28th Meeting PLANNING COMMISSION (Irrigation & Command Area Dev. Division)

Subject:- Meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 18th December, 1976 - First Meeting.

The Summary Record of the meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 18th December, 1976 in Shram Shakti Bhavan, New Delhi, is circulated herewith.

> (K. S. S. Murthy) Chief(Irrigation) Member-Secretary

1. Shri C.C. Patel, Secretary, Department of Irrigation

2. Shri Y.K. Murthy, Chairman, Central Water Commission and

Ex-officio Secretary to the Government of India.

/Authority 3. Shri K.L. Puri, Chairman, Central Electricity/and Ex-officio Secretary to the Govt, of India, W. Block II, R.K. Puram, New Delhi.

4. Shri S. S. Grewal, Adviser (A&I), Planning Commission.

5. Shri V. B. Eswaran, Adviser (Energy), Planning Commission.

- 6. Shri R.K. Kaul, Joint Secretary, Plan Finance Division, Ministry of
- 7. Shri B.M.K. Mattoo, Financial Adviser, Deptt. of Irrigation, Ministry of Agriculture & Irrigation.

8. Shri S.K. Banerjee, Joint Secretary, Soil & Water Management Unit, Department of Agriculture, Ministry of Agriculture & Irrigation.

9. Mrs. Otima Bordia, Joint Secretary, Deptt.of Power, Ministry of Energy.

10. Shri Hari Bhushan, Adviser (Technical) & Ex-officio Joint Secretary, Department of Heavy Industry.

PLANNING COMMISSION CIR. NO. II-16(25)(1)/76-1&CAD. DATED: 29.12.1976

COPY TO:

Ministry of Agri. & Irrigation (Deptt. of Irrigation) 1. Shri O.P. Chadha, Joint Secretary(I)

2. Shri S. B. Khare, Joint Secretary(GB)

3. Shri K.V. Rama Rao, Member(JRC)

4. Shri H.J. Desai, Deputy Secretary

5. Shri K.R. Chandrasekharan, Deputy Secretary (Floods)

Ganga Flood Control Commission, Patna

1. Shri R. Ghosh, Chairman

Gentral Water Commission, New Delhi

1. Shri C.V. Gole, Member(WR)

2. Shri E.C. Saldhana, Member(P&P)

3. Shri A.N. Harkauli, Member (D&R)

4. Shri M. N. Venkateshan, Director(TE)

5. Shri A.M. Krishna, Director(TE), Bikaner House

6. Shri R. B. Shah, Director(Flood Control)

7. Shri C. G. Desai, Director(UT)

Agricul ture

1. Shri G. N. Kathpalia, Joint Commissioner, Water Management.

Ministry of Finance.

1. Shri S. S. Pradhan, Deputy Secretary(I&P)

Department of Mines

Shri J. Marwaha, Joint Secretary

Department of Science & Technology Technology Bhavan New Mehrauli Road.

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1. Shri N. R. Krishnan, Deputy Secretary.

Planni Commission

1. Adviser Traustries)
2. Chief(P r)

Water Supply) 3. Pare

PLANNING COMMISSION (IRRIGATION & COMMAND AREA DEV. DIVISION)

Minutes of the first meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on Saturday, the 18th December, 1976 at 3.00 p.m. in Shram Shakti Bhavan, New Delhi.

The names of officers who participated in the discussions, are given in the enclosed annexure.

The following projects were considered and the Committee's recommendations are given below:

I. MULTI_PURPO SE PROJECTS

1. Upper Indravati (Orissa) - Estimated Cost: Rs. 20814.49 lakhs.

The Committee desired that the Central Water Commission should examine this project more thoroughly and a Member of the CWC along with a senior engineering geologist should visit the project site and discuss all aspects of this project with the State officers. The following aspects need to be looked into specially by the CWC/CEA:

Action CWC:

- (i) Review of the foundation investigations, material investigations and allied items;
- (ii) Alternatives for the various dam sites, if any;
 - (iii) Infra-structure planning;
 - (iv) Phasing of construction of works. PERT Chart/Bar Chart studies to estimate the partial benefits that can accrue during the construction;
 - (v) Detailed data may be collected for land classification of the command area on block basis. The proposed conversion of forest area for agriculture needs careful consideration. The environmental aspects, the cost of on-farm development etc. may also be examined;
- (vi) Part of the tail-race waters are being lifted for irrigating a portion of the command area. Studies should be carried out to see if/the proposed lift areas could be irrigated can be so located by gravity flow; that
 - (vii) The proposed irrigation intensity of 200 per cent appear to be on the high side. Generally, the lift areas are provided with 80-90 per cent irrigation intensity. The cropping pattern may be reviewed thoroughly and expert opinion of the agronomists at the Central and the State levels may be obtained for this purpose;

Action C.E.A .:

(viii) Keeping in view the load factor in the region, the C.E. A. may review and recommend the appropriate sizes of the power units.

The Committee also desired that the CWC and CEA should examine in greater detail all aspects of multi-purpose and major projects estimated to cost more than Rs.100 crores.

(ACTION: CWD/CEA)

2. Singda Multi-purpose Project (Manipur) - Estimated Revised Cost:
Rs.793 lakhs.

The scheme was found acceptable and the apportionment of cost to irrigation and water supply sectors is given below:

(Rs. lakhs)

(a) Irrigation 479

(b) Water Supply 314

Total: 793

The CWC's note mentions a cost of Rs.200 lakhs for the water supply distribution system, about which a decision may be taken by the appropriate department.

(ACTION: Planning Commission)

Banjar River Project (M.P.) - Estimated Cost:Rs.208.79 lakhs.

The scheme was considered acceptable subject to the allocation of cost between the M.P. Irrigation Deptt. and the Department of Mines being decided by the Planning Commission, the Deptt. of Mines and the Deptt. of Irrigation.

(ACTION: Planning Commission/ Deptt. of Mines)

II. MAJOR IRRIGATION SCHEMES

1. Chaskaman Irrigation Project (Maharashtra) - Estimated Cost:
Rs. 2248.00 lakhs.

The scheme was found acceptable subject to the following observations:

(i) The water allowance for paddy, sugarcane and groundnut seems to be high and may be reviewed by the State in consultation with the Union Ministry of Agriculture & Irrigation and the C.W.C.

- (ii) The Water Sanagement Division of Deptt. of Agriculture have cleared the project and suggested that detailed soil survey, which is in progress, should be completed early and then crop pattern reviewed. The project authorities have agreed to do so.
- (iii) The 75% dependability yield of 12.3 TMC (derived from observed data for the periods 1906-1926 and 1947-1957), and a design flood of 1.4 lakh cuseds and the biseasonal working tables have been tentatively accepted for planning purposes. The project authorities have been advised to continue the observation at the dam site, ensuring that it conforms to I.S.I. standards and prepare monthly working tables. They have also been advised to establish more self-recording raingauges, collect hourly discharge and rainfall data for making detailed flood studies and get these vetted by the Hydrology Directorate of Central Water Commission before final designs are taken up. They have agreed to do so.

(ACTION: CWC/Planning Commission)

2. Bateshwarstham Pump Canal Phase-I (Bihar) - Estimated Cost: Rs.1387.70 lakhs.

The scheme was found acceptable subject to the following observations:

- (i) The Department of Agriculture (W.M. Division) has suggested that installation of tubewells to increase the rabi area may considered. It is indicated in the Project Report that he area does not have much of ground water prospects. The State Engineers have however agreed to look into this aspect in detail.
- (ii) The Soil Survey of the command, which is in progress, may be completed as early as possible.
- (iii) The project authorities may consider lining of the canals up to 25 cusecs discharge in order to save transmission losses of the costly pumped water supply.

(ACTION: CVC/Planning Commission)

3. Upper Pravara Project near Mhaladevi (Maharashtra) - Estimated Gost:
Rs.1586.78 lakhs.

The scheme was found acceptable subject to the following observations:

(i) Detailed soil survey may be taken up and completed before the actual release of canal water for irrigation.

- (ii) Based on the soil data the cropping pattern may be reviewed.
- (iii) The hydrology of the project may be refined further and the operation of the reservoir may be checked up on a monthly basis taking into account the inflows from the Bhandardara reservoir and the releases to be made for protecting the existing irrigation ex. Ozar weir.
 - (iv) Recessary flood hydrographs may be worked out by unit hydrograph method and got vetted by the GWC at the time of taking up detailed designs.

(ACTION: CWC/Planning Commission)

4. Suheli Irrigation Scheme (U.P.) - Estimated Cost: Rs. 640.00 lakhs.

The scheme was found acceptable subject to the following observations:

- (i) A detailed project report may be submitted by the State to the CWC as the project is proposed to serve more than 10,000 ha. command.
- (ii) The possibilities of serving part of the proposed command from the Ghagra-Sarda Link Canal may be examined.
- (iii) The ground water support and the cropping pattern may be reviewed by the State and the results communicated to the CWC and the Planning Commission.

(ACTION: CWC/Planning Commi tion)

5. Sukhi Project (Gujarat) - Estimated Cost: Rs. 2311. CO lakhs.

The scheme was found acceptable.

(ACTION: Planning Commission)

LIL, MEDIUM IRRIGATION SCHEMES

- 1. Thumblahalli Reservoir Scheme (Tamil Nadu) Estimated Cost: Rs.102.00 lakhs.
- 2. Pambar Reservoir Scheme (Tamil Nadm) Estimated Cost: Rs. 160.00 lakhs.
- 3. Kerwan Tank Project (Madhya Pradesh) Estimated Cost:Rs.103.33 lakhs.

The above three schemes were found acceptable.

(ACTION: Planting Commission)

4. Kothapally Lift Irrigation Scheme on River Krishna (Andhra Pradesh) - Estimated Cost: No. 200.00 lakhs.

The scheme was found acceptable subject to the observation that paddy irrigation should not be allowed on the project as the scheme is to be implemented under the IPAP Programme and involves costly lift water supply.

(ACTION: Planning Commission)

5. Krishnapuram Reservoir Scheme (Andhra Pradesh) - Estimated Cost:
Rs.128.QO lakhs.

The scheme is proposed upstream of Poondi Reservoir and, therefore, Tamil Nadu Govt, may be consulted before the project is put up to the Advisory Committee.

(ACTION: C.W.C.)

- 6. Bijna Tank Project (Malhya Pradesh) Estamaded Cost: Rs. 120.59 lakhs.
- 7. Godhatad Irrigation Scheme (Gujarat) Estimated Cost:Rs.47.77 lakhs.
- Rajawal Irrigation Schame (Gujarat) Estimated Gost: Ro. 253 o 159 lakhs.
- 9. Amipur Irrigation Scheme (Gujarat) Estimated Cost: Rs. 278.92 lakhs.
- 10. Sukhbhadar Irrigation Scheme (Gujarat) Estimated Cost:Rs.225.546 lakhs.
- Peddavagu Peservoir Scheme (Andhra Pradesh) Estimated Cost:
- 12. Mukkamamidi Project (Andhra Pradesh) Estimated Cost: Rs. 47.50 lakhs.
 13. Boggulavagu Project (Andhra Pradesh) Estimated Cost: Rs. 136.30 lakhs.

The above 8 schemes (serial nose6 to 13) were found acceptable.

(ACTION: Planning Commission)

14. Jurala Lift Irrigation Scheme on River Krishna (Andhra Pradesh) Estimated Cost: Rs. 105.50 Lakhs.

The scheme was found acceptable subject to the observation that paddy irrigation should not be allowed.

(ACTION: Planning Commission)

15 Maddigedda Reservoir Scheme (Andhra Pradesh) - Estimated Cost: Rs.155.27 lakhs.

The scheme was found acceptable subject to the observation that the irrigation intensity may be reduced to 122 per cent by suitably extending the canal system. The project authorities may look into the drainage requirements of the project during construction.

(ACTION: Planning Commission)

18, Taliperu Project (Andhra Pradesh) - Estimated Cost: As. 906.00 lakhs.

The Committee observed that the cropping pattern may be reviewed and rabi irrigation benefits increased by suitably curtailing paddy irrigation. The economics of lifting water from river Godavari to provide irrigation facility in the proposed command area may also be investigated and the results submitted to the Advisory Committee.

(ACTION: C. V.C.)

17. Pedda Ankalam Regulator Schame (Andhra Pradesh) - Estimated Cost:

This is a run-of the river scheme to provide irrigation benefits to the existing and new areas. The scheme was found acceptable subject to checking of the run-off data by the CWC.

(ACTION: CWC/Planning Commission)

18. Pedderu Reservoir Scheme (Stage-I)(Andhra Pradesh) - Estimated Cost:

The scheme was found acceptable subject to the observation that the estimates for Stage-II may be submitted by the State immediately to the CWC and the Planning Commission.

(ACTION: CWC/Planning Commission)

19 Jalleru Reservoir Scheme (Andhra Pradesh) - Estimated Cost:
Rs.218.85 lakhs.

The scheme was found acceptable subject to the observation that the irrigation intensity may be limited to 100 per cent and the command area may be suitably extended.

(ACTION: CWC/Planning Commission)

203 Raiwada Reservoir Scheme (Andhra Pradesh) ~ Estimated Cost: Rs. 888.00 lakhs.

The scheme was found acceptable, subject to the observation that the modernisation scheme may be prepared by the State and this aspect integrated with the implementation of the scheme.

(ACTION: CWC/Planning Commission)

21. Suvarnamukii-Gomukii Reservoir Scheme (Andhra Pradesh) - Estimated Cost: Rs. 300.00 lakhs.

The scheme was found acceptable subject to the observation that the possibilities of extending the command beyond the railway line be considered by the State and the result intimated to the CWC/Planning Commission.

(ACTION: CVC/Planning Countssion)

22. Anjunem Irrigation Project (Goa) - Estimated Cost: Rs. 368.15 lakhs.

The scheme was found acceptable subject to the observation that the possibilities of extension of irrigation benefits to greater area may be kept in view by Goa Administration.

(ACTION: Planning Commission)

23. Kalisarar Project (Meherashtra & M.P.) - Estimated Cost: Rs. 322.45 lakhs.

The cost apportioned between Maharashtra and Madhya Pradesh is Rs.241.85 lakhs and Rs.80.612 lakhs respectively. The scheme was found acceptable subject to the observation that the sugarcane may be reduced to 5 per cent and bot weather crops reduced drastically.

(ACTION: C. W.C. Planning Commission)

- 24. Valtivagu Scheme (Andhra Pradesh) - Estimated Cost:Rs.540 lakhs
 - 25. Mallurvagu Scheme (Andhra Pradesh) - Estimated Cost:Rs.151.75 lakhs.
 - 26. Konam Reservoir Scheme (Andhra Pradesh) - Estimated Gost:Rs. 148 lakhs.
 - Paronen Tank Project (M.P.) Estimated Cost:Rs.108.80 lakhs. 27
- Mandohol Irrigation Scheme (Maharashtra) Estimated Cost: Rs. 186.70 | Y , 2B.
- Marhi Tank Project (M.P.) Estimated Cost: Rs. 146.479 lakhs. XV 78 ÷ 29 ,
- Bisandha Tank Project (M.P.) Estimated Cost: Rs. 67.83 lakhs. t 30.
- Modsagar Tank Project (M.P.) Estimated Cost: Rs. 96.44 lakhs.
- Gulaboura Tank Project (M.P.) Estimated Cost:Rs.50.83 lakhs (P.) 6
- Baramandel Tank Project (M.P.) Estimated Cost:Rs.50.50 lakhs.
- Sani Irrigation Scheme (Gujarat) Estimated Cost: Rs. 182.4 lakhs.
- Sarapgarh Irrigation Project (Orissa) Estimated Cost:Rs.114.59 lakhs.
- 36 Jharbandha Irrigation Project (Orissa) - Estimated Cost:Rs.63,05 lakhs
- 437, Talasara Irrigation Project (Orissa) - Estimated Cost:Rs. 217.30 lakhs.
- Umrar Tank Project (M.P.) Estimated Cost: Rs. 191.50 lakhs. 1-16, াইটি ন
- · (3.9). Sonkhedi Tank Project (M.P.) - Estimated Cost: Rs. 65.48 lakhs
- 40
- 41.
- Mahroi Tank Project (M.P.) Estimated Cost:Rs.38.32 lakhs.

 Kachan Dam Project (MP.) Estimated Cost:Rs.210.07 lakhs.

 Mansurwari Tank Project (MP.) Estimated Cost:Rs.149.09 lakhs. 42.
 - Johilla Reservoir Project (M.P.) Estimated Cost:Rs. 126.10 lakhs:

The above 20 schemes (serial nos. 24 to 43) were found acceptable.

(ACTION: Planning Commission)

(44. Pandarwa Reservoir Scheme (Bihar) - Estimated Cost:Rs.51.44 lakhs.

The scheme was found acceptable, subject to the observation that the C.C.A. may be reduced to provide higher rabi irrigation benefits.

(ACTION: C. W. C. /Planning Commission)

Hirehalla Tank Project (Karnataka) - Estimated Cost: Rs. 635 lakhs.

The scheme was found acceptable subject to the observation that the alternative of lifting water from Tungabhadra Reservoir may. be considered.

(ACTION: C. W. C. /Planning Commission)

46. Bakhar Marihan Feeder Scheme (Uttar Pradesh) - Estimated Cost: Rs.94.72 lakhs.

The scheme was found acceptable subject to the observation that the irrigation intensity may be increased to 70 per cent.

