Seonath river in Mahanadi Basin along with canal systems and other hydraulic structures. The Revised proposal is without any change in scope and has been finalized for Rs 98.62 crore (--2009-PL) with B.C. Ratio of 1.65. State Finance Concurrence for this project has also been obtained.

After brief discussion the Committee accepted the proposal.

## 4. Improving Irrigation Intensity of Hardoi Branch System - ERM (Revised Major), Uttar Pradesh:

CE (PAO), CWC briefly introduced the project proposal. Improving irrigation intensity of Hardoi Branch System – ERM was accorded investment clearance by Planning Commission in Dec. 2006 for Rs. 105.30 cr at 2005-PL for command area of 6,24,605 ha with an annual irrigation of 3,06,055 ha. Improving irrigation intensity of Hardoi Branch system – ERM is a part of Sarda canal system. Through this project, restoration of irrigation system to 95,961 ha is contemplated at its tail end. The project envisages:

- i) Correcting and restoring section of Hardoi Branch and other Branches which emerge from Hardoi Branch, Lucknow Branch, Sandila Branch, Asiwan Branch, Purwa Branch, Unnao Branch and their distribution system.
- ii) Rehabilitation of structures such as regulators, falls, cross-drainage works, bridges, etc.

The present revised cost estimate is without any change in scope and the cost has been finalized for Rs. 135.17 cr at Jan 2010-PL with B.C. ratio of 2.69. State Finance Concurrence has already been accorded to this proposal.

Engineer-in-Chief, Irrigation Department, Govt. of UP informed that 90% of the works have been completed and balance 10% will be completed by 2010-11. He further informed that 81,000 ha has restored and the remaining area will be restored during the remaining period.

Secretary (WR) stated that the works under the proposal should be completed by March 2011.

After brief discussion the Committee accepted the proposal with the condition that no further time/cost revision will be considered by this Committee.

## 5. Rajiv Sagar (Bawanthadi) Project (Revised Major): a Joint Venture of Maharashtra & Madhya Pradesh:

CE (PAO), CWC briefly introduced the project proposal. Rajiv Sager (Bawanthadi) Project, a joint venture of M.P. & Maharashtra was earlier approved by Planning Commission for Rs. 161.57 crore (1988-89-PL) in December, 1999 with CCA of 48,848 ha. The project, located near Village Kudwa, Tehsil Warasooni in district Balaghat in MP is planned to irrigate annually an area of 57,120 ha benefiting Bhandara district of Maharashtra and Balaghat district of Madhya Pradesh.

The Project proposal envisages construction of 6,420 m long earthen dam with a maximum height of 31 m across river Bawanthadi, a tributary of Wainganga River in Godavari Basin. The project has two canal systems – Left Bank Canal (LBC) benefits to the area of MP while Right Bank Canal (RBC) looks after the need of Maharashtra. The present revised Cost Estimate (without any change in scope) has been examined and the same has been finalized for Rs.1407.19 (2009-PL) with B.C. Ratio 1.515. State Finance Concurrence has also been obtained for this project.

Secretary (WR) observed that the cost of the project has increased from Rs. 161.57 cr at 1989 price level to Rs. 1407.19 cr at 2009 price level. He asked the reasons for such increase.

The project authorities informed that such increase was mainly attributed to delayed acquisition of land and subsequent upward revision of land cost. They further

informed that the land compensation has already been paid to Forest Department and land acquisition (including the forest land) has been completed.

Secretary (WR) desired that the project must be completed by March 2013 by compressing the construction time by one year.

With this condition, the Committee accepted the proposal with the condition that no further time/cost revision will be considered by this Committee.

### 6. Purna Barrage-II (Ner-Dhamana)- New Medium Project, Maharashtra:

CE (PAO), CWC gave a brief account of the project. Purna Barrage-II is a new Medium irrigation Project envisaging construction of a 216 m long barrage across river Purna, a left bank tributary of river Tapi near village Ner in Akola district in Maharashtra to provide irrigation to a command area of 8,693 ha with an annual irrigation to 7302 ha. The project will serve the drought prone areas of Akola district of Maharashtra. It is proposed to lift entire utilization through direct lift from the flow of the river during monsoon period and from the pondage created at the end of the monsoon period. The present project proposal has been finalized for Rs. 179.28 cr at 2009-PL with B.C. ratio of 2.083. The State Finance Concurrence has already been obtained for this project.

The project authorities informed that the project will be completed by 2011-12. After brief discussion the Committee accepted the proposal.

## 7. Upper Manar Medium Irrigation Project (Revised Medium with change in scope), Maharashtra:

CE (PAO), CWC briefly introduced the project proposal. Upper Manar Medium Irrigation Project was originally approved by Planning Commission in April 1997 for Rs. 26.18 Crore (Price Level-1985- 86) to provide annual irrigation to 8280 ha having CCA of 8750 ha. The original proposal envisages an earthen dam of 975 m length across Manar river (a tributary of Manira river in Godavari basin) along with 58 km long left bank lined canal with discharging capacity of 5.41 cumec to cater to annual irrigation of 8280 ha through flow irrigation. Now the Project Authorities have revised the project proposal for additional irrigation by including lift irrigation components by providing two nos. of rising mains along with two additional main canals and distribution systems to provide additional annual irrigation of 4140 ha in drought prone area of Latur district of Maharashtra thus enhancing the annual irrigation to 12,420 ha. (consisting of 8,280 ha in Nanded district through flow irrigation and 4,140 ha in Latur district through lift irrigation). The previous water utilization in the Upper Manar project was 2.298 TMC and the same has been kept in the revised proposal also with the help of saving water through the provision of PVC pipe distribution network in the command. These PVC pipes directly take off from the main canal. The revised project proposal has been finalized for Rs. 525.40 cr on 2009 price level with B.C. ratio as 1.518. State Finance Concurrence for Rs. 525.40 cr has been obtained.

The Committee deliberated upon the modified project proposal with change in scope. The Committee was of the opinion that such a high conveyance efficiency and field efficiency is not practicable to achieve. Accordingly, the scope of the revised proposal should be same as that given in its original proposal as approved by the Planning Commission in April 1997. The Committee directed the Project Authorities as well as CWC to recast the estimate by deleting the lift component. In pursuance of the above decision, the field office, CWC, Nagpur recast the estimate of the revised project proposal without change of scope for Rs. 424.50 cr at B.C. ratio of 1.6. As such, the project proposal for Rs. 424.50 cr with B.C. ratio of 1.6 is acceptable to the Committee.

The project authorities informed that the project will be completed by 2011-12.

## 8. Modernisation of Zaingir Canal Irrigation Project – ERM (New Medium), J&K:

CE (PAO), CWC briefly introduced the project proposal. Zaingir Canal off takes from Madhumati Nalla at Sonnar Wani in Bandipora area (J&K) to provide irrigation to a command of 5100 ha with annual irrigation of 7100 ha. The project is located in hilly areas of Baramulla district of J&K. The length of the main canal is 34 km with 41 km distribution system. The present proposal is an ERM scheme envisaging mainly the following works:

- i) Lining of main canal at selected stretches.
- ii) Strengthening of canal embankment at selected stretches.
- iii) Renovation of falls, escapes, outlets, aqueduct, super passage, etc.
- iv) Construction of Foot Bridge, culverts, water drains, etc.

The cost of the project proposal has been finalized for Rs. 73.51 cr at 2009 price level with B.C. ratio as 3.29. State Finance Concurrence has been obtained from the State Govt.

Secretary (WR) observed that after completion of the scheme, the State Govt. should ensure that it is properly maintained thereafter so as to achieve the intended benefit.

The project authorities assured that maintenance would be carried out regularly after completion of the scheme from the State funds.

After brief discussion the Committee accepted the proposal.

## 9. Raising and Strengthening of Left and Right Embankments along None River, Bihar:

CE (PAO), CWC briefly introduced the project proposal. The Flood Control project proposal envisages raising and strengthening as well as brick soling at the top as per the following details:

- 1. Raising and strengthening of existing right and left embankments with 15 No. of ramps on lower None river in a length of 54 km.
- 2. Raising and strengthening of existing right and left embankments on Khaimat Jheel link channel in a length of 21 km.
- 3. Construction of 12 cms thick brick soling 3 m wide on top of right and left embankments for a length 75 km.
- 4. Construction of 5 No. flood sluices at required locations and residual work of 1 No. of existing Bhorha sluice.

The project proposal has been examined by GFCC and finalized for Rs. 26.71 cr. at 2008-price level with B.C. ratio as 2.64. The proposal has also got recommendation of the State TAC and approved by the Govt. of Bihar with concurrence of State Finance Deptt.

Chairman, GFCC informed that the project is necessary so as to overcome drainage congestion and stave off flooding due to None river in Budhi Gandak basin.

After brief discussion the Committee accepted the proposal.