(ACTION: C. W.C. /Planning Commission)

47. K. dumudiar Reservoir Scheme (Tamil Nadu) - Estimated Cost: Rs.167.00 lakhs.

48, Umarhat Pumped Canal Project (U.P.) - Estimated Cost: Rs. 77.84 lakhs.

49. Teetha Reservoir Project (Karnataka) - Estimated Cost:Rs.180 lakhs. 50. Soudagar Tank Project (Karnataka) - Estimated Cost:Rs.169.00 lakhs.

. Dhoba P.C. Scheme (U.P.) - Estimated Cost:Rs.75.00 lakhs.

5%. Shiva Canal Project (J&K) - Estimated Cost: Rs. 67.00 lakhs.
53. Deda Kastigad Canal Project (J&K) - Estimated Cost: Rs. 40.00 lakhs.

Chulki Nala Project (Karnataka) - Estimated Cost:Rs.379.76 lakhs.

The above 8 schemes (serial nos.47 to 54) were found acceptable.

(ACTION: Planning Commission)

IV. FLOOD CONTROL SCHEMES

P-48

1. Revised Estimate of Nowi Basin Drainage Scheme (24-Parganas) (W. Bengal) - Estimated Cost:Rs.281.07 lakhs.

The scheme was found acceptable. The Committee desired that G.F.C.C., Patna, in consultation with the State Government, may check up the outfall conditions and submit its report to the Deptt. of Irrigation and the Planning Commission.

(ACTION: G. F. C. C. Patna/Planning Commn.)

2. Patna Flood Protection Schemes (Bihar)

Two estimates for construction of a new embankment from Maner to Saidabad costing Rs.427,40 lakhs and for the construction of an embankment-cum-masonry wall on the south bank of Ganga from Digha to Maner costing Rs.550 lakhs have been submitted by the G.F.C.C., Patna. Shri R.Ghosh. Chairman, GFCC, Patna, mentioned that these are part estimates of the Patna flood protection works which may cost about Rs.17.66 crores. The Advisory Committee desired that G.F.C.C. should put up a comprehensive estimate for the Patna flood protection works after due processing. Thereafter, the Committee would take a view.

(ACTION: G.F.C.C., Patna)

List of officers present in the meeting of the Advisory Committee on Irrigation, LFlood Control & Multi-purpo se Projects

- Shri C. C. Patel, Secretary, Deptt. of Irrigation - Chairman. 1.
- Shri Y.K. Murthy, Chairman, CWC and ex-officio Secretary to the Government of India. 2.
- 3. Shri V. B. Eswaran, Adviser(Energy), Planning Commission
- Mrs. Otima Bordia, Joint Secretary, Deptt. of Power.
- 5. Shri B.M.K. Mattoo, Financial Adviser, Deptt. of Irrigation
- Shri K.S.S. Murthy, Chief(Irrigation)

- Member-Secy.

ALSO PRESENT:

- 7. Shri R. Ghosh, Chairman, GFCC, Patna.
- 8. Shri J. Marwaha, Joint Secretary (Mines) 9.
- 10.
- Shri E.C. Saldanha, Member(P&P), GWC Shri K.V. Rama Rao, Member(JRC), Deptt. of Irrigation. Shri G. N. Kathpalia, Joint Commissioner, Water Management. 11.
- Shri K. R. Chandrasekharan, Deputy Secy., Deptt. of Irrigation. 12.
- Shri M. N. Venkateshan, Director, CHG 13.
- 14.
- 15.
- Shri A. M. Krishna, Director, CWC Shri G.G. Desai, Director(UI), GWC Shri K.M. Maheshwari, Director(Irrigation), Planning Commission. Shri B. B. Karajagi, Dy. Director, GWC. 16,
- 17.
- Shri A. S. Gupta, SRO, Planning Commission. 18.

PLANNING COMMISSION (I&CAD DIVISION)

Subject: Meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 28th April, 1977-Second Meeting.

The Summary Record of the meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 28th April, 1977 in Shram Shakti Bhavan, New Delhi, is circulated herewith.

> (K.M. Maheshwari) Director (Irrigation) for Member-Secretary

- 1. Shri C.C. Patel, Secretary, Department of Irrigation
- 2. Shri Y.K. Murthy, Chairman, Central Water Commission and Ex-officio Secretary to the Government of India.
- 3. Shri S.S. Grewal, Adviser (A&I), Planning Commission.
- 4. Shri B.M.K. Mattoo, Financial Adviser, Deptt. of Irrigation,
- Ministry of Agriculture & Irrigation.

 5. Shri S.K. Banerjee, Joint Secretary, Soil & Water Management
 Unit, Department of Agriculture, Min. of Agriculture & Irrigation
 6. Shri R.K Kaul, Jt. Secy., Plan Finance Div., Min. of Finance.

Planning Commission Cir.No.II-16(25)(2)/77-I&CAD dt. 2.5.1977

COPY TO:

Ministry of Agriculture & Irrigation(Deptt. of Irrigation)

- Shri O.P. Chadha, Joint Secretary(I) Shri S.B. Khare, Joint Secretary(GB)
- 3. Shri K.V. Rama Rao, Member (JRC)
- Shri H.J. Desai, Deputy Secretary
- Shri K.R. Chandrasekharan, Deputy Secretary(Floods)

Ganga Flood Control Commission, Patna

Shri R. Ghosh, Chairman

Central Water Commission, New Delhi.

- Shri C.V. Gole, Member(WR)

- Shri E.C. Saldhana, Member(P&P)
 Shri A.N. Harkauli, Member(D&R)
 Shri Pritam Singh, Momber(Floods)
 Shri K.S.S. Murthy, Chief Engineer(Drought Areas Study)
- Shri M.C. Das, Chief Engineer(FI), R.K. Puram W.B. I Shri M.N. Venkateshan, Director (TE) 5 copies

- 9.
- Shri A.M. Krishna, Director(TE), Bikaner House Shri R.B. Shah, Director(Flood Control) Shri B.L. Jatana, Director(P&P). 2 copies 10.

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CENTRAL WATER COMMISSION, PATNA

Shri B. Sinha, Chief Engineer, Patna. Department of Agriculture

Shri G.N. Kathpalia, Joint Commissioner, Water Management. Ministry of Finance

1. Shri S.S. Pradhan, Deputy Secretary(I&P)

Department of Science & Technology, Technology Bhavan, New Mehrauli Road, New Delhi.

1. Shri N.R. Krishnan, Deputy Secretary.

(K.M. Maheshwari)
Director (Irrigation)
for Member-Secretary

PLANNING COMMISSION (L&CAD DIVISION)

Minutes of the Second Mééting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on Thursday, the 28th April, 1977, at 3.00 p.m. in Shram Shakti Bhavan, New Delhi.

The names of officers who participated in the discussion are given in the enclosed annexure.

The Committee desired that thefollowing may be immediately attended to by the Central Water Commission/Deptt. of Irrigation/Planning Commission.

(i) The CWC may indicate important items of works for which information about the unit rates adopted in project estimates may be furnished by the project authorities for medium irrigation projects. Such information should invariably be furnished with the CWC notes for advisory Committee in respect of all irrigation projects.

The CWC may take immediate action to inform the State Irrigation Departments about incorporating the unit rates in the proforma report for medium projects together with a copy to the Planning Commission.

(ACTION: CWC.)

(ii) The CWC should make a study of the cost per hectare and cost per unit of storage for medium projects. This information may be put up in the next meeting of the Committee alongwith recommendations regarding some guidelines indicator that cost of the project is abnormally high.

(ACTION CWC.)

(iii) The Department of Irrigation and/or Planning Commission may consider the appraisal of the medium projects constructed.

(ACTION: DEPTT OF IRRIGATION)

(iv) The field to field irrigation practised in many parts of the country for paddy crops is not desirable. Construction of field channels for such areas is also essential. Attention of the project authorities to discard the practice of field to field irrigation and the desirability of construction of field channels in paddy areas may, therefore, invariably be drawn by the CWC. and this aspect be mentioned in the approval letters for the medium projects.

(ACTION: CWC/PLANNING COMMISSION)

The following projects were considered and the Committee's recommendations are given below:

IRRIGATION

I. Major Projects

1. Karjan Project(Gujarat) - Estimated Cost: Rs. 3720.00 lakhs

The scheme was found acceptable, subject to the observation that soil surveys may be completed within three years and the cropping pattern be reviewed thereafter. The result of this review may be communicated by the project authorities to the Central Water Commission, Department of Agriculture and the Planning Commission.

(ACTION: CWC/PLANNING COMMISSION)

2. Lower Dudhana Project(Maharashtra)-Estimated cost: Rs.2230.00 lakhs.

The scheme was found acceptable. subject to the following observations:

- (i) The design flood may be reviewed after constructing some unit hydrographs at the dam site on the basis of hourly gauging at this site.
- (ii) Working tables may be prepared on a long-term basis for 35 years to adjudge the performance of the reservoir.
- (iii) The report on soil survey may be completed early and cropping pattern reviewed on the basis of soil conditions. A copy of this report along with the soil map be supplied to the CWC., Department of Agriculture and the Planning Commission.

(ACTION: CWC/PLANNING COMMISSION)

3. Revised Estimate of Bhimsagar Irrigation Project(Rajasthan)-Estimated Cost Rs. 438.93 lakhs.

The Committee observed that the revised cost of the project has gone up to Rs.438.93 lakhs against the originally sanctioned cost of Rs.18.18 lakhs in 1958. It is recommended that detailed reasons for the increase in cost may be gone into by a committee to be formed by Rajasthan Government and they may associate the CWC in this work.

The Committee also made the following observations:

The Committee also made the following observations:

- (i) The CCA of the revised project for Bhimsagar being more than 10,000 hectares, the detailed project report as required for a major project may be submitted by the State to the concerned Central Ministries/Organisations.
- (ii) The intensity of irrigation may be increased by reducing the CCA to, say, 10,000 ha. The provision for sugarcane needs to be drastically curtailed.
- (iii) Silt provision may be calculated by area reduction method and the planning reviewed in this light.
 - (iv) It is mentioned in the proforms report that field channels will be constructed by the Department and cess will be recovered from the cultivators, but there is no mention of cess charges in the project report.
 - (v) The estimate is to be updated on the basis of current schedule of rates.
 - (vi) Till the revised project is approved by the Planning Commission, no expenditure may be incurred on this project.

(ACTION: CWC/PLANNING COMMISSION)

II. Medium Projects

1. Palme Reservoir Scheme (Bihar)-Estimated Cost: Rs. 194.37 lakhs
The Committee observed that the following aspects require
further consideration by the project authorities:

(i) The cross-section and the foundation treatment of the earth dam has been adopted on the basis of similar dam projects in the area. It is suggested that the designs of these sections and foundation treatment as well as estimates be based on the results of the investigation as laid down for the purpose.

- (ii) No drilling has been carried out for the spillway.

 It is suggested that the necessary investigations

 may be carried out to finalise the spillway design.
- (iii) Water allowance adopted for kharif crops is low. The detailed cropping pattern needs to be given by the State.
 - (iv) The concurrence from the State Finance Department may be obtained by the project authorities.

(ACTION: CWC)

O 2. Jharjhma Reservoir Scheme (Bihar)-Estimated Cost:Rs.446.95 lakhs.

The scheme was found acceptable subject to the following observations:

- (i) The concurrence of State Finance Department may be obtained.
- (ii) The cropping pattern may be reviewed by the State and more rabi benefits considered by providing lesser kharif irrigation. The requirement of water for kharif seems to be on the low side.

(ACTION: CWC/PLANNING COMMISSION)

3. Nakti Reservoir Scheme (Bihar) - Estimated cost: Rs. 288.951akhs

The Committee observed the following:

- (i) The concurrence of State Finance Department may be obtained.
- (ii) The cost of the scheme seems to be on the higher side. The design flood discharge and the design of spillway and the dam may be reviewed by the project authorities in consultation with the CWC.

(ACTION: CWC.)

4. Halubhar Irrigation Scheme (Gujarat) - Estimated college 315 - 6

The scheme was found acceptable, subject to the following observations:

- (i) The CCA may be increased by 20 per cent.
- (ii) Water allowance for wheat, oilseeds and pulses is on higher side and needs to be reviewed.

(ACTION: CWC, PLANNING COMMISSION)

5. Waghyanalla Tank Project (M.P.) - Estimated cost Rs. 163.61 lakhs

The scheme was found acceptable, subject to the observation that the water allowance for cotton may be reviewed and the C.C.A. may be reduced to increase the intensity of irrigation.

(Action: CWC/PLANNING COMMISSION)

6. Jhirumnadi Diversion Scheme (Baru Nadi Project Phase-I) (Madhya Pradesh) - Estimated cost: Rs. 39.605 lakhs.

The scheme was found acceptable, subject to the following observations:

- (i) The possibilities of groundwater exploitation in the command area may be investigated and results reported to the CWC. This would help stabilising the crops on the weir project.
- (ii) The State may consider the execution of Phase II of the project. In this connection, the feasibility report of Phase II may be submitted on priority basis to the CWC.

(ACTION: CWC/PLANNING COMMISSION)

7. Nahlesar Tank Project(M.P.) - Estimated cost: Rs. 196.02 lakhs.

It was noted that the scheme has been completed many years back. The CWC may obtain the annual utilisation figures for this project since the date of its completion. This should be noted for similar projects in future.

(ACTION: CWC/PLANNING COMMISSION)

8. Revised Estimate of Putka Nalla Tank Project(M.P.) - Estimated Cost: Rs.68.327 lakhs.

The scheme was found acceptable.

(ACTION: PLANNING COMMISSION)

-/-

Jarmora Tank Project (M.P.) - Estimated Cost: Rs. 190.85 lakhs.

The scheme was found acceptable, subject to the following observations:

- (i) The project authorities may look into the design of the waste weir and the tail channel for suitable protection measures against the retrogression. The results may be communicated by the project authorities the CWC.
- (ii) Exploitation of groundwater may be considered to enhance the intensity of irrigation suitably.

(ACTION: CWC/PLANNING COMMISSION)

Chorborari Tank (M.P.) - Estimated Cost: Rs. 64.97 lakhs.

The scheme was found acceptable, subject to the following observations:

- (i) The concurrence of the State Finance Department may be obtained by the project authorities.
- (ii) The project authorities may provide waterway for 100 per cent estimated flood instead of flood moderation for the spillway in the dam.

(ACTION: CWC/PLANNING COMMISSION)

11. Balar Reservoir Project(M.P.) - Estimated Cost: Rs. 267 lakhs.

12. Matia Moti Nalla Project(M.P.) - Estimated Cost:Rs.161.157

The above two schemes were found acceptable, subject to the observation that the project authorities may review the cropping pattern in respect of rabi irrigation and the result may be intimated to the CWC, Department of Irrigation and Planning Commission.

(ACTION: CWC/PLANNING COMMISSION)

13. Piparia Tank Project(M.P.) - Estimated Cost:Rs.389.79 lakhs.

The scheme was found acceptable.

(ACTION: PLANNING COMMISSION).

14. Basappawadi Irrigation Scheme (Maharashtra) - Estimated Cost Rs.97.48 lakhs.

The scheme was found acceptable subject to the observation that the hot weather crops be deleted and the rabi intensity may be reduced suitably, as this project is located in the chronically drought-affected area.

(ACTION: CWC/PLANNING COMMISSION)

15. Strengthening of Bhatghar Dam(Maharashtra)—Estimated Cost: Rs. 466.00 lakhs.

The scheme was found acceptable.

(ACTION: PLANNING COMMISSION)

16. Wabagai Barrage Project on Sekmai River (Manipur)-Estimated Cost: Rs. 259.66 lakhs.

The scheme was found acceptable.

(ACTION: PLANNING COMMISSION)

7. Bondapipili Irrigation Project(Orissa)-Estimated Cost:
Rs.148.85 lakhs.

The scheme was found acceptable, subject to the observation that the concurrence of State Finance Department may be obtained by the project authorities.

(ACTION: CWC/PLANNING COMMISSION)

18. Kothari Irrigation Project (Rajasthan) - Estimated Cost:
Rs. 235.18 lakhs.

The scheme was found acceptable, subject to the following observations:

- (i) The concurrence of the State Finance Department may be made available by the project authorities.
- (ii) The C.C.A. may be reduced suitably so that the irrigation intensity may be increased to at least 75 per cent. The result of this review may be communicated to the CWC, Department of Agriculture and Planning Commission.

(ACTION: CWC/PLANNING COMMISSION)

19. Margia Irrigation Scheme (Rajasthan) - Estimated Cost: Rs.59.57 lakhs.

The lommittee observed the following:

- (i) The project cost is high and may be reviewed to bring the cost to Rs.10,000 to 12,000 per ha.
- (ii) The project authorities may look into the cropping pattern and paddy and sugarcane crops may be reduced to very minimum.
- (iii) The water utilisation proposed in the project is much less than the available run-off and, therefore, there is a case for increasing the command area.

(ACTION: CWC.)

20. Bardaha Dam Project (U.P.) - Estimated Cost: Rs. 126.50 lakhs.

The scheme was found acceptable, subject to the observation that the intensity of irrigation be increased to 75 per cent by suitable reduction in the command area. The water allowance for rabi is high and needs review. The result of the review may be communicated to the CWC., Department of Agriculture and Planning Commission.

(ACTION: CWC/PLANNING COMMISSION)

FLOOD CONTROL

1. Urgent Development Works of Sunderbans Area(W.Bengal) - Estimated cost: Rs.1643.00 lakhs.

The scheme was found acceptable, subject to the following observations:

- (i) The project authorities should ensure adequate compaction of embankments.
- (ii) The State Government should create suitable organisation for the proper maintenance and repairs of the works in the project area.
- (iii) The sluices and outlets should be designed properly keeping in view the experience of the Dabo sluice.

(ACTION: G.F.C.C./CWC/PLANNING COMMISSION)

ANNE XURE

List of Officers present in the meeting of the advisory Committee on Trigation, Flood Control and Multi-purpose Projects held on 28.4-1377.

- 1. Shri C.C. Patel, Secretary, Department of Irrigation . Chairman
- 2. Shri Y.K. Murthy, Chairman, CWC and Ex-officio Secretary to the Government of India.
- 3. Shri B.M.K. Mattoo, Financial Adviser, Department of Irrigation Planning Commission
- 4. Shri K.M. Maheshwari, Director (Irrigation) on behalf of Member-Secretary.

ALSO PRESENT:

- 5. Shri K.V. Rama Rao, Member (JRC), Department of Irrigation.
- 6. Shri H.J. Desai, Deputy Secretary, Deptt. of Irrigation.
- 7. Shri K.R. Chandrasekharan, Deputy Secretary, Department of Irrigation.
- 8. Shri B. Sinha, Chief Engineer, CWC., Patna.
- 9. Shri G.M. Kathpalia, Joint Commissioner, Water Management, Department of Agriculture.
- 10. Shri A.M. Krishna, Director (TE), CWC.
- 11. Shri R.V. Suryanarayana, Joint Director, Planning Commission
- 12. Shri Raisinghani, Dy. Director, CWC.
- 13. Shri A.S. Gupta, SRO., Planning Commission.

PLANNING COMMISSION

(Irrigation & Command Area Dev. Division)

Subject: Meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 26th August, 1977 - Third Meeting.

The Summary Record of the meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 26th August, 1977 in Shram Shakti Bhavan, New Delhi, is circulated herewith.

KITCH

(K.M. Maheshwari) Director (Irrigation) for Member - Secretary

1. Shri C.C. Patel, Secretary, Department of Irrigation

2. Shri Y.K. Murthy, Chairman, Central Water Commission and Ex-officio Secretary to the Govt. of India.

3. Shri K.S. Subrahmanyam, Chairman, Central Electricity and Ex-officio Secretary to the Govt. of India, Bikaner 3 copies) New Delhi.

4. Shri T.R. Satish Chandran, Adviser(Energy), Planning Commission

5. Shri R.K. Kaul, Joint Secretary, Plan Finance Division, Ministry of Finance.

6. Shri B.M.K. Mattoo, Financial Adviser, Deptt. cf Irrigation Ministry of Agriculture and Irrigation.

7. Shri S.K. Banerjee, Joint Secretary, Soil & Water Management Unit, Department of Agriculture, Min. of Agriculture and Irrigation.

8. Shri R. Gopalaswamy, Joint Secretary, Department of Power. Ministry of Energy.

9. Shri Hari Bhushan, Adviser, Technical and Ex-officio Joint Secretary, Department of Heavy Industry.

Planning Commission Circular No.II-16(25)(3)/77-I&CAD dt.9.9.1977 Copy to:

Ministry of Agriculture and Irrigation, Deptt. of Irrigation.

Shri O.P. Chadha, Joint Secretary(I)

Administration of the Control of the

2. Shri S.B. Khare, Joint Secretary(GB)
3. Shri K.V. Rama Rao, Member (J.R.C.)
4. Shri H.J. Desai, Director(P) · · · 5 copies.

Ministry of Finance

1. Shri Vijay Kumar, Deputy Secretary(I&P) ... 3 copies

Central Water Commission, New Delhi.

- 1. Shri C.V. Gole, Member(WR).
 2. Shri E.C. Saldhana, Member(P&P).
- 3. Shri A.N. Harkauli, Member (D&R), 4. Directors (TE), L&II, Biksus House '8 copies each
- 5. Shri Pritam Singh, Member (F&Sc.) Department of Science & Technology
- 1. Shri N.R. Krishnan, Deputy Secretary, Department of Science & Technology, Technology Bhavan, New Mehrauli Road, New Delhi.
- 2. Chief (Power), Planning Commission.

3 copies

PLANNING COMMISSION (I&CAD PIVISION)

Minutes of the third meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 26th August, 1977 at 3.00 p.m. in Shrum Shukti Bhavan, New Delhi.

Names of officers who participated in the discussion are given in the enclosed annexure.

2. The following projects were considered and the Committee's recommendations are given below:

I. MULTI-PURPOSE FROJECTS

- 61. (a) Revised Estimate of Beas Unit-I(Beas-Sutlej Link)-Estimated Cost: Rs.38257.10 lakhs.
 - O (b) Revised Estimate of Beas Unit-II-Estimated Cost: Rs.25980.00 lakhs.

The revised estimates of Beas Project were considered acceptable, subject to the observation that the allocation of cost to the concerned States and the share between irrigation and power shall be determined by the Beas Control Board.

(Action: CEA/PlanningCommission)

2. Hasdeo(Bango) Project(Phase III of Hasdeo Project - Madhya Pradesh) - Estimated Cost: Rs.115.3 crores.

The CWC note on Hasdeo(Bango) Project mentions the following apportionment of cost:

		<u>(.)</u>	Rs. crores)
(i)	Dam and appurtenant works	3	60.00	
(ii)	Irrigation canals		53.00	
(111)	Hydro-power civil works comprising embedment of penstocks and excavation for powerhouse		2.30	
		Total.	115 30	

Total: 115.30

The Committee observed that the Department of Irrigation has taken up with the Director General, Geological Survey of India, the question of the possible submargence of some coal reserves in the proposed Hasdeo (Bango) dan reservoi. The views of the Director General, CSI, in this matter may be obtained at the earliest. The matter needs to be resolved from point of view of submargence of coal reserve before approval of the scheme.

(Action: Deptt. of Irrigation

As soon as the above issue is settled by the Department of coal, the scheme shall be considered acceptable subject to the following

(i) Cooling towers may be necessary in lean years. Final view in this connection may be taken by the C.E.A.

(Action: C.E.A.)

(ii) Adequate drainage needs to be provided matching with the construction of canal works. A separate project may be submitted by the State Government in regard to the drainage.

(Action: CWC)

(iii) Member(D&R), CWC, may visit the dam site and review the investigations carried out.

(Action: CWC/Planning Commission)

MAJOR IRRIGATION PROJECTS

1. Revised Estimate of Gandak Project(Bihar portion only) Estimated Cost: Rs.35,358.40 lakhs.

The scheme was considered acceptable.

(Action: Planning Commission)

Revised Estimate of Rajasthan Canal Project Stage II (Rajasthan) - Estimated Cost: Rs.244.58 crores.

In the scheme was considered acceptable, subject to the following observations:

- (i) Concurrence from Financial Adviser, Department of Irrigation is awaited.
- (ii) Command Area contour plan should be prepared so that the canal construction and development of the area may synchronise.

(iii) The State Government may take suitable measures in regard to the land allotment policy, so that the investment on the canal works bring the desired benefits.

(Action: CWC/Planning Commission)

3. Heran Project(Gujarat) - Estimated Cost:Rs.2526 lakhs.

The project was considered acceptable, subject to the inter-state agreement between the Chief Ministers on 8th March, 1975.

(Action: CWC/Planning Commission)

III. MEDIUM IRRIGATION PROJECTS

C.1. Gundlavagu Project(Andhra Pradesh) - Estimated Cost: (Rs. 116.00 lakhs.

The project was considered acceptable.

(Action: Planning Commission)

Sathnala Project(Andhra Pradesh - Estimated Cost:

Rs.321.60 lakhs.

The project was considered acceptable, subject to the following observations:

- (i) The paddy area may be reduced and water allowance for cotton reviewed by the project authorities in consultation with the State Agriculture Deptt.
- (ii) The project authorities may submit immediately the foundation details to the CWC. The possibilities of locating a saddle spillway may be considered by the project authorities and result intimated to the CWC.

(Action: CWC/Planning Commission)

3. Lohargarh Reservoir Scheme (Bihar) - Estimated cost: Rs.93.74 (tax) s.

The cost per hectare of the scheme has been mentioned as Rs.22051.00 which is a very high figure. The concurrence of the State Finance Department is also awaited.

The project as put up was not considered acceptable.

(Action: CWC)

4. Murahir Reservoir Scheme (Bibar) - Estimated Cost:
RS.189.70 Labbs

The scheme was considered acceptable.

1

(Action: Elanning Commission)

5. Nallur Amanikore Project (Karnanaka) - Estimated Gost:

Rs. 190.00 lakes. The scheme was not considered acceptable. (Action: CWC.)

6. Kodar Reservoir Project (Madhya Pradesh) - Estimated Cost:

<u> 25.294.16 lakhs.</u>

The scheme was considered acceptable, subject to the following observations:

- (i) The intensity of irrigation may be reduced to about 120%, of which paddy and rabi may be 80% and 40% respectively.
- (ii) The project authorities will provide waterway for full design flood instead of flood moderation for the spillway in the dam.

(Action: CWC/Planning Commission)

Rs.57.61 lakhs.

The scheme was considered acceptable, subject to the observation that the area under kharif may be increased.

(Action: CWC/PlanningCommission)

8. Rampura Khurd Project(Madhya Pradesh) - Estimated Cost:
Rs. 150.64 lakhs.

The scheme was considered acceptable.

(Action: Planning Commission)

. Dholbaha Dam Project (Punjab) - Estimated Cost:

Rs.349.40 lakhs.

The scheme was considered acceptable, subject to the observation that suitable soil conservation may be taken up simultaneously in the catchment area of the project.

(Action: CWC/Planning Commission)

10. <u>Margia Irrigation Scheme (Rajasthan) - Estimated cost:</u> Rs.59.57 lakhs.

The scheme was considered acceptable on the basis of increase in the proposed annual irrigation to 550 ha. as suggested by the CWC.

(Action: CWC/Planning Commission)

11. Rohani Dam Project(Uttar Pradesh) - Estimated Cost:
Rs.70.42 lakhs.

The scheme was considered acceptable.

(Action: Planning Commission)

List of officers present in the meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose projects held at 3 p.m. on 26.8.1977 in Shram Shakti Bhavan.

- 1. Shri C.C. Patel, Secretary, Department of Irrigation
 Chairman
- 2. Shri Y.K. Murthy, Chairman, CWC and Ex-officio Secretary to the Govt. of India.
- 3. Shri K.S. Subrahmanyam, Chairman, GEA and Ex-officio Secretary to the Govt. of India.
- 4. Shri T.R. SatishGhandran, Adviser(Energy), Planning Commission.
- 5. Shri B.M.K. Mattoo, Financial Adviser, Deptt. of Irrigation Ministry of Agriculture and Irrigation.
- 6. Shri K.M. Maheshwari, Director (Irrigation), Planning Commission on behalf of Member-Secretary.

Also present

- 7. Shri O.P. Chadha, Joint Secretary(Indus), Deptt. of Irrigation
- 8. Shri E.C. Saldhana, Member, CWC.
- 9. Shri H.J. Desai, Director (P), Deptt. of Irrigation.
- 10. Shri M.N. Venkatesan, Director (TEI), CWC.
- 11. Shri A.M. Krishna, Director (TE-II), CWC.
- 12. Shri G.N. Kathpalia, Joint Commissioner(Water Management), Department of Agriculture.
- 13. Shri K. Manjia, Deputy Director, CWC.
- 14. Shri B.B. Karajagee, Deputy Director, CWC.
- 5. Shri A.S. Gupta, Senior Research Officer, Planning Commission.

PLANNING COMMISSION (Irrigation & Command Area Day. Division)

经关税的 英格拉特的

Subject: Meeting of the Edvisory Consittee on Irrigation, Flood Control and Multi-purpose Project held on 30th November, 1977 in Shran Shakti Bhavan, New Delhi- Fourth Meeting.

The Summary Record of the meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 30th November, 1977 in Shran Shakti Bhavan, New Delni, is circulated herewith.

> (K.M. Muhashwari) Chief (Irrigation) Member - Secretary

and the second

1. Shri C.C. Patel, Secretary, Department of Irrigation 2. Shri Y.K. Murthy, Chairman, Central Water Commission and

Ex-officio Secretary to the Govt. of India.

3. Shri S.N. Roy, Chairman, Central Electricaty and Ex-officio Secretary to the Government of India, Bikaner House Naw Delhi. 3 copies

4. Shri T.R. Satish Chandran, Adviser(Energy), Planning Commission.

5. Shri R.K. Kaul, Joint Secretary, Plan Finance Division, Ministry of Finance.

6. Shri B.M.K. Mattoo, Financial Adviser, Department of Irrigation Ministry of Agriculture and Irrigation.

7. Shri S.K. Banerjee, Chairman, Central Ground Water Board, Department of agriculture, Min. of agriculture and Irrigation.

8. Shri R. Gopalaswamy, Joint Secretary. Department of Power, Ministry of Energy.

9. Shri Hari Bhushan, adviser, Technical and Ex-officio Joint Sec. stary, Department of Heavy Industry.

Plannin, Commission Circular No. II-16(25)(4)/77-I&CAD dt.20.12.177

Copy to:

Ministry of agriculture and Irrigation, Department of Irrigation

- 1. Shri O.P. Chadha, Joint Secretary(I)
- 2. Shri S.B. Khare, Joint Secretary (GB)
- 3. Shri K.V. Rama Rao, Member(JRC)
- 4. Sari E.J. Desai, Director (P) ... 5 copies 5. Shri K.R. Chandrashekharan, Dy. Secy. (Floods) ... 2 copies

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- 1. Shri Vijaya Kumary, Deputy Secretary (I&P) 3 copies Central Water Commission, New Delhi.
- 1. Shri C.V. Cole, Member(WR). 2. Shri E.C. Saldanha, Member(P&P)
- 3. Shri A.N. Harkauli, Member(D&R)
- 4. Shri Pritan Singh, Member (F&SC.)
- 5. Directors (TE) I&II, Bikaner House

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- 1. Shri N.R. Krishnan, Deputy Secretary, Department of Science & Technology, Technology Bhavan, New Mehrauli Road, Néw Delhi.
- 2. Chief (Power)

3 copies

Shri R. Ghosh, Chairman-r (Ganga Flood Control Commission, Patna.

Department of Power

Shri Arun Bhatnagar, Deputy Secretary.

Department of Agriculture

Shri G.N. Kathpalia, Joint Commission, Water Management.

PIMNING COMMISSION (Irrigation and Command Area Dev. Div.)

Minutes of the Fourth Cheting of the Advisory Committee on Trigation; Flood control and Mulki-purpose Projects held on 30th November, 1977 at 3.00 p.m. in Shram Shakti Bhavan, N.Delhi.

Names of officers who participated in the discussion, are given in the enclased annexure.

- 2. The following projects were considered and the Committee's recommendations are given below:
- I. MULTI-PURPOSE PROJECTS

Ì

1. Upper Indrevati Project(Orissa)- Istigated Cost: 20,814.49 lakks

The project was considered acceptable, subject to the following observations:

- (a) The intensity of irrigation(170%) is considered on high side and may be reduced to 140%.
- (b) The works may be suitably phased out in consultation with the CWC and all efforts be made to complete the project works within 7 years from the date of start of works.
- (c) The transmission line network may be planned in consultation with the G.E.A.

(action: CWC/CEA/Planning Commission)

12. Thein Dam Project(Punjab)-estimated cost Rs. 26316.13 lakhs:

The project report submitted by the Funjab Government has been examined by the CWC/CEA and is recommended for clearance, subject to the decisions taken by the Prime Minister in the inter-State meeting held on 3.10.1977 attended, amorngst others, by the Union Minister of Agriculture and Irrigation, the Chief Ministers of Punjab, Rajasthan and Himachal Pradesh the Ministers of Irrigation of Rajasthan, Jammu & Kashmir and Haryana and the Finance Minister of Punjab, without linking with the clearance of the Anandpur Sahib Hydel Scheme and the Mukerian Hydel Project.

According to the Indus Waters Treaty 1960 the waters of the Eastern Rivers (of which Ravi is one) are available for unrestricted use by India after 31.3.70; hence there is no international aspect.

Inter-State aspect: There is no difference amongst the partner states regarding the sharing of the waters of the river Ravi for irrigation, while the states of Purjab, J&K and Himachal Januah in whose veritory the project lies and whose areas a submerged have reached an understanding regarding sharing of power. It was decided in the inter-state meeting referred to above that work and the Theorem and Sharing and that the Government of India would consider the claims of Rajasthan and Haryana regarding sharing Their Dam Power.

The following immediate steps have to be taken up simultenously:

- (i) the construction of Shahpur Kandi Barrage is to be taken up in accordance with the bilateral agreement between Punjab and J K;
- (ii) Rajasthan and Punjab should prepare detailed Master Plans for the water utilisation in their respective areas in terms of intensity of irrigation, earmarking of exact areas for irrigation, year to year working tables etc.
- (iii) the beneficiary states i e. Punjab and Rajasthan should intimate the irrigation rates for the different crops; and
 - (iv) the break-up of the proposed project area mentioned in the report as 8.61 lakh acres requires to be given by the Punjab Government.

(action:Deptt. of Irrgn./Deptt. of Power/C.E.a./CWC/Planning Commission).

II. MAJOR IRRIGATION PROJECTS

1. Rangwan Canal (M.P.) - Estimated cost: Rs.317.08 lakhs.

The project was considered acceptable, subject to the observation that record of the rise in groundwater table may be kept by the project authorities.

(Action: Planning Commission)

2. Revised Paralkote Dam Project(M.P. under administrative control of Dandakaranya Dev. Authority) - Estimated cost: Rs.527.7 lakhs.

The revised estimate of the project was considered acceptable.

(Action: Planning Commission)

3. Increase in capacity of Dockali Pumped Canal Scheme (U.P.)-Estimated cost: Rs. 1429.00 lakhs.

The scheme was considered acceptable, subject to the observation that no pumping from River Ganga shall be permitted from 1st January, to 31st May.

(Action: Planning Commission)

4. Urmil Dam Project (U.F.) - Estimated Cost; as 856.29 lokhs:

The project was considered acceptuble, subject to the observation that the origination intensity may be increased to 0% and the ravised estimate for the canal portion in U.P. be submitted to the CWC under intensity ion to the Planning Commission.

Extension and Improvement of Irrigation on Shah Nehar Canal System (Punjab) Estimated cost Rs. 1062.79 lakhs.

The project was considered acceptable, subject to the utilisation of Punjab limited to 0.32 m.a.f. as pre-partition use and balance against its share of surplus Ravi-Beas Waters.

(ACTION: Planning Coumission)

6.0 Barrarpur Left Bank Canal Project(M.P.) - astimated Cost: Rs. 1840 lakhs.

The project was considered acceptable, subject to the observation that short duration paddy may be encouraged in the command area.

The C.W.C. may request the State Government to expedite preparation of the greater Gangau Project which may provide storage backing to the canal project.

(ACTION: CWC/Planning Commission)

III. MEDIUM IRRIGATION PROJECTS

- 01. Jaipur Reservoir Scheme (Bihar)—Estimated Cost: As. 47.05 lakhs.
- 0 2. Lorgara Reservoir Scheme(Bihar)-Estimated Jost:Rs.55.80 lakhs.
- 3. Palna Reservoir Scheme (Bikar) Estimated Cost: Rs. 194.37 lakhs.
- 54. Sakrigali Pumped Canal Scheme(Bihar)- Estimated Cost:Rs.61.03
- 5. Bateswarasthan Pumped Canal Schome (Phase-II) (Bihar) -. Est ated Cost: Rs. 297.10 lakhs.

The above five schemes of Bihar were considered acceptable, subject to the concurrence by the State Finance Department.

For Palma Reservoir Scheme, the kharif irrigation may be reduced to 70% and rabi may be increased suitably. For the above two pumped cancels of Bihar, no pumping from the river shall be permitted from 1st January to 31st May, For Bateswarasthan P.C. Scheme (Phase-II), the kharif shall be limited to 80% intensity and the same observations as mentioned for Phase-I of the scheme shall be mentioned in the acceptable letter.

(ACTION: CWC/Planning Commission)

13. <u>Karapuzha Irrigation Project (Kerala) - Estimated Cost:</u> Rs.760 lakhs:

object was considered acceptable, subject to the object ations that a project report be prepared for on-farm declopment works in the command area and submitted to the CWC., Department of Egriculture and Planning Commission before the canal works are taken in hand.

(ACTION: CWC/Planning Commission)

14. Attappady Irrigation Project(Kerala) Estimated Cost: Rs.842 lakhs.

The project was not considered acceptable. The on-farm development works in the command area are to be estimated and B.C. ratio worked out. The CWC may also submit a copy of the inter-State understanding to the Advisory Committee.

(ACTION: C.W.C.)

15. Chandrakeshar Dam Project(M.P.)-Revised Estimated Cost: Rs.317.40 lakhs.

It was noted that the project works are complete.

(ACTION: Planning Commission)

Amkoi Dam Project(M.P.): Estimated Cost: Rs.60.10 lakhs.

17. Naktara Dam Project (M.P.): Estimated Cost: Rs. 46.857 lakhs.

18. Pendhari Nalla Project(Maharashtra): Estimated Cost:
Rs.83.06 lakhs.

19. Dongargaon Project (Maharashtra) - Estimated Cost: Rs. 1.)6.10 lakhs.

20. Pakadi Gudam Tank Project(Maharashtra)-Estimated Cost:

21. Kansta Irrigation Project(Rajasthan)-Estimated Cost:
Rs.81.12 lakhs.

The above projects from S1.16 to 21 were considered acceptable.

(ECTION: Planning Commission)

22. Harai Reservoir Scheme (West Bengel)-Estimated Cost:
Rs. 69.27 lakhs.

The C.W.C. may consult the D.V.C. regarding this project and submit a report to the Advisory Committee. The concurrence of the State Finance is also wanting.

(ACTION: Central Water Commission)

IV. FLOOD CONTROL PROJECTS:

- 1. Sone Embankment Scheme(Bihar)-Estimated Co.t: Rs.259.74 lakhs.

 The scheme was considered acceptable, subject to the following object to the following
 - (a) The canal banks there serving as flood embankments may be suitably protected.
 - (b) Constant watch and comprehensive records be kept for the river behaviour.
 - (c) Suitable measures may be taken for the protection of Keelwar town.

The G.F.C.C., Patna, may look into the above aspects and submit reports from time to time to the Commartment of Irrigation.

(ACTION: GFCC., Patna/Planning Commission)

Construction and Improvement of Village Protection Works on the Right Bank of River Gandak (U.P. and Bihar) - Estimated Cost: Rs.960 lakhs (U.F 's portion; Rs.729 lakhs and Bihar's portion; Rs.231 lakhs).

The scheme was considered acceptable, subject to suitable arrangements being made for reliable communication (wareless sets/telephone) between U.P. and Bihar engineers in charge of these works.

(ACTION: Planning Commission)

O 3. Ghea-Kunti Basin Drainage Scheme (West Bengal) - Estimated Cost: Rs.759.00 lakhs.

The scheme was considered acceptable. Chairman, G.F.C.C., Patna, may review the scheme and inspect the area again before its implementation. The weed growth if any, in the drainage channels may be checked and the effect of additional supplies from the Farakka Feeder may be considered by the G.F.C.C. and a report submitted to the Department of Irrigation.

(ACTION: GFCC, Patna/Deptt. of Irrigation/Planning Commission

4. Kunur River Embankment(West Bengal)-Estimated Cost:
Rs. 401.56 lakhs)

The scheme was considered acceptable, subject to the

- (a) Stringent forest policy in the catchment area may be enforced. It is advised that the forests may not be cut down. On the other hand, the need of afforestation and soil conservation measures may be looked into by the State and the G.F.C.C.
- (b) Suitable accommodation for operating staff may be provided and the provision made in the estimate.
 - (c) The requirement of sympathetic embankments on larger streams may be considered.
- G.F.C.C. may discuss these aspects with the project authorities and submit a detailed report to the Department of Irrigation.

(ACTION: G.F.C.C./Planning Commission.

List of officers present in the meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose projects held at 3.00 p.m. on 30th November, 1977 in Shraw Shakti Bhavan, New Delhi.

- Shri C.C. latel. Secretary, Department of Irrigation .. Chairman
- 2. Shri Y.K. Murthy, Chairman, CWC and Ex-officio Secretary to the Government of India.
- 3. Shri T.R. Satish Chandran, Adviser (Energy), Planning Commission
- 4. Shri B.M.K. Matteo, Financial Adviser, Department of Irrigation, Ministry of Agriculture and Irrigation.
- 5. Shri K.M. Maheshwari, Chief (Irrigation), Planning Commission

Also present

- 6. Shri O.P. Chadha, Joint Secretary (Indus), Deptt. of Irrigation
- 7. Shri E.C. Saldanha, Member, C.W.C.
- 8. Shri K.V. Rama Rao, Member(JRC) 9. Shri G.N. Kathpalia, Jt. Compission (Water Management) Deptt. of Ag. . Shri H.J. Desai, Director (P), Deptt. of Irrigation
- 11. Shri Arun Bhatnagar, Deputy Secretary, Deptt. of Power.
- 12. Shri S.K. Aggarwal, Dy. Secretary(Irrigation)
- 13. Shri Basawan Sinha, Member (GFCC), Patna.
- 14. Shri M.N. Venkatesan, Director (TE.I), CWC.
- 15. Shri A.M. Krishna, Director (TE.II),
- 16. Shri K. Manjia, Deputy Director, CWC.
- 17. Shri K.J. Raisinghani, Deputy Director, CWC.
- 18. Shri A.S. Cupta, Senior Research Officer, Planning Commission.

PLANNING COMMISSION (Irrigation & Command Area Dy. Division)

Subject: Meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Project held on 20th February, 1978 in Shram Shakti Bhavan, New Delhi - Fifth Meeting.

The Summary Record of the meeting of the Adviscry Committee on Irrigation, Flood Control and Multi-purpose Projects held on 20th February, 1978 in Shram Shakti Bhavan, New Delhi, is circulated herewith.

> (K.M. Maheshwari) Chief (Irrigation) Member - Secretary

1. Shri C.C. Patel, Secretary, Department of Irrigation 2. Shri Y.K. Murthy, Chairman, Central Water Commission

and Ex-officio Secretary to the Covernment of India. Authority3. Shri S.N. Roy, Chairman, Central Electricity and Ex-officio Secretary to the Government of India, Bikaner House, New Delhi. 3 copies

> 4. Shri T.R. Satish Chandran, Adviser(Energy), Planning Commission,

5. Shri S.K.Banerjee, Adviser(A&I), Planning Commission

6. Shri R.K. Kaul, Joint Secretary, Plan Finance Division, Ministry of Finance.

7. Shri B.M.K. Mattoo, Financial Adviser, Department of Irrigation, Ministry of Agriculture & Irrigation.

8. Joint Secretary, Soil and Water Management Unit, Department of Agriculture, Krishi Bhavan, New Delhi.

9. Shri R. Gopalaswamy, Joint Secretary, Department of Power, Ministry of Energy.

10. Shri Hari Ehushan, Adviser, Technical and Ex-officio Joint Secretary, Department of Heavy Industry.

Planning Commission circular No.II-16(25)(5)/78-I&CAD dt.333.178 Copy to:

Ministry of Agriculture & Irrigation, Department of Irrigation

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Shri K.V. Rama Rao, Member(JRC)

.. 5 copies 4. Shri H.J. Desai, Director(P)

5. Shri K.R. Chandrashekharan, Dy. Secy. (Floods)

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 - 1. Shri N.R. Krishnan, Deputy Sacretary, Department of Science & Technology, Technology Bhavan, New Mehrauli Road, New Delhi.
 - 2. Chief (Power), Planning Commussion

Shri R. Ghosh, Chairman (Ganga Flood Control Commission. Patna.

Department of Power

Shri Arun Bhatnagar, Deputy Secretary.

Department of Agriculture

Shri G.N.Kathpalia, Joint Commissioner, Water Management.

PLANNING COMMISSION
(Irrigation & Command Area Dev. Division)

Minutes of the Fifth Meeting of the Advisory Committee on Irrigation, Ficed Control and Multi-purpose Projects held on 20-2. 1973 at 3-00 P.M. in Shram Shakti Bhavan, New Delhi.

Names of Officers who participated in the discussion are given in the enclosed annexure.

- 2. The following projects were considered and the Committee's recommendations are given below:
- I. MAJOR IRRIGATION PROJECTS
- 1. Left Bank Chagra Canal (U.P.) Estimated Cost Rs. 7868.00 lakhs

The project was considered acceptable subject to the following observations:

- (a) as a second stage development, planning may be made and project submitted for the following within one year:
 - (i) Augmentation tubewells for Rabi irrigation.
 - (ii) Selective canal lining in pervious reaches.
 - (iii) Arrangement of timely power supply.
- (b) Rapid soil survey may be carried out by the State agriculture Department to determine the suitability of cropping pattern adopted. State Government may also do the soil survey before construction of the project.
- (c) The design of the barrage may be suitably modified before taking up the work.
- (d) Other comments and suggestions of the specialised Directorates of the C.W.C. may be attended to by the State Engineers before taking up the construction work.

(ACTION: CWC/Planning Commission)

2. Upper Wainganga Project (M.P.)-Estimated Cost Rs. 5060 lakhs.

The project was considered acceptable subject to the following observations:

(i) The intensity of irrigation may be limited to 125 per cent and the command area increased suitably.

- (ii) Design flood adopted may be reviewed by the State authorities in consultation with the Central Water Commission.
- (iii) Regarding dam foundations, the G.S.I. may be consulted before start of work and during the construction

(Action: CWC/Planning Commission)

Upper Krishna Project Stage-I(Revised Estimates) (Karnataka) - Estimated Gost: Rs. 22355 lakha.

The project was considered acceptable subject to the following observations:

- (i) The first stage of the project is already under construction. It has been stated by the Project Authorities that non-overflow and earth section of the Almatti Dam have been considered for execution even now up to second stage/final stage of the project. This position has not been accepted by the Central Water Commission as no satisfactory justification has been furnished for the height of dam in final stage. The project planning and execution has to be done strictly keeping in view the award of Krishna Water Dispute Tribunal of May, 1976 and any commitments beyond those permitted by the Award will be/the State Government's own risk and cost.
- (ii) Acceptance is further subject to compliance to the technical comments of CWC/Expert Committee recommendations.

(ACTION: CWC/Planning Commission)

II. MEDIUM IRRIGATION PROJECTS

/at

O 1. Jhumba Nalla Tank Project (Madhya Pradesh) Estimated Cost: Rs 195.21 Takhs,

The project was considered acceptable subject to the following observations:

- (i) Intensity of irrigation may be limited to 110% and command area extended suitably.
- (ii) Conjunctive use of surface and ground water may be planned.

(ACTION: CWC/Planning Commission)

2. Mand Diversion Project (Madhya Pradesh) - Estimated Cost: Rs.289.21 lakhs

The project was considered acceptable subject to the following observations:

- (i) Intensity of irrigation may be limited to 110%.
- (ii) Conjunctive use of surface and ground water may be planned and irrigation benefits extended to the Left Bank also, if found feasible.

(ACTION: CWC/Planning Commission)

- 3. Bilaspur Diversion Project(Madhya Pradesh)
 Estimated Cost:Rs.95.21 Lakhs.
- 4. Ghunghutta (Shyam Diversion Project (Madhya Pradesh) Estimated Cost: Rs. 198.99 lakhs.
- 5. Urmil Right Bank Canal Project (Madhya Pradesh)-Estimated Cost: Rs.640.7 lakhs.
- 6. Dholawad Tank Project (Madhya Pradesh) Estimated Cost: Rs. 468.25 lakhs.

The above four projects were considered acceptable subject to the following observations:

- i) Suitable provision for drainage may be made.
- ii) Detailed soil surveys of the command area may be done early.

(ACTION: CWC/Planning Commission)

- 7. <u>Hiran-II Irrigation Project (Revised Estimate) Gujarat Estimated Cost: Rs. 448.37 lakhs.</u>
- 8. <u>Kabutari Irrigation Project(Gujarat)-Estimated Cost:</u> Rs.113.55 lakhs
- 9. Marval Lift Irrigation Scheme (J&K)-Revised Estimated Cost Rs.432.00 lakhs
- 10. Laster Valley Irrigation Scheme (U.P.) Estimated Cost: Rs.114.50 lakhs

The above four medium schemes were considered acceptable.

(ACTION: Planning Commission)

11. Gurma Nalla Project(Madhya Pradesh) - Revised Estimated Cost: Rs.231.67 lakhs.

It was noted that the project works have already been completed.

(ACTION: Planning Commission)

୍ତ 12. Amaria Project (Karnataka) - Estimated Cost:Rs.570.00 lakhs.

The project was considered acceptable subject to the condition that the intensity of irrigation may be increated above 100% or, in the alternative, the command area may be increased in order to achieve optimum utilisation of available waters.

(ACTION: CWC/Planning Commission)

13. Upper Suktel Irrigation Project (Orissa) - Estimated Cost: Rs. 127.83 lakhs.

According to the new criteria laid down about the classification of projects, this project would now be a minor irrigation project and therefore, it may be referred back to the State.

(ACTIONL Central Water Commission)

Annexure

List of officers present in the meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects at its 5th meeting held at 3.00 p.m. on 20th February, 1978 in Shram Shakti Bhawan, New Delhi.

- 1. Shri C.C.Patel, Secretary, Deptt. of Irrigation Chairman
- 2. Shri S.K.Banerjee, Adviser(A&I), Planning Commission
- 3. Shri B.M.K. Mattoo, Financial Adviser, Department of Irrigation
- 4. Shri K.M. Maheshwari, Chief(Irrigation), Member-Secy. Planning Commission

Also Present:

- 5. Shri O.P. Chadha, Joint Secretary (Indus), Department of Irrigation.
- 6. Shri S.B. Khare, Joint Secretary(GB) Department of Irrigation.
- 7. Shri A.N. Harkauli, Member(D&R), C.W.C.
- 8. Shri H.J. Desai, Director(P), Department of Irrigation.
- 9. Shri M.N. Venkatesan, Director(TE-I), C.W.C.
- 10. Shri R.S. Nagaraja, Director(Irrigation), Planning Commission.
- 11. Shri A.P. Joseph. Dy. Commissioner(Water Management Division),
 Department of Agriculture.
- 12. Shri R.V.Suryanarayana, Joint Director(Irrgn.), Planning Commission.
- 13. Shri G.V.Rao, Under Secretary, Department of Irrigation.
- 14. Shri K. Manjiah, Deputy Director, CWC.
- 15. Shri K.J. Raisinghani, Deputy Director, CWC.

PLANNING COMMISSION (Irrigation & Command Area Dev. Division)

Subject: Meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 14th March, 1978 in Shram Shakti Bhavan, New Delhi-Sixth Meeting.

The Summary Record of the meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 14th March, 1978 in Shram Shakti Bhavan, New Delhi, is circulated herewith.

> In sta (K.M. Maheshwari) Chief (Irrigation) Member - Secretary

- 1. Shri C.C. Patel, Secretary, Department of Irrigation
- 2. Shri Y.K. Murthy, Chairman, Central Water Commission and Ex-officio Secretary to the Government of India.
- 3. Shri S.N. Roy, Chairman, Central Electricity Authority and Ex-officio Secretary to the Government of India, Bikaner 3 copies House, New Delhi.
- 4. Shri T.R. Satish Chandran, Adviser(Energy), Planning Commission.
- 5. Shri S.K. Banerjee, Adviser(A&I), Planning Commission
- 6. Shri R.K. Kaul, Joint Secretary, Plan Finance Div., Ministry of Finance.
- 7. Shri B.M.K. Mattoo, Financial Adviser, Department of Irrigation, Ministry of Agriculture & Irrigation.
- 8. Joint Secretary, Soil and Water Management Unit,
- Department of Agriculture, Krishi Bhavan, New Delhi. 9. Shri R. Gopalaswamy, Joint Secretary, Department of Power, Ministry of Energy.
- 10. Shri Hari Bhushan, Adviser, Technical and Ex-officio Joint Secretary, Department of Heavy Industry.

Planning Commission Circular No.II-16(25)(6)/78-I&CAD dt.16.3.178 Copy to:

Ministry of Agriculture & Irrigation, Department of Irrigation

- 1. Shri O.P. Chadha, Joint Secretary(I)
- 2. Shri S.B. Khare, Joint Secretary (GB)
- 3. Shri K.V. Rama Rao, Member(JRC)
- 4. Shri H.J. Desai, Director(P) ... 5. Shri K.R. Chandrashekharan, Dy. Secretary(Floods) 5 copies

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- 2. Shri E.C. Saldanha, Member (P&P)

- 3. Shri A.N. Harkauli, Member(D&R)
 4. Shri Pritan Singh, Member(F&SC)
 5. Shri B.L. Jatana, Director(P&P), Bikaner House:
 6. Director(CE) I&II, Bikaner House

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Department of Science & Technology

1. Shri N.R. Krishnan, Deputy Secretary, Department of Science & Technology, Technology Bhavan, New Mehrauli Road, New Delhi.

Department of agriculture, Krishi Bhavan, New Delhi.

Shri G.N.Kathpalia, Joint Commissioner, Water Management.

PLANNING COMMISSION (Irrigation & Command Area Development Div.)

Minutes of the Sixth Meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 14.3.1978 at 3.00 p.m. in Shram Shakti Bhavan, New Delhi.

Names of Officers who participated in the discussion are given in the enclosed annexure.

2. The following projects were considered and the Committee's recommendations are given below:

I. MAJOR IRRIGATION PROJECTS

1) Rengali Irrigation Project(Phase I), Orissa (Estimated cost Rs.233.64 crores)

The project was considered acceptable subject to the following observations:

- i) The cost of the project is very high. A Committee under the Chairmanship of Member (P&P), CWC, may be constituted to go into the various aspects of the project, such as, the estimated cost, phasing of work, cropping pattern etc. The State Government may furnish necessary data to C.W.C. in this respect and associate their Irrigation & Agriculture Departments with the work of the Committee. The Committee shall be constituted by the C.W.C.
- ii) The intensity of irrigation may be reduced to 140%
- iii) Detailed soil survey is under progress in the command area. After completion of the soil survey by the State, the cropping pattern etc. should be reviewed.
 - iv) It should be ensured that the back water from the barrage does not affect the tailrace level of the Rengali power house under construction.
 - v) For basing water availability aspect on a scientific footing, it is advised that the discharge observation and collection of data may be continued till Phase II is taken up for implementation. The studies may have to be reviewed on the basis of the data.

(Action: CWC/Planning Commission)

2) Mahanadi Barrage, Orissa (Estimated cost Rs.42.087 crores)

The project was considered acceptable subject to the outstanding comments made by C.W.C.

(Action: C.W.C./Planning Commission)

II. MEDIUM IRRIGATION PROJECTS

20(21) 77 = 11) Taliperu Project, Andhra Pradesh (Estimated cost Rs. 906.00 lakhs)

()

20(10)77 - (2) Anraj Reservoir Scheme, Bihar (Estimated cost Rs. 264.80 lakhs)

- 3) Badua Upper Nala Reservoir Project, Bihar (Estimated cost Rs.90.54 lakhs)
- 20(25) 77 -4) Revised Estimated of Machhundri Irrigation Scheme, Gujarat (Estimated cost-Rs.311.88 lakhs)
 - -05) Revised estimate of Shingoda Irrigation Scheme-Gujarat (Estimated cost Rs.300.00 lakhs)
 - 6) Bhabour Sahib Lift Irrigation Scheme, H.P. (Estimated cost Rs.75.00 lakhs)
 - 7) Revised Estimated of Lethpora Lift Irrigation Scheme-J&K (Estimated cost Rs.277.00 lakhs)
 - 8) Majhgaon Tank Project, M.P. (estimated cost Rs. 94.00 lakhs)
 - 9) Sahibkhedi Irrigation Project, M.P. (Estimated cost Rs. 103.17 lakhs)
 - 10) Shivnath Diversion Project M.P. (Estimated cost Rs.39.65 lakhs)
 - 11) Antargaon Tank Project, Maharashtra (Estimated cost Rs.63.563 lakhs)
 - 12) <u>Hariharajhor Irrigation Project Orissa</u> (Estimated cost Rs.725.673 lakhs)
- (17) 77-13) Lining of Faridkot Distributary System Scheme-Punjab (Estimated cost Rs.80.72 lakhs)
- 20(2) 77-14) Dhenkwah Bundh Scheme, Uttar Pradesh. (Estimated cost Rs.89.00 lakhs)
 - 15) Dimu Irrigation Scheme, West Bengal (Estimated cost Rs.28.153 lakhs)

The above 15 medium irrigation projects were found acceptable. For Dhenkwah Bundh Scheme, Uttar Pradesh the intensity of irrigation is recommended to be increased to 70%. For schemes at serials 3,13,14, and 15, the concurrence of State Finance Departments is awaited.

(Action: CWC/Planning Commission)

16) Revised Estimate of Machhu-II Irrigation Project, Gujara (Estamated Cost Rs.325.00 lakhs)

The Completed with an estimated cost of Rs.330.55 lakhs.

(Action: Planning Commission)

ANNEXURE

.. Member-Secy.

List of Orficers present in the meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects at its 6th meeting held at 3.00 p.m. on 14th March, 1978 in Shram Shakti Bhavan, New Delhi.

- 1. Shri C.C. Tatel, Secretary, Department of ... Chairman Irrigation.
- 2. Shri Y.K. Murthy, Chairman, Central Water Commission
- 3. Shri S.K Perjee, Adviser(A&I)
 Planning Goldission
- 4. Shri B.M.K. Matoo, Financial Adviser, Deptt. of I igation
- 5. Shri K.M. Mahashwari, Chief(Irrigation), Planning Commission

HILLIS COMMITSELOR

Also present

Department of Irrigation

- 1. Shri H.J. Desai, Director(P)
- 2. Shri G.V. Rao, Under Secretary
- Shri K.S.Sharma, Dy. Director(Indus)
 Central Water Commission
- 1. Shri E.C. Saldanha, Member (P&P)
- 2. Shri G.M. Vaidya, Chief Engineer
- 3. Shri M.N. Venkatesan, Director (TE-I)
- 4. Shri K. Manjiah, Dy. Director (TE)
- 5. Shri K.J. Raisinghani, Dy. Director(TE)
 Planning Commission
- 1. Shri R.S. Nagaraja, Director (Irrigation)
- 2. Shri A.S. Gupta, Senior Research Officer
- 3. Shri J.N. Nanda, Research Officer

PLANNING COMMISSION (Irrigation & Command Area Development Div.) ****

Subject: Meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on -21st July, 1978 in Shran Shakti Bhavan, New Delhi-Seventh Meeting.

The Sunmary Record of the Seventh needing of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 21st, July, 1978 in Shran Shakni Bhavan, New Delhi, is circulated herewith.

> (K.M. Maheshwari) Chief (Irrigation) Member - Secretary.

Barrier Commission of the Comm

1. Shri C.C. Patel, Secretary, Department of Irrigation 2. Shri Y.K. Murthy, Chairman, Central Water Commission and

Ex-officio Secretary to the Government of India, Bikaner House, New Delhi. •• 3 copies

3. Shri S.N. Roy, Chairman, Central Electricity Authority and Ex-officio Secretary to the Government of India, Bikaner House, New Delhi. .. 3 copies

4. Shri T.R. Satish Chandran, Adviser(Energy), P.C.

5. Shri S.K. Banerjee, Adviser(A&I), P.C. 6. Shri R.K. Kaul, Joint Secretary, Plan Finance Div, Ministry of Finance.

7. Shri B.M.K. Mattoo, Financial Adviser, Department of Irrigation, Ministry of Agriculture & Irrigation. 8. Shri J.K. Jain. Chairman, Gentral Ground Water Board,

Department of Agriculture, Krishi Bhavan, New Delhi.

9. Shri R. Gopalaswary, Joint Secretary, Department of Power, Ministry of Encrey.

10. Shri Hari Bhushan, Adviser, Technical and Ex-officio Joint Secretary, Department of Heavy Industry.

Plaming Coumission Circular No.II-16(25)/(7)/78-I&CAD dated 27.7.1978

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- 3. Shri K.V. Rama Rao, Member(JRC)
- 4. Shri R.V.Ranthidevan, Director(P).
- 5. Shri K.R. Chandrashekharan, Dy. Secretary (Floods)
- 6. Shri Vijay Kumar, Deputy Secretary (I&P)
- 7. Shri G.V. Rao, Under Secretary, Yojana Bhavan.

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- 2. Shri E.C. Saldanha, Monber(P&P)

- 3. Shri A.M. Harkauli, Momber(D&R)
 4. Shri Pritam Singh, Member(F&SC)
 5. Shri B.L. Jatana, Director(P&P), Bikaner house ... 5 copies
- 6. Directors(TE) I &II, Bikaner House .. 8 copies

Department of Science & Technology
1. Shri Brij Kishore: Deputy Secretary: Department of Science & Technology, Technology Bhavan, New Mehrauli Road, New Delhi.

Department of Agriculture, Krishi Bhavan, New Delhi.

1. Shri G.N. Kathpalia, Joint Commission, Water Management,

Ganga Flood Control Commission, Patna

- 1. Shri R. Ghosh, Chairnan.
- 2. Shri A.S. Chandrasekharan, Member

Planning Commission

- 1. Chief (Power)
- 2. Joint Director (Science)

The second second

(K.M.Maheshwari) Chief (lrrigation) Member - Secretary

PLANNING COMMISSION (1&CAD DIVISION)

Minutes of the Seventh Meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 21.7.1978 at 10.30 and in Shram Shakti Bhavan under the Chairmanship of Shri C.C. Patel, Secretary, Ministry of Agriculture and Irrigation (Department of Irrigation).

Names of Officers who participated in the discussion are given in the enclosed annexure.

2. The following projects were considered and the Committee's recommendations are given below:

I. MAJOR IRRIGATION PROJECTS

NoI-20(18) 77 leeves (Estimated cost Rs. 91.31 crores)

The project was considered acceptable in principle subject to the following observations:-

- i) Detailed hydrological studies made for the maximum design flood of 66528 cumec(23.50 lakh cusecs) are to be submitted to the Central Water Commission for vetting.
- ii) Effect of sedimentation on the live storage of the dam and revised area capacity curves after 50 years of sedimentation are to be worked out afresh and used in drawing up the working tables to consider the effect on the performance of the project.
- iii) The foundation has an over-burden material of 15M. Therefore, more thorough investigation of the foundation material is required to make adequate provision for foundation treatment which will depend on in-situ chracteristics of the foundation.
- iv) Engineering properties of the soils proposed to be utilised in embankment section are to be further analysed to verify and satisfy stability requirement.
- v) Alignment of the dam is to be further examined and finalised before taking up the construction of the main dam.

- vi) Basic rates for Steel and other fabricated steel works like gates, gantry etc appear to be on the low side and should be based on current market rates.
- vii) For a number of items, L.S. provision has been made. This is to be supported by detailed estimates.
- viii) Compensation for buildings to be worked out on plinth area besis and on present rates.
 - ix) Latest census figure to be adopted for mnabilitation measures.
 - x) The allocation of cost of dam for Irrigation and Power may be tentatively taken as fifty-fifty for computing the B.C. ratio for the canal projects subject to suitable allocation to be decided in consulatation with CEA and CWC.

A 2 Construction of New Okhla Barrage - U.P. (Estimated cost Rs.25.37 crores)

No 2-2 (35) /78 /ECAN

dotte 9.8.78 The project was considered acceptable in principle subject to the following observations:-

- i) Okhla Barrage has been considered to be a replacement work of the old weir and higher utilisation of Yamuna waters shall, in no case, be availed of by Uttar Pradesh and Harvana.
- ii) The maximum pond level shall be kept at RL660 feet with the proviso that the anti-flood sluice in Barapula malla shall be constructed at a suitable location at the cost of the project if the need for the same is established. If found necessary, the pond level could be raised upto RL 660.50 feet during monsoon only by suitable proviso of temporary attachments on the top of the gate.
- iii) The maximum discharge capacity of the feeder canal may be 8560 cusecs including 1260 cusecs for silt ejector and 60 cusecs for Badarpur Thermal Power Station.
 - iv) The allocation of the waters from Okhla Barrage main canal between the concerned States and the sharing of cost between these States have not yet been finalised and these aspects are being looked into by the Ministry of Agriculture & Irrigation (Department of Irrigation) and Central Water Commission.

v) CWC may expedite the case for acceptance of Tajewala Barrage by the PlanningCommission.

PAction: Plg.Comm./Deptt Irrigation/CWC).

MEDIUM SCHEMES TI.

MOB- 20 (17) /77 1600

Pahumara Irrigation Scheme - Assam

(Estimated cost Rs.500 lakhs)

clated

The project was considered acceptable subject to the concurrence by the State Finance Department.

(Action: CWC/Plg. Commission)

do.

2) Rupahi Irrigation Scheme - Assam (Estimated cost Rs. 183.48 lakhs)

The project was considered acceptable subject to the following observations:

- i) The water allowance for rabi crops may be reviewed and rabi may be increased keeping in view 'the' availability of supplies in the season.
- ii) The concurrence of State Finance isawaited.

(Action: CWC/Plg. Commission)

dated 11-19-761

3) Bilasi Rese voir Scheme - Bihar (Estimated cost Rs. 146.38 lakhs)

The project was found acceptable subject to concurrence by the State Finance.

(Action: Planning Commission)

4) Mitti Irrigation Scheme - Gujarat No 1 -20 (25) /78 (ext) (Estimated cost Rs. 188.44 lakhs).

dalu 11.0.78

The project was found acceptable.

(Action: Planning Commission).

Venue II Irrigation Project - Gujarat (Estimated cost Rs 324.77 lakhs)

The project was found acceptable subject to water allowance to be reviewed for rabi crops by the State Agriculture Department and the result to be intimated to CWC, Planning Commission and Ministry of Agriculture & Irrigation (Department of Agriculture).

(Action: Plg. Commission/CWC)

Mon-20(15)/20 6) Revised Estimate of Phophal Irrigation Project-Gujarat

(Estimated cost Rs. 310.00 lakhs)

It was noted that the works on the project are nearing completion. The revised estimate was found acceptable.

(Action: Planning Commission)

Note -20 (6)/70 180007 dated 5.0.70

Maskinala Project - Karnataka (Estimated cost Rs. 301.00 lakhs)

The project was found acceptable.

(Action: Planning Commission)

- شكل -

8) Upper Mullamari Project - Karnataka (Estimated cost Rs. 328 lakhs)

The project was found acceptable subject to the following observation:-

i) The delta for sugar be limited to 60 and the remaining water requirement be met with by utilisation of ground water for sugarcane crop. No irrigation supplies from project shall be allowed during summer for sugarcane.

(Action: Planning Commission/CWC).