## 10. Flood Threat of River Jhelum – Urgent works in Srinagar and other districts (Estimated Cost: Rs. 97.46 cr):

CE (PAO), CWC briefly introduced the project proposal. The scheme envisages activation of Flood Spill channel, Mechanical deepening and widening of Out Fall Channel (OFC), Rehabilitation of Weir, Up gradation of supplementary Dhoodh Ganga Diversion Channel, etc, in order to protect the low lying area of Srinagar city due to ravage of floods in River Jhelum. The project has got clearance by the State TAC. The project proposal has been finalized for Rs. 97.46 cr at 2010 price level with B.C. ratio of 1.12. It has been reported that no forest land is involved in the present area. However, State Govt. has been advised to submit the Forest Clearance Certificate from the State Forest Deptt to CWC and Planning Commission before the Investment clearance. State Finance Concurrence has been obtained for this Project.

On the query of the Secretary (WR), the project authorities informed that provision of dredger has been kept which will be used to carry out dredging operation so as to remove the deposited material. It is further informed that land has already been earmarked to dump the dredged material consequent to the aforesaid operation.

Director (Monitoring & Appraisal), CWC, Jammu added that without the completion of the project complete protection to Srinagar city is not expected.

Considering the gravity of the problem and keeping in view that the proposal is contained in the accepted draft Comprehensive Flood Management of Jhelum, the present proposal was accepted by the Advisory Committee.

## 11. a) Regulation of Flood water in Kayal Area, 4 Padasekharams in Kuttanad Region, Kerala:

CE (PAO), CWC briefly introduced the project proposal. The project envisages raising and strengthening of existing bunds around 4 padasekharams (paddy growing fields) of kayal area located in Central Kerala. These bunds will check the water spread in these fields from the nearby lakes and water bodies during monsoon. The proposed structural measures consist of about 2.3 m high and 2 m wide embankments without any motorable inspection track. These works would minimize inundation of paddy fields and would result in saving of annual damage to the paddy crops to the extent of Rs. 9.45 cr in Kuttanad area of Kerala. The project proposal has been finalized for Rs. 46.73 cr at 2009-10 price level with B.C. ratio as 1.26. State Finance Concurrence has also been obtained for this project.

## 11. b) Mitigation of Floods in Group 9, 5 Padasekharams in Kuttanad region of Kerala:

CE (PAO), CWC briefly introduced the project proposal. The proposal envisages raising and strengthening of existing bunds to protect 5 padasekharams (paddy growing fields). These bunds will check the water spread from the nearby lakes and water bodies during monsoon. The proposed structural measures consist of about 2.3 m high and 2 m wide embankment. The proposed works would minimize inundation of paddy fields and would result in saving annual damage to the paddy crops to the extent of Rs. 20.53 cr. The project proposal has been finalized for Rs. 72.183 cr at 2009-10 price level with B.C. ratio as 1.78. State Finance Concurrence has also been obtained.

Secretary (WR) observed that the above two flood control projects from Kerala are of the same type having the same objectives and located in the same area. As such, it was felt that these two projects should be integrated into a single one, the Committee directed CWC to merge the said two project proposals into single one. In pursuance of the above decision of the Committee, the integrated proposal for Rs. 118.91 cr with B.C. ratio of 1.576 is accepted by the Committee.

## 12. Project Estimate for Flood Protection works of River Yamuna Basin (Estimated Cost: Rs. 28.113 cr at 2010 PL):

CE (PAO), CWC briefly introduced the project. The scheme consists of Flood Protection works at 5 different places on the left bank of River Yamuna in Saharanpur district. The proposal has already been approved by State TAC and Steering Committee of State Flood Control Board. The same has also been cleared by Yamuna Standing Committee. The project proposal has been finalized for Rs. 28.113 cr with B.C. ratio of 2.6. State Finance Concurrence has also been obtained.

After brief discussion, the Committee accepted the proposal.

## 13. Scheme for Flood Protection Works along Left and Right of River Rapti in district Siddharth Nagar & Gorakhpur, UP:

CE (PAO), CWC briefly introduced the project proposal. The Irrigation Department, State Govt. of UP has formulated Flood Control schemes for 12 locations to protect important cities and villages and cultivable land where severe erosion is reported to have taken place. The measures include construction of spur/stud, construction of cutter, raising and strengthening of embankment, etc, covering a length of 53.62 km. The present proposal has been finalized for Rs. 68.89 cr with B.C. ratio as 2.62. The schemes have already got the recommendation of State Technical Advisory Committee as well as the Steering Committee of Flood Control Board of UP. The State Finance Concurrence has also been obtained for Rs. 68.82 cr.

Engineer-in-Chief, Irrigation Department, Govt. of UP apprised the Members of the Committee regarding the significance of the project proposal and other salient features.

After brief discussion the Committee accepted the proposal for Rs. 68.82 cr.

# 14. Flood protection works along left and right bank of river Yamuna in district Muzaffarnagar, Baghpat, Ghaziabad, Gautam Buddha Nagar, Aligarh and Mathura, UP:

CE (PAO), CWC gave a brief account of the project proposal. The instant scheme has been formulated by UP by clubbing 11 flood protection schemes to afford protection against floods by river Yamuna in major parts of districts of Muzaffarnagar, Baghpat, Ghaziabad, Gautam Buddha Nagar, Aligarh and Mathura. The proposal envisages construction of spur, stud, construction/restoration of bunds, etc, at various locations along Yamuna river in the aforesaid districts. The scheme has been finalized for Rs. 43.80 cr. with B.C. ratio as 4.19 by GFCC. It would provide protection to an area of 18,633 ha and population of 93,700. The scheme has already got approval of the State Technical Advisory Committee as well as a Steering Committee of the State Flood Control Board of UP. The State Finance Concurrence has also been obtained for this project.

After brief discussion the Committee accepted the proposal.

## 15. Project for construction of embankment along left bank of river Ganga from village Sherpur to Thet in district J P Nagar and Bijnor, UP:

CE (PAO), CWC briefly introduced the project proposal. The scheme is meant to protect agricultural land and other properties of inhabitants of the affected areas by constructing embankment along left bank of river Ganga in district of J P Nagar and Bijnor.

The proposal envisages the following components:

- i) Construction of 14.9 km long earth embankment.
- ii) Work related to slope pitching and apron for 600 m of length of the embankment.
- iii) Permanent acquisition of 55.65 ha of land for construction of embankment.
- iv) Mitigation measures and other works as per the order given by the Hon'ble Supreme Court of India.

The project proposal has been finalized for Rs. 33.23 cr with B.C. ratio as 2.8 by GFCC. It would provide benefit to 4,000 ha of land.

The project has got the recommendation of the State Technical Advisory Committee as well as the Steering Committee of the Flood Control Board of Uttar Pradesh. State Finance Concurrence has also been obtained.

Related to this proposal, the case of construction of embankment in the Hastinapur Wildlife Sanctuary was referred to the Supreme Court. The Supreme Court has allowed construction of the project with certain conditions. Supreme Court vide IA No. 2708, dt. 29.1.2010 has passed the following Order in this regard:

"The Irrigation Department of the State of Uttar Pradesh is seeking permission for construction of an embankment on the left bank of the river Ganga from village Sherpur to village Thet falling in the Hastin apur Wildlife Sanctuary. The Central Empowered Committee (CEC) of the Supreme Court has examined the proposal and has recommended the following recommendations subject to which permission may be granted:

- 1. Approval of the Standing Committee of the National Board for Wildlife (NBWL) shall be obtained before starting any work on the project.
- 2. Five percent (5%) of the estimated project cost of Rs. 24.58 crores will be deposited in the Compensatory Afforestation Fund for implementing the mitigative measures, suggested by the CWLW, in the sanctuary.
- 3. For the use of the non-forest land falling within the sanctuary, the NPV will be deposited as per the Hon'ble Court's order dated 28.3.2008 in the NPV matter.
- 4. The conditions stipulated by the Chief Wild Life Warden will be strictly complied with."

GFCC has informed that the above conditions are acceptable to the State Government As such, after brief discussion, the Committee accepted the proposal subject to fulfillment of the above conditions. GFCC will monitor it to ensure that the conditions stipulated by the Central Empowered Committee/Supreme Court are complied with before taking up the construction work.

## 16. Project for Anti-erosion works to protect sensitive cluster of villages along right bank of river Ghaghra in district Lakhimpur Kheri, Uttar Pradesh:

CE (PAO), CWC briefly introduced the project proposal. The Irrigation Department, Govt. of UP has formulated scheme to arrest the erosion tendency of river Ghaghra in district Lakhimpur Kheri so as to afford protection to villages from fury of flood by river Ghaghra. The proposal envisages the following components:

- i). Excavation of 3 km long channel in the river bed (cunnette).
- ii) 1 m thick slope pitching by geobags filled with river bed material for a length of 1850 m.
- iii) Laying of apron of geobags filled with river bed material with 8 m width and 3.5 m depth for a length of 1850 m.
- iv) Laying of 1785 nos. of porcupine on geobags filled with river bed material @ 60 m c/c in three rows.
- v) Laying of 359 nos. of porcupine in five rows for diversion of river.