(Estinated cost Rs.160.80 lakhs)

attal 19. 8.76) The project was considered acceptable subject to the follow-ing observations:

- i) The cropping pattern proposed in the project is for only kharif which has to be changed to cater for rabi irrigation also. It is recommended that the paddy and rabi crops be planned for 7000 acres and 4000 acres respectively
- ii) Till such time that the re-generation in the downstream develops, some lift irrigation may be provided on the left bank from the reservoir.

(action: Planning Commission/CWC.)

~ Wis-

10) Ghongha Reservoir Project - M.P. (Estimated cost Rs. 215.74 lakhs)

The project was found acceptable subject to the observation that paddy may be reduced and wheat area may be increased.

(Action: Planning Commission/CWC.

_ otro -

11) Mehgaon Tola Tank Project - M.P. (Estimated cost Rs. 138.09 lakhs)

The project was found acceptable subject to the observation that the intensity of irrigation proposed on the project is only 41% which is very low and therefore, the project may be planned with 70% intensity. "Spillway capacity for 100% estimated flood be provided without any flood moderation.

(Action: Planning Commission/CWC)

Non-20(14) 78 120 Vadivale Irrigation Project, Maharashtra Hater 11th Dug. 78. (Estimated cost Rs.330.11 lakhs) A 13) Kalimatitola Tank Project, Maharashtra

(Estimated cost Rs. 124.454 lakhs) A 14) Morna Irrigation Project, Maharashtra (Estimated cost Rs.221.56 lakhs)

The above three projects of Maharashtra were found acceptable.

(Action: Planning Commission) 15) <u>Kanjhari Irrigation Project, Orissa</u> (Estimated cost Rs.744.81 lakhs) No. 3- 20(5) 1701 18 CAD

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The project was found acceptable subject to the following observations:

- i) The CCA may be increased to provide benefits to the maximum area on the project.
- ii) Water allowance for rabi crops may be reviewed.

(Action: Planning Commission/CWC.)

III. FLOOD CONTROL SCHENES

1) Mokameh Tal Drainage Scheme Phase-II-Bihar (Estimated cost Rs.292.75 Lakhs)

The project was considered acceptable subject to the

I-12(10)/78-Ilani) The work in the lower half portion of the embankment should not be carried out unless complete model to the should not be carried out unless complete model tests for the whole scheme are run at CW&PR Station, Pune, tests should be submitted by Bihar Government, processed by GFCC and submitted to the Department of Irrigation for concurrence.

- ii) The Chairman of the GFCC should inspect the Punpun area and clear the alignments of the marginal and the Punpun embankments for implementation.
- iii) The Tal Development Committee, which has been disbanded, should be reconstituted at the earliest.

(Action: P.C./GFCC/Deptt. of Irrgn/ CWC)

(Estimated cost Rs. 269.82 lakhs exclusive of Rs. 120.00 lakhs spent during 1977).

The scheme was found acceptable subject to the following

I (10)/78 1 i) It was noted that the work has been substantially completed in vulnerable portion. However, it is recommended that the size recommended that the size of the boulder wire crates should not be less than 8'x8'x22' in future works.

> ii) The work should be countinously watched, soundings taken and damage, if any, reported by the project authorities to GFCC.

> > (Action: Planning Commission/GFCC)

3) Remodelling of Najafgarh drain from Dhansa to Bharatnagar bridge-Delhi. (Estimated cost Rs. 1877.00 lakhs)

The project was found acceptable subject to the

- The project was The project was to large the project was the project was to large the project was the proje i) It was noted that indirect benefits have been taken into account while computing the benefit-cost ratio of this scheme. This has been agreed to in the special circumstances viz. highly urbanised and fast developing area.
 - ii) Keeping in view the very high priority of this scheme for Delhi, the construction works may be completed in two years' time.

(action: Planning Commission/CWC.

4) Januna Basin Drainage Scheme - West Bengal (Estimated cost Rs.538 kakhs)

The project was found acceptable subject to the following observations:

- i) There should be a suitable culvert inter-connecting two sectors of the drainage scheme.
- ii) GFCC may get the silt content of the flood waters in the drainage looked int. Risk of possible scour due to the proposed four cuts, resulting in steepening of the drainage gradient should also be examined.

(Action: Planning Commission/GFCC).

List of Officers present in the meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects at its 7th meeting held at 10.30 A.M. on 21st July, 1978 in Shram Shakti Bhavan, New Delhi.

- 1. Shri C.C. Patel, Secretary, Department of Irrigation. Chairman
- 2. Shri Y.K. Murthy, Chairman, Central Water Commission.
- 3. Shri S.K. Banerjee, Adviser(A&I), Planning Commission.
- 4. Shri K.M. Maheshwari, Chief(Irrigation), Planning Commission. ... Member-Secy.

Also present

Department of Irrigation

- 1. Shri K.V. Rama Rao, Member(JRC).
- 2. Shri R.V. Ranthidevan, Director(P).
- 3. Shri G.V. Rao, Under Secretary.

Department of Agriculture

1. Shri G.N. Kathpalia, Joint Commission (WM).

Ministry of Finance, Deptt. of Expenditure.

1. Shri S. Sampathnarayanan, Director(Plan Finance).

Central Water Commission

- 1. Shri E-C. Saldanha, Member(P&P)
- 2. Shri Pritam Singh, Member (Floods).
- 3. Shri A.N. Harkauli, Member(D&R).
- 4. Shri A.K. Pal, Director (TE).
- 5. Shri G.S. Jakhadeo, Director (TE).
- 6. Shri R.K. Kaushal, Dy. Director (TE)
- 7. Shri D.K. Bablani, Dy. Director (TE).
- 8. Shri K. Manjiah, Dy. Director (TE).
- 9. Shri K.J. Raisinghani, Dy. Director(TE).

Ganga Flood Control Commission, Patna.

- 1. Shri R. Ghosh, Chairman.
- 2. Shri A.S. Chandrasekharan, Member. Planning Commission
 - 1. Shri R.S. Nagaraja, Director(Irrigation).

PLARAING COMALSSION (I&CAT DIVESTON) . ** : * *

Subject: Meeting of the Advisory Committee on Irrigation, Flool Control and Multi-purpose Projects held on 17-11.1973 in Shram Shakti Bhavan, New Delhi - Bighth Meeting.

The Summary Record of the Eighth meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 17.11.1978 in Shram Shakti Bhavan, New Delhi, is circulated herewith.

> I feel to the second (K.M. Maheshwari) Chief (Irrigation) Member - Secretary

- 1. Shri C.C. Patel, Secretary, Department of Irrigation
- 2. Dr. K.C. Thomas, Chairman, Central Water Commission and Ex-officio Secretary to the Government of India, Bikaner House, New Delhis
- 3. Shri (A.), Chairman, Central Electricity Authority and Ex-officio Secretary to the Government of India, Bikaner House, New Delhi.
 4. Shri T.R. Satish Chandran, Adviser(Energy), Planning Commission.
- 5. Shri S.K. Banerjee, Adviser(A&I), Planning Commission
- 6. Shrt R.K. Keut, Joint Secretary, Plan Finance Division. Ministry of Finance.
- 7. Shri B.M.K. Mattco, Financial Adviser, Department of Irrigation, Ministry of Agriculture & Irrigation
- S. Shri J.K. Jain, Chairman, Central Ground Water Board, Department of Agriculture, Krishi Bhavan, New Delhi.
- 3. Shrt R. Gopalaswamy, Joint Secretary, Department of Power,
- Ministry of Energy.

 Shri Hari Bhushan, Adviser, Technical and Ex-cificio Joint Secretary, Department of Heavy Industry.

Planning Commission Circular No.II-16(25)(8)/78-1&CAD at.4.12.178 Copy to:

Ministry of Agriculture & Irrigation, Department of Irrigation

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- 2. Shrī S.B. Khare, Joint Secretary (GB)
- 3. Shri K.V. Rama Rao, Member(JRC)
- 4. Shri R.V. Ranthidevan, Dy. Secretary(P)
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- 7. Shri G.V. Rao, Under Secretary, Yojana Bhavan

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Ministry of Finance

Shri S. Sampathnarayanan, Director (Plan Finance)

Central Water Commission, New Delhi-

- 1. Shri C.V. Gole, Member(JR).
- 2. Member(P&P)
- 3. Shrt A.N. Harkauli, Member(D&R)
- 4. Shri Pritad Singh, Member(P&SC)
 5. Directr Director(P&P), Bikaner House
 6. Directors(TE) I&II, Bikaner House

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Department of Science & Technology

Shri Brij Kishore, Deputy Secretary, Deptt. of Science & Technology, Technology Bhavan, New Mehrauli Road, New Delhi.

Department of Agriculture, Krishi Bhavan, New Delhi.

1. Shri G.N. Kathpalia, Joint Commissioner, Water Management.

Ganga Flood Control Commission, Patna.

- 1. Shri R. Ghosh, Chairman.
- 2. Shri A.S. Chandrasekharan, Member

Planning Commission

- 1. Chief (_Power)
- 2. Joint Director (Science)

(TK.M. Maheshwari) Chief (Irrigation) Member - Secretary

PLANNING COMMISSION (1200.D DIVISION)

Minutes of the 8th Meeting of the Advisory Committee on Irrigation. Flood Control and Multipurpose Projects held on 17.11.1978 at 10.30 a.m. in Sheam Shakti Bhavan, New Delhi.

Names of the officers who participated in the discussion are given in the annexure

The following projects were considered and the Committee's recommendations are given below.

- I. Major IRRIGATION PROJUCT:
- 1. arpa Project (Madhya Pradesh) (Estimated cost Es 3213 lakis).

The project was considered acceptable subject to the following observations:

- (i) The level of the cus off and the treatment for foundation should be decided after detailed investigations of permeability of foundations before the work is taken up.
- (ii) The design of Barth dam section should be reviewed after conducting tests on undisturbed samples of foundation materials to decide their shear parameters.
- (iii) The design flood adopted may be reviewed on the basis of observations of the hydrographs at closer intervals for better degree of accuracy at the time of preparation of detailed designs.
- (iv) Energy dissipation arrangements may be reviewed and finalised according to the recommendations of the model studies to be carried out.
- (v) Detailed soil surveys of the command area may be carried out and the crop pattern, intensity of irrigation may be reviewed as it is felt that the water requirement for some of the corps is somewhat liberal. The provision for drainage may also be reviewed alongwith.
- (vi) Water allowance for kharif crops is high. This may be reviewed and the water thus saved could be used for increasing rabi irrigation.
- (vi) Suggestions of the Department of Science and Technology with regard to the environmental impact of the project will be taken care of by the Project Authorities before implementation.

(Action: CWC/planning Commission).

-/-

II. MEDIUM SCHTTES:

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21. Second Revised Estimate of Sukla Irrigation Scheme() ossu) - (Estimated Cost: Rs.40) Jakhs:)

The revised estimated cost was lated. However, it should be suggested to the State Coverament that any flood embankment, which may be considered necessary, should be provided.

(Action: Planning Commission/CWC

(-2. Igo-Phey Irrigation Scheme of Leh(J & K) - (Estimated cost - Rs.595 lakhs).

The project was considered acceptable subject to the observation that the water requirement for the crops needs to be reviewed with a view to increasing the area under irrigation.

(Action: Planning Commission/CWC)

3. Tral lift Irrigation (J & K) - (Estimated Cost-Rs-612,84 lakhs).

The project was considered acceptable.

(Action: Planning Commission)

4. Rajpura Lift Irrigation Scheme(J & K) - (Estimated Cost Rs. 213 Jakhs)

The project was considered acceptable.

(Action: Flanning Commission)

5. Lower Mulla Mari Project (Karnataka) (Estimated cost: Rs. 336.60 lakhs)

It was observed that the intensity of irrigation during kharif was high. The project was found acceptable subject to the irrigation intensity being reviewed.

(Action:Planning Commission/CWC)

6. S. kalda Tank Project(Magnya Pradesh) - (Estimated Cost - Rs. 166.53 lakhs)

It was observed that intensity of irrigation was low. The project was found acceptable subject to the review of the irrigation intensity.

(Action: Planning Commission/CWC)

7. Revised Estimate of Bill Project (Madhya Pradesh) -- (Estimated Cost - Rs-371.1 Lakhs)

The revised estimated cost was noted.

(Action: Planning Commission)

8. Revised Estimate of Dudhawa Tank Project(Abdhya Pradesh) - (Estimated Cost - 25.430.77 lacns).

The revised cost was noted.

(Action: Planning Commission)

9. Matiyari Tank Project (Madhya Pradesh) - (Estimated Cost - Rs. 483 / 77 lakhs)

It was observed that the escalation of 10 to 25 per cent assumed in the estimated cost over 1973 proces was low. The State-Government should be advised to update the cost subject to this, the project was found acceptable.

(Action: CWC/Planning Commission)

10. Khumary Nala Project (Maharashtra) - (Estimated Cost - Rs. 31. 7 lakhs)

The project was found acceptable.

(Action: Planning Commission)

11. Harabangi Irrigation Project (Orissa) - (Estimated Cost - Rs.90). 14 Lakhs)

It was observed that the intensity of irrigation during kharif was high. The project was considered acceptable subject to review of irrigation intensity.

(Action:Planning Commission/CWC)

12. Gumti Irrigation Scheme (Tripura) - (Estmated cost; Rs.588 lakhs)

The project was found acceptable in principle subject to the irrigation intensity being reviewed, which was considered high.

(Action: CWC/Planning Commission)

III. LLOOD CONTROL PROJECT:

1. Construction of Hulwana Diversion Drain(Uttar Pradesh) ... (Estimated Cost - Rs. 1515 lakhs)

The project would be considered further by the Advisory Committee after the inter-state aspects are examined by the Ganga Flood Control Commission, CWC and the Department of Irrigation.

(Action: GFCC/CWC/Deptt.of Irrigation)

List of Officers present in the meeting of the Advisory Committee on Trrigation, Flood Control and Multi-purpose projects at its 8th meeting held at 10.30 a.m. on 17th November, 1978 in Shram Shekti Bhavan, New Delhi.

- 1. Shri C.C. Patel, Secretary, Department of Irrigation -Chairman
- 2. Dr. K.G. Thomas, Chajrman, Cortail Water Commission.
- 3. Shri S.K. Banerice, Adviser(Adr), Flanning Commission.
- 4. Shri K.M.Maheshwari, Chief (Irrigation) Member-Secretary, Planning Commission.

Also present:

Department of Irrigation:

- 1. Shri K.V. Rama Rao, Member(J.R.C.).
- 2. Shri S.B. Khare, Joint_Secretary(G.B.).
- 3. Shri B.M.K. Mattoo, Joint Secretary(M).
- 4. Shri S.K.Aggarwala, Deputy Secretary(I).
- 5. Shri K.R. Chandrasekharan, Deputy Secretary(C).
- 6. Shri G.V. Rao, _Under Secretary.

Department of Agriculture:

Shri A.P. Joseph, Deputy Commissioner(WM).

Central Water Commission

- 1Shri A.N. Harkauli, Member(D&R).
- 2.Shri M.G. Padhey, Member(PP) in-charge.
- 3. Shri G.S. Jhakade, Director (TE-II).
- 4. Shri K. Manjiah, Deputy Director(TE).
- 5. Shri K.J. Raisinghani, Dy. Director (TE).
- 5. Shri J.C. Gupta, Deputy Director(TE).
- 7. Shri S.S.Manocha, Deputy Director(TE).

Ganga Flood Control Commission:

- 1. Shri A.S. Chandrasekharan, Member.
- 2. Shri N. Sachidanand, Director.

Planning Commission;

- 1. Shri R.S. Nagaraja, Director(Irrigation) _
- 2. Shr: N.K. Dikshit, Joint Director(Irrigation)

PLANNING COMMISSION (L&CAD DIVISION)

Subject: Meeting of the Advisory Committee on Irrigation, flood control and Multi-purpose projects held on 27.2.1979 in Shram Shakti Bhavan, New Delhi -Ninth Meeting.

The Summary Record of the Ninth meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 27.2.1979 in Shram Shakti Bhavan, New Delhi, is circulated herewith.

> The second secon (K:M. Maheshwari) Chief (Irrigation) Member - Secretary

1. Shri C.C. Patel, Secretary, Department of Inrigation 2. Dr. K.C. Thomas, Chairman, Central Water Commission and

Ex-officio Secretary to the Govt. of India, Bikaner House. New Delhi.
Shri StN: Rot, Chairman, Central Electricity Authority and Ex-officio Secretary to the Govt. of India, Bikaner House, New Delai.

4. Shri T.R. Satish Chandran, Adviser(Energy), Planning Commis-

5. Shri S.K. Banerjee, Adviser(A&I), Planning Commission 6. Shrt R.K. Kaul, Joint Secretary, Plan Finance Division, Mintstry of Finance.

7. Shri B.M.K. Mattoo, Financial Adviser, Department of Irrigation, Ministry of Agriculture & Irrigation.

8. Shri J.K. Jain, Chairman, Central Ground Water Board, Department of Agriculture, Krishi Bhavan, New Delhi.
9. Shri R. Gopalaswamy, Joint Secretary, Department of Power,

Ministry of Energy.

10. Shri Hari Bhashan, Adviser, Technical and Ex-officio

Joint Secretary, Department of Heavy Industry. Planning Commission Circular No. 16(25)(9)/79-I&CAD dt. 7.3.1979 Conv to:

Ministry of Agriculture & Irrigation, Department of Irrigation

- 1. Shri I.P. Kapila, Joint Secretary(I)
- Joint Secretary(GB).
- 3. Shrt K.V.Rama Rac, Member(JRC)
- 4. Shri R.V. Ranthidevan, Dy. Secretary(P)
- 5. Shrī K:R. Chandrashekharan, Dy. Secretary(F) ••• 3 copies 6. Shrt Vijay Kumar, Deputy Secretary (I&P) 3 copies
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Ministry of Finance

Shri S. Sampathnarayanan, Director(Plan Finance)

Central Water Commission, New Delhi.

- Member (WR). Member(P&P)
- 2.

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3. Shri A.W. Harkauli, Member(D&R)
4. Shri Pritam Singh, Member(F&SC)
5. Director (P&P), Bikaner House
6. Director (TE)— I&II, Bikaner House

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Department of Science & Technology, Technology Bhavan, New Mehnaul: Road, New Delhi.

1. Snri Sa Venkatesh, Joint Secretary.

2 ShBrij Kishore, Deputy Secretary.

Department of Agriculture, Krishi Bhavan, New Delhi.

1. Shri G.M. Kathpalia, Joint Commissioner, Water Management.

Ganga Flood Control Commission, Patna.

1. Shri R. Ghosh, Chairman.

2. Shri A.S. Chandrasekharan, Member.

Central Electricity Authority, Bikaner House, New Delhi,

1. Shri S.P. Thyagi, Deputy Director.

Planning Commission

1. Chief ('Power) - 2. Joint Director (Science)/(Power)

PIAMNING CONTISSION (I.&CAD Divn.)

Minutes of the Ninth Meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 27.2.1979 at 10.30 A.M. in Shrum Shakti Bhavan under the Chairmanship of Shri C.C. Patel, Scortary, Ministry of Agriculture and Irrigation (Department of Irrigation).

Names of O ficers who participated in the discussion are given in the enclosed annexure.

- 2. The following projects were considered and the Committee's recommendations are given below: -
- I. SULTI PURPOSE PROJECTS:
- 1) Mahi-Bajaj Sagar Project, Gujarat and Rajasthan Estimated Cost:

Unit-I

R. 6733.25 lakhs.

Unit-II

Rs. 3581.50 lakhs.

It was observed that while the sharing of cost between Gujarat and Rajasthan was in the ratio of 40:9, the share in the utilization of water was mentioned in CWC Note as 40:16. The Committee recommended that Government of Rajasthan should consult the Covernment of Gujarat regarding sharing of cost on the basis of revised sharing of water utilization. It was also observed that the submergence in Madhya Pradesh is now estimated to be 622.43 ha. as against 84.5 ha. agreed to by Malbya Pradesh carlier. The Committee, therefore, recommended that the concurrence of Madhya Pradesh for increased submergence of land including back water effects should be obtained.

(Action: C.W.C.)

II. MEDIUM IRRICATION PHOJECTS:

1

- 1. Dudh i River Project, Madhya Pradesh (Estimated cost: 8.265.59 lakhs):
- 2. Chorel Piver Project. Madhva Pradesh (Estd. Cost: Es. 396.76 lakhs):
 These projects were considered acceptable.

(Action: Planning Commission)

- 3. Chikutna Irrigation Project, Maharashtra (Estimated Cost: Fr. 428, 49 lakhs):
- 4. Kalu Irrication Project, Maharashtra (Estimeted Cost:Rs.276.26 lek hs)
- 5. Kasari Irrigation Project, Mahamashtra-(Estd. Cost. Fs. 615.18 lakhs):

6. Kadvi Irrigation Project, Maharashtra - (Estimated Cost: 83.547.30 lakhs):

These projects were considered acceptable. In case of Chikutra Irrigation Project, the acceptance is subject to the sugarcane area being limited to 7% of the CCA. In case of lift Irrigation Projects, the acceptance was subject to the benefit cost-ratio being worked out taking into account the present rate of electricity tariff in the State.

It was decided that the Deptt. of Agriculture (Water Management Divn.) would forward to the C.W.C. (under copy to the Deptt. of Irrigation and Flanning Commission) the norms to be adopted in respect of yields and the commodity prices for working out the benefit-cost ratio in the different regions of the country for circulating these by GTC to the States.

(Action: C'C, Planning Commission and Deptt. of Agriculture (Water Management Divn.).

7. Maldevalesa Reservoir Project, Andhra Pradesh - (Tstimated Cost: 83.845.87 lakhs):

The project was considered acceptable.

(Action: Planning Commission)

III. FIOOD CONTROL PROJ CAS:

(1. Drainage and Flood Flan for New Okhla Industrial Development (Area (U.P.) - Estimated Cost: Es. 1004 lakhs):-

The project was considered acceptable.

(Action: Planning Commission)

2. Frotection Works for Kosi Flood Embankments and Afflux Bunds, Eihar - (Estimated Cost: Rs. 305.15 lakhs);

The project was accepted in principle. The Committee, however, desired that the Canga Flood Control Commission should work out the benefit-cost ratio for the scheme and submit the details to the Deptt. of Irrigation and Planning Commission.

(Action: GFCC).

List of officers present in the mosting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose projects at its 9th meeting held at 10-30 A.M. on 27th February, 1979 in Shram Shakti Bhavan, New Delhi.

- 1. Shri C.C.Patel, Secretary, Deptt. of Irvigation Chairman.
- 2. Dr. K.C. Thomas, Chairman, Central Water Commission.
- 3. Shri B.M.K. Mattoo, F.A., Deptt. of Irrigation.
- 4. Shri K.M. Maheshwari, Chief (Irrigation), Member Secretary Planning Commission.

Also present:

- 1. Shri I.P. Kapila, Joint Secretary (I).
- 2. Shri K.V. Rama Rao, Member (J.R.C.).
- 3. Shri R.V. Ranthidevan, Dy. Secy. (P).
- 4. Shri G.V. Rao, Under Secretary.

Deptt. of Agriculture:

Shri G.N. Kathpalia, Joint Commissioner (WH).

Central Water Commission:

- 1. Shri G.M. Valuya, Chief Engineer (Design).
- 2. Shri Kailash Narain, Director (T.E.-I).
- 3. Shri G.S. Jhakade, Director (TE-II).
- 4. Shri B.D. Sharma, Director (FC).
- 5. Shri T.S. Murthy, Dy. Director (TE).
- 6. Shri K.J. Raisinghani, Dy. Director (TE).
- 7. Shri S.S. Manocha, Deputy Director (TE).

Ganga Flood Centrol Commission:

- 1. Shri A.S. Chandrasekharan, Member.
- 2. Shri N. Sachidamand, Director.
- 3. Shri G.S.Marayana, Director.

Central Electricity Authority:

Shri S.P. Thyagi, Dy. Director.

Planning Commission:

- 1. Shri R.S. Nagaraja, Director (Irrign.).
- 2. Shri D.M. Saxena, Jt. Director (P&E).
- 3. Shri N.K. Dikshit, Jt. Director (Irrigation).

IMMEDIATE

PLANNING COMMISSION (1&CAD DIVISION)

Subject: Meeting of the Advisory Committee on Irrigation, flood control and Multi-purpose Projects held on 6.6.1979 in Shram Shakti Bhavan, New Delhi - Tenth Meeting.

The Summary Record of the Tenth meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 6.6.1979 in Shram Shakti Bhavan, New Delhi, is circulated herewith.

KIRICA

(K.M. Maheshwari) Jt. Adviser (Irrigation) Member - Secretary

1. Shri C.C. Patel, Secretary, Department of Irrigation 2. Dr. K.6.-Thomas, Chairman, Central Water Commission and Ex-officio Secretary to the Govt. of India, Bikaner House,

New Delhi.
3. Shri Sana Roy, Chairman, Central Electricity Authority and Ex-officio Secretary to the Govt. of India, Bikaner House, New-Delhi.

- 4. Shri T.R. Satish Chandran, Adviser(Energy), Planning Commission.
 5. Shri S.K. Banerjeë, Adviser(A&I), Planning Commission.
 6. Shri R.K.Kaul; Joint Secretary, Plan Finance Division,
 Ministry of Finance.
 7. Shri B.M.K. Mattoo, Financial Adviser, Department of Trrgn.,
 Ministry of Agriculture & Irrigation.
 8. Shri J.K. Jain, Chairman, Central Ground Water Board,
 Department of Agriculture, Krishi Bhavan, New Delhi.
 9. Shri P.M. Belliappa, Joint Secretary, Department of Power,
 Ministry of Energy.

Ministry of Energy.

10. Shri Hari Bhushan, Adviser, Technical and Ex-officio Joint Secretary, Department of Heavy Industry.

Planning Commission Circular No.16(25)(10)/79-I&CAD dated 22.6.79 Copy to:

Ministry of Agriculture & Irrigation, Deptt. of Irrigation

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 2. Shri N.L. Shankaran, Joint Secretary(CB)
 3. Shri K.V. Rama Rao, Member(JRC)
 4. Shri R. Rangachari, Director.
 5. Shri R.V. Ranthidevan, Dy. Secretary(P)
 6. Shri K.R. Chandrashekharan, Dy. Secretary(F) ... 5 copies
- ... 5 copies ... 3 copies 7. Shri Vijay Kumar, Deputy Secretary(I&P)
 8. Shri S.K. Aggarawala, Dy. Secretary(I)
 9. Shri G.V. Rao, Under Secretary,

Ministry of Finance

Shri S. Sampathnarayanan, Director(Plan Finance)

Central Water Commission, New Delhi.

- 1. Shri M.G. Padhye, Member (P&P)
 2. Shri A.N. Harkauli, Member(D&R)
 3. Shri Pritam Singh, Member(F&Sc.)

4. Director (P&P), Bikaner House 5. Director(TE)-I&II, Bikaner House

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Department of Science & Technology, Technology Bhavan, New Mehrauli Road, New Delhi.

- 1. Shri S. Venkatesh, Joint Secretary 2. Shri Brij Kishore, Deputy Secretary.

Department of Agriculture, Krishi Bhavan, New Delhi.

1. Shri G.N. Kathpalia, Joint Commissioner, Water Management.

Ganga Flood Control Commission, Patna.

- 1. Shri R. Ghosh. Chairman.
- 2. Shri N. Sanyal

Planning Commission

Joint Adviser(P)

PLANNING COMMISSION (1&CAD DIVISION)

Summary Record of the Tenth Meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose projects held on 6.6,1979 at 3.00 P.M. in Deptt. of Irrigation, Shram Shkti Bhavan, New Delhi.

Names of the officers who participated in the discussions are given in the enclosed annexure.

- 2. The following projects were considered and the Committee's recommendations are given below:
- I. Irrigation Projects
- 1. Revised Estimate of Hasdeo Right Bank Canal (M.P.) (estimated cost_Rs.1338.57 lakhs)

The project is almost completed and the revised cost was, therefore, noted.

(Action: Planning Commission)

2. Cheyyeru: (Andhra Pradesh) - estimated cost: Rs. 915.27 lakhs.
3. Bassi (Rajasthan) - estimated cost Rs. 233.81 lakhs.

These projects were considered acceptable. In the case of Cheyyeru, the Committee observed that the project is in drought prone area and therefore the canals upto 25 cusecs capacity should be lined in order to reduce the transmission losses and the water thus saved should be used in extending the area irrigated.

(Action: CWC/Planning Commission)

4. Gosunda (Rajasthan)-estimated cost Rs. 709.50 lakhs:

The project was considered acceptable subject to the following observations:

- (a) At the time of detailed design, stability calculations should be redone consider/the seismic co-efficient which whould be got approved by the Standing Committee of the Government of India constituted for the purpose, Howsoever negligible the co-efficient may be.
- (b) Discharge observations may be continued at dam site. The design of overflow section for a discharge of Jakh cusecs(suggested by CWC and accepted by project authorities) should be reviewed at the time of final design. The flood peak studies may also be reviewed at that time based on the discharge observations at dam site and short interval catchment rainfall data during floods.

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- (c) The detailed design of the aqueduct at RD 1065 M of IMC will be reviewed on the lines suggested by CWC during technical sanction and execution of the project.
- (d) The suggestions given by the Environmental Appraisal Committee (accepted by the project authorities) will be followed before project implementation.

- (Action: CWC/Planning Commission)

5. Kolar (Madhya Pradesh)-estimated cost Rs. 2575 lakhs.

The project was considered acceptable subject to the following observations:

- (a) Adequate tests on foundation materials should be carried out for their engineering properties.
- (d) The dependable yield and design flood accepted tentatively for project planning should be reviewed for taking up the work on hand, on the basis of short interval hydro-metrological data which should be collected for better degree of accuracy.
- (c) Silt rate of 1Aft./year/Sq. mile which is based on the observed data for two years may be reviewed after collecting further data.
- (d) In order to get sufficient water depth for roller effect, the design of energy dissipation arrangements are required to be re-examined at the time of taking up detail designs.
- (e) Detailed soil surveys for development of area may be carried out and the crop pattern, intensity of irrigation, provision of drainage etc. may be reviewed based on the results of detailed soil surveys.
- (f) The environmental aspect of the project should be got cleared from the Deptt. of Science and Technology before implementation of the project.

(Action: CWC/Planning Comm./Deptt. of S&T).

6. Sipu Reservoir (Gujarat)-Estimated cost: Rs. 1880.27 lakhs.

The project was considered acceptable subject to the observation that till Narmada project comes up, some water may be released downstream for committed irrigation and the environmental aspect being cleared by Deptt. of Science and Technology.

(Action: CWC/Planning Comm-)/Deptt. of S&T)

II. Flood Control Project:

Hazīpur-Bazidpur Embankment Scheme - Bihar - Estimated cost: Rs.1147 lakhs.

The project was considered acceptable subject to the following observations:

- i) The HFL assumed in the scheme shall be confirmed by model experiments (preferably before execution) at CWPRS, Pune with all the existing and proposed embankments on the main Ganga and tributaries. The discharge that has to be taken for the proposed model studies shall be decided by the State in consultation with G.F.C.C.
- ii) The various drainage schemes connected with Gandak Project would be coordinated properly with reference to the ruling H.F.L in the Ganga in the post-jacketted condition.
- iii) The State will also coordinate the flood levels assumed in the design (subject to confirmation by model experiments) with the design HFL adopted for the road bridge under construction near Patna.
- Tv) Suitable modification during construction will be made in the Mokamehtal drainage scheme Phase II due to increase in HFL in the post-jacketted conditions.
- v) After the embankments proposed in the scheme are constructed, the protected area may be flooded due to local rainfall when the rivers are in spate. In that situation, the arrangements for evacuation of the people from the area to safer places would have to be examined by the State.
- river should be re-examined to see whether the flooded waters in the protected area could be drained easily by making a straight cut to the river Ganga.

(Action: GFCC/Planning Commission)

ANNEXURE

List of Officers present in the 10th meeting of the Advisory Committee on Irrigation, F.C and Multi-purpose Projects held at 3 p.m. on 6th June, 1979 in Shram Shakti Bhavan, N.Delhi.

- 1. Shri C.C. Patel, Secretary, Deptt. of Irrigation ... Chairman
- 2. Shri B.M.K. Mattoo, J.S. & F.A., Deptt. of Irrigation.
- 3. Shri K.M. Maheshwari, Jt. Adviser(Irrigation)-Member-Secretary Also present

Deptt. of Irrigation

- 1. Shrì N.L. Shankaran, Joint Secretary (GB).
- 2. Shri R. Rangachari, Director.
- 3. Shri R.V. Ranthidevan, Dy. Secretary (P.I).
- 4. Shri S.K. Aggarwala, Dy. Secretary(I)
- 5. Shri G.V. Rao, Under Secretary.

Deptt. of Agriculture

1. Shri G.N. Kathpalia, Joint Commissioner(WM).

Central Water Commission

- 1. Shri A.N. Harkauli, Member (D&R)
- 2. Shri Pritam Singh, Member(F&Sc.)
- 3. Shri M.G. Padhye, Member (P&P)
- 4. Shri H.S. Krishnaswamy, Director (TE).
- 5. Shri G.S. Jhakade, Director (TE)
- 6. Shri Mahesh Chand, Director (R&C).

Ganga Flood Control Commission

- 1. Shri R. Ghosh, Chairman
- 2. Shri N. Sanyal, Member

PLANNING COMMISSION

1. Shri N.K. Dikshit, Jt. Director (Trrgn.)

PLANNING COLMISSION (ISUAD DIVISION)

光转换设备

Subject: Meeting of the Advisory-Committee on Irrigation. Flood Control and Multi-purpose Projects held on 11.9.1979 in Shran Shakti Bhavan, New Delhi-11th Meeting.

The Summary Record of the Eleventh meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 11.9.1979 in Shram Shakti Ehavan, New Delhi, is circulated herewith.

(K.M.Mahesbwari) Jt. Adviser (Irrigation) Member - Secretary

- 1. Shri G.C. Patel, Secretary, Department of Irrigation
- 2. Dr. K.C. Thomas, Chairman, Central Vater Commission and Tw-officio Secretary to the Govt. of India, Bikaner House, New Delbi.
- 3. Shri S.H. Roy, Chairman, Central Electricity Authority and Ex-officio Secretary to the Govt. of India. Bikaner House. New Delhi.
- 4. Shri T.R. Satish Chandran, Adviser (Energy), Planning Commission.
- 5. Shri S.K. Banerjee, Adviser (ACI), Planning Commission.
- 6. Shri R.K. Raul, Joint Secretary, Plan Finance Division, Hinistry of Finance.
- 7. Shri D.H. M. Mattoo, Financial Adviser, Deptt. of Irrgn.,
- Ministry of Agriculture & Irrigation.

 8. Shri J.K.Jain, Chairman, Central Ground Water Board,
 Department of Agriculture, Krishi Bhavan, New Delhi.

 9. Shri P.M. Delliappa, Joint Secretary, Department of Power,
- Hinistry of Energy.
- 10. Shri Hari Bhushan, Adviser, Technical and Ex-officio Joint Secretary, Department of Heavy Industry.

Planning Commission Circular No.16(25)(11)/79-I&CAD dt.4.10.1979

Copy to:

Hinistry of Agriculture & Irrigation, Deptt. of Irrigation
T. Bari I.E. Rapila, Joint Secretary(I)
2. Shri I.E. Shankaran, Joint Secretary(S)
3. Shri R.V. Rama Rao, Nember(JRC)
4. Shri R.V. Ranthidevan, Dy. Secretary(P)
5. Shri R.R. Chandrashelbaran, Dy. Secretary(F)

- 5. Shri G.V. Mao, Under Sceretary.

Ministry of Finance

Shri S. Sampathnarayanan, Director (Plan Finance)

Central Water Commission, New Delhi.

- 1. Shri H.G. Padhye, Homber (P&P)
- 2. Shri A.N. Harkauli, Member (D&R)
- 3. Shri Pritam Singh, Member(F&Sc.)
 4. Shri K. Ramesha Rao, Chief Ingineer(TE)
 5. Director (P&P), Bikaner House
 6. Director(TE)-I&II, Bikaner House.

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Department of Science & Technology, Technology Bhavan, New Mehrauli Road, New Delhi.

- 1. Shri S. Venkatesh, Joint Secretary 2. Shri Brij Kishore, Deputy Secretary.

Department of Agriculture, Krishi Bhavan, New Delhi.

1. S hri G.N. Kathpalia, Joint Commissioner, Water Management.

Ganga Flood Control Commission, Patna.

1. Shri R. Ghosh. Chairman.

Central Electricity Authority.

1. Shri A.N. Singh, Member (H.S)

Planning Commission

Joint Adviser(P)

Planding Continuon (180AD DIVISION)

Summary Record of the 11th meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 11.9.1979 at 10.30 a.m. in the Deptt. of Irrigation, Shram Shakti Bhavan, Mew Delhi.

Names of officers who participated in the discussion are given in the enclosed Annexure.

2. The following projects were considered and the Committee's recommendations are given below:

I. Irrigation Projects:

1. Halali (Madhya Pradesh) estimated cost Rs. 1306.00 lakhs.

The project was considered acceptable subject to the following observations:

- (i) The field studies may be reviewed by collection of further data from the reservoir operation for confirmation of 75% dependable computed yield and also for drawing the reservoir regulation rules.
- (ii) The design flood may be reviewed after collection of additional data to take remedial measures if needed. Till such a review is done careful watch on the operation and behaviour of the dam may be kept.
- (iii) The approval to the modified crop pattern and water requirements may be obtained as indicated by C. C.
- (iv) The canal capacities which have now been provided considering the staggering demand in the distributaries require to be reviewed when full development takes place.
- (v) Water rates proposed are low and require revision.
- (vi) To take note of the comments, if any, from the Deptt. of Science and Technology on environmental aspects and take remedial measures as necessary.

(Action: CCC/Planning Commission)

2. Jankhari Reservoir (Gujarat) - Istimated cost: Rs. 1869.77 lakhs

The project was considered acceptable subject to the clearance from the environmental angle by the Deptt. of Science and Technology.

The Committee also observed that the following suggestions may be taken into account at the time of preparation of detailed designs:

- i) To review design flood by unit hydrograph method after collecting more byrometerological data;
- ii) The review of the alignment of canals and the value of int for designs for sections below 100 Cs.
- iii) Review of High Flood discharge, trough design and foundation levels for aquaduct at chainage 435 of T.B.C.
- iv) Adoption of seismic coefficient for design of damias approved by the Standing Committee for recommending design seismic coefficient.
- v) Review of the design of the roller bucket on the bais of model studies
- vi) Free board as computed to be provided above F.R. D. and not above M.W.L. as has been done in the present design.
- vii) The intensity of irrigation reviewed keeping in View the future need for cojunctive use of surface and ground water.
- viii) Suggestions of Deptt. of S&T on environmental aspects.

(Action:CODeptt. of Science & Technology/Planning Commission).

3. Rajghat Dam (Madhya Pradesh and Uttar Pradesh)-Estd Cost:

The project was considered acceptable subject to the following observations:

(i) While the design flood considered in this project was 16 lakh cusecs, for design of spillway, the existing Matatila Dam down stream was designed only for 7 lakh cusecs. Design of the Matatila Dam and its spillway may be reviewed jointly by the C.V.C. and concerned State Engineers and proposals for strengthening and remodelling as may be considered necessary should be drawn up to assure proper interaction between the two.

- (ii) The land between FRI and RWI, which may amount to 4,000 acres, needs to be acquired.
- (iii) The project is yet to be cleared from the environmental angle by the Department of Science and Technology. This should be got done.
- (iv) The possibility of generating power at the dam site should be explored in consultation with the Central Electricity Authority and the cost of the common works to be borne by the power sector should be determined.

(Action: CWC/CHA/Deptt. of Science & Technology/Planning Commission)

Revised Istimate of Bhadar Irrigation Project(Gujarat) - Estimated cost: Rs.422.21 labbs:

It is noted that the project has already been completed. The Committee observed that the State Govt. should be requrested to review the spillway capacity in view of the recent unprecedented floods in the Saurashtra Region of the State and submit suitable proposals for increasing the spillway capacities as may be considered appropriate.

(Action: C/C/Planning Commission)

List of Officers present in the 11th meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held at 10.30 a.m. on 11th September, 1979 in Shram Shahti Bhavan, New Delhi.

1. Shri C.C.Patel, Secretary, Deptt. of Irrigation-Chairman

2. Dr. K.C. Thomas, Chairman, CVC.

- 3. Shri S.K. Banerjee, Adviser(A&I), Planning Commission.
 4. Shri B.M.K.Mattoo, J.S. & F.A., Deptt. of Irrigation.
 5. Shri K.H.Maheshwari, Jt. Adviser(Irrgn.)-Member-Secretary, Planning Commission.

Also present:

Deptt. of Irrigation

1. Shri I.P. Kapila, Jt. Secretary(I). 2. Shri K.V. Rama Rao, Member(JRC)

3. Shri N.L.Shankaran, Jt. Secretary(GB).

R.V. Ranthidevan, Dy. Secretary(P.I.)

Deptt. of Agriculture:

1. Shri G.N. Kathpalia, Jt. Commissioner (MI).

Central Water Commission

1. Shri Pritam Singh, Hember (F&SC)

2. Shri M.G.Padhye, Member(P&P).
3. Shri K. Ramesha Rao, Chief Engineer(TD).

4. Shri G.S. Jhakade, Director(TA).

5. Shri K.S. Rajsinghan, Dy. Director(TE) 6. Shri D.K. Bablani -do-

7. Shri T.S. Murthy,

Ganga Flood Control Commission

1. Shri R. Ghosh, Charman.

Central Electricity Authority.

1. Shri A.N. Singh, Member (HE).

Ministry of Finance (Plan Finance Division).

1. Shri W. Velluri, Dy. Secretary (RF).

Planning Commission

- 1. Shri R.S. Hagaraja, Director (Irrgn.)
- 2. Shri M.K.Dilshit, Jt. Director(Irrgn.)

PLANNING COMMISSION (I.& CAD DIVN.)

Subject: 12th Meeting of the Advisory Committee in Irrigation, Flood Control and Multi-purpose Projects held on 21.11.1979 in Shram Shakti Bhavan, New Delhi.

The Summary record of the Twelfth meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose projects held on 21.11.1979 in Shram Shakti Bhavan, is circulated herewith.

(K.M. Maheshwari)

Joint Ldvise-r(I.& CAD)

Member-Secretary.

- 1. Shri C.C. Patel, Secretary, Deptt. of Irrigation.
- 2. Dr. K.C. Thomas, Chairman, Central Water Commission, Bikaner House, New Delhi.
 - 3. Shri S.N. Ray, Chairman, Central Electricity Authority, Bikaner House, New Delhi.
 - 4. Shri T.R. Satishchandran, Adviser (Energy), Planning Commission.
- 5. Shri S.K. Banerjee, Adviser (I.& CAD), Planning Commission.
 - 6. Shri D. Shankarguruswami, Jt. Secy., Plan Finance Divn., Ministry of Finance.
- 7. Shri B.M.K. Mattoo, Financial Adviser, Deptt. of Irrigation.
- 8. Shri J.K. Jain, Chairman, Central Groundwater Board, Deptt. of Agriculture.
- 9. Shri P.M. Belliappa, Jt. Secy., Deptt. of Power.
- 10. Shri Hari Bhushan, Adviser, Technical & Ex-officio, Jt. Secy., Deptt. of Heavy Industry.

Planning Commission Circular No. 16(25)(11) 79-I.& CAD,

dated the 6th December, 1979.

Copy to:-

Deptt. of Irrigation

- 1. Shri I.P. Kapila, Jt. Secy. (I).
- 2. Shri N.L. Shankaran, Jt. Secretary (GB).
- 3. Shri K.V. Rama Rao, Member (JEC).
- 4. Shri K.S.S. Murthy, Adviser (PP).
- 5. Shri R. V. Ranthidevan, Dy. Secretary.
- 6. Shri G.V. Rao, Under Secretary.

Ministry of Finance.

Shri S. Samp-atnarayanan, Director (Plan Finance)

Central Water Commission

- 1. Shri M.G. Padhye, Member (P&P).
 - 2. Shri K. Ramesh Rao, Chief Engineer (TE).
 - 3. Director TE(I)/(II).-

4. Director (P&P).

Deptt. of Agriculture.

- 1. Shri G.N. Kathpalia, Jt. Commissioner (WM).
- 2. Shri B.K. Saha, Deputy Secretary (CAD).

Deptt. of Science (Technology, Technology Bhavan) New Delhi.

- 1. Shri S. Venkatesh, Joint Secretary.
- 2. Shri Brij Kishore, Deputy Secretary.

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PLANNING COMMISSION (1&CAD DIVISION)

Summary Record of the 12th Meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose projects held on 12.11.1979 at 11 a.m. in the Deptt. of Irrigation, Shram Shakti Bhavan, New Delhi.

Names of Officers who participated in the discussion are given in the enclosed Annexure.

The following projects were considered and the Committee's recommendations are as follows:

- I. Multi-purpose Project:
- 1. Thoubal Multi-purpose Project(Manipur)-Estimated Cost: Rs. 4725 lakhs.

It was observed that the yield and the spillway capacity assumed in the project were too low. After some discussion it was decided that:

- (a) The yield from the catchment should be based on adjoining Tipaimukh catchment characteristics, since the data for the catchment in question was not adequate.
- (b) the spillway cap-acity of 80,000 cusecs assumed in the project should be reviewed and increased if necessary.
- (c) with the increased availability of water for the project the possibility of extending the commanded area and also increasing the power potential of the project should be explored.
- (d) Member (P&P) and Director (Dans) from the Central Water Commission should visit the project area with a view to verify the various assumptions made in the project in respect of its design.

The project should be revised on the basis of the above observations and put up again for consideration of the Advisory Committee.

(Action: CWC)

II. Irrigation Projects:

- 1. Khowai Irrigation Project (Tripura) Estimated Cost: Rs.710 lakhs.
- 2. Buridehingi Lift Irrigation (Assam) Estd. Cost: Rs. 113.89 lakhs.
- 3. Bundala Irrigation Project (M.P.) Estd. Cost Rs. 218.13 lakhs.
- 4. Chandora Tank Project (M.P.) Estd. Cost: Rs.292.82 lakhs.

- 6. Gomukh Project (M.P.) Estd. Cost: Rs. 350.73 lakhs.
- 7. Seer Lift Irrigation (J.& K.) Estd. Cost: Rs. 162 lakhs.

The above projects were considered acceptable. In the case of Khowai project, the acceptance is subject to the convation that the intensity of irrigation should be revised to limit it to 180%. The acceptance of four projects of Madhya Pradesh viz. Chandora, Bundola, Banki and Gomukh is subject to review of water rates by the State, which are, at present, low. In respect of Banki Project the acceptance is also subject to the observation that for initial seed-bed, groundwater should be developed and the State Govt. should encourage groundwater development in the rabi season for supplementing the surface irrigation. The acceptance of Seer Lift Irrigation Project is subject to the concurrence of the State Finance and Agriculture Deptts to the project proposals.

(Action: CMC/Planning Commission)

8. Mondovi Irrigation Project (Goa) - Estd. Cost: Rs. 1310.90 lakhs.

The Committee observed that the intensity of irrigation of 216% assumed in the project was too high and should be reduced to about 150%. The transmission losses of 10% assumed for the main canal were on the low side and should be increased to 25%. It was also decided that the B.C. ratio should be revised taking into account the reduced intensity and the project should be put up again for consideration of the Committee.

(Action: CWC)

9. Revised Estimate of Potteru Irrigation Project (Orissa) - Estimated Cost: Rs. 4886 lakhs:

It was stated in the CWC Note on the project that the present revised estimate was drawn up for making the immediate financial arrangements although the cost was to be firmed up after detailed surveys and investigations. It was observed that the intensity of irrigation of 180% assumed was too high and the water rates proposed were not able to meet even the administrative expenses. After some discussion, it was agreed that the present revised cost may be noted subject to up-dating detailed investigations of the ayacut and also taking into account the reduced intensity of about 140%. The water rates also need to be revised poward by Orissa Govt.

(Action: CWC/Planning Commission)

The Chairman desired that in the case of projects where the revised costs have gone up considerably an Expert Committee should go into the reasons for such revision and advise the State Government suitably.

(Action: CPC)

10. Eastern Ganga Canal Project (U.P.) - Estd. Cost: 6:4846 lakhs.

The project was considered acceptable subject to the following observations:-

- 1. Slope of the canal would be reviewed at the time of final design after conducting detailed contour survey by the State Engineers.
- 2. Suggestions regarding cross section of canal, design discharge for cut and cover portion, max. flood discharge for cross drainages would be reviewed at the time of detailed designs.
- 3. Detailed design of the distribution system which is not given in the report will be done.
- 4. Conjunctive use in the canal command should be emphasized.

(Action: CVC/Planning Commission)

O 11. Revised Estimate of Bhimsagar Trrigation Project (Rajasthan)-Estimated Cost: Rs.747.10 lakhs.

The revised estimated cost was noted. The Committee, however, desired that it should be impressed upon the State Govt. that such abnormal increase in cost could be avoided, if the projects were formulated on complete investigations.

(Action: CWC/Planning Commission)

12. Moudaha Dam Project (U.P.) - Estd. Cost: Rs. 2675.40 lakhs.

The project was considered acceptable subject to the compliance of the following outstanding comments of the Central Water Commission.

- 1. Test pits and insite permeability tests along dam axis as suggested by Geologist may be carried out before fixing the depth of cut off trench for the dam.
- 2. Stability studies for embankment slopes have been done considering only 3 circles in each condition, passing through toe of the embankment. The failure circles may be studied and minimum factor of safety determined by closing the grid. Prop er depth of overburden for foundation may also be considered in final designs.

- 3 Command area of each distributory may be reviewed on the basis of detailed contoured maps.
- 4. The carryover storage of 20% may be utilised for increasing the intensity of Irrigation rather than increasing the dependability to 82%.
- 5. The 'C' value in Dicken's formula for some of the cross-drainage works, which is considered low, may be review ed before final design.
- 6. Thickness of impervious floor may be checked for uplift on the basis of Khosla's theory.
- 7. Hydraulic details of some cross-drainage works which are not consistant, may be rechecked at the time of final design. The State Officers have also agreed to check the yield studies on the basis of observed data at dam site available from 1977 onwards.

(Action: CWC/Planning Commission)

() 13. Boralia Irrigation Project (Assam) - Estd. Cost: Rs.677.50 lakhs.

The project was considered acceptable subject to the compliance of the following comments of the CWC.

- 1. The design flood of 850 cumecs (30,000 cusecs) accepted tentatively, will be reviewed after the hydrological studies on rational basis are carried out.
- 2. The cropping pattern and delta will be reviewed after receipt of detailed soil survey report from the State Agriculture Department.
- 3. Adequate drainage facilities would be provided.
- 4. Detailed C.A.D. report would be p-repared.

(Action: CWC/planning Commission)

APPEXUTE.

List of Officers present in the 12th meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpo-se Projects held on 21st November, 1979 in Shram Shakti Bhavan, New Delhi.

- 1. Shri C.C. Patel, Secretary, Deptt. of Irrigation Chairman.
- 2. Shri B.M.K. Mattoo, J.S. & F.A., Deptt. of Irrigation.
- 3. Shri K.M. Maheshwari, Jt. Adviser (Irrign.) Member-Secretary, Planning Commission.

Also p-resent:

Deptt. of Irrigation

- 1. Shri