The project proposal has been finalized for Rs. 30.4 cr with B.C. ratio as 1.84 by GFCC. It would provide benefit to 195 ha of land.

The State Finance Concurrence to this project has already been obtained.

After brief discussion, the Committee accepted the proposal.

# 17. Project for Anti-erosion works to protect sensitive cluster of villages along left and right banks of river Sarda in district Lakhimpur Kheri and Sitapur, Uttar Pradesh:

CE (PAO), CWC briefly introduced the project proposal. The present Flood Control Scheme is meant to protect villages along right and left banks of river Sarda in Lakhimpur Kheri and Sitapur districts with the following components of the works:

- i) 1 m thick slope pitching by geobags filled with river bed material for a length of 2410 m.
- ii) Laying of apron of geobags filled with river bed material with 8 m width and 4 m depth for a length of 2410 m.
- iii) Laying of 1761 nos. of porcupine on geobags filled with river bed material @ 60 m c/c in three rows.

The above project proposal has been finalized for the cost of Rs. 25.04 cr with B.C. ratio as 1.62 by GFCC, Patna. It would provide benefit to 140 ha of land.

The project proposal has got the recommendation of the State Technical Advisory Committee of Uttar Pradesh.

The State Finance Concurrence to this project has also been obtained.

After brief discussion, the Committee accepted the proposal.

### 18. Modernisation of Lar Canal (Medium-ERM), Jammu & Kashmir:

CE (PAO), CWC briefly introduced the project proposal. Lar Canal is a very old canal system providing irrigation facilities to 44 villages in Budgam district of J&K State. The project has deteriorated considerably due to lack of maintenance works. The present modernization proposal is aimed to provide assured irrigation to a CCA of 2231 ha and additional irrigation to 617 ha of land. The present proposal has been finalized for Rs. 47.72 cr at 2009 price level with B.C. Ratio: 1.37. The project proposal was earlier considered by Advisory Committee in its 101st meeting held on 30.11.2009. However, the project proposal was deferred as the State Finance Concurrence was not submitted by the State Govt. in that meeting. Now, the State Finance Concurrence has been submitted by the State Govt. The project proposal was accordingly accepted by the Advisory Committee after brief discussion.

## 19. Modernisation of Grimtoo Canal Project (Medium-ERM), Jammu & Kashmir:

CE (PAO) briefly introduced the project proposal and intimated that this proposal at an estimated cost of Rs. 99.09 cr was considered in 101<sup>st</sup> TAC meeting held on 30.11.2009 but acceptance of the proposal was deferred due to non submission of State Finance Concurrence. The state govt. had subsequently submitted State Finance Concurrence for the project for Rs.85.30 cr, as against the finalized cost of Rs. 99.09 cr, vide letter No. FD/Res/25/Fincon/2009/186, dt. 24.2.2010. This was considered in the 103<sup>rd</sup> meeting on 11.3.2010 wherein the Committee observed that the reason for sanction of SFC for a lesser amount than the finalized cost by CWC might be clarified by the project authorities.

CE (PAO) intimated the Committee that the State Govt. has now submitted the State Finance Concurrence for Rs. 99.09 cr as finalized by CWC.

After brief discussion the Committee accepted the proposal.

## 20. Restoration and Modernisation of main Ravi canal and its distribution network (New Major-ERM), Jammu & Kashmir:

CE (PAO), CWC briefly introduced the project proposal. The existing Ravi canal project of J&K has 4 phases for implementation out of which first three phases have been completed.

The present proposal is for replacement of the lift pumps and restoration of canal network so as to stabilize the command area already created through completion of Phase-I, Phase-II and Phase-III of the Ravi canal project. Total CCA of the Ravi canal project is 26,600 ha with annual irrigation of 56,749 ha. The ERM proposal has been finalized for Rs. 62.27 cr at 2008-09 price level with B.C. ratio as 1.85.

The project proposal was considered in the 103rd meeting of Advisory Committee held on 11.3.2010. It was however, deferred as State Finance Concurrence for the finalized cost i.e. Rs. 62.27 cr was not furnished by the State govt. Now, the State Finance Concurrence for Rs. 62.27 cr has been submitted by the State govt.

After brief discussion the Committee accepted the proposal.

The meeting ended with Vote of thanks to the Chair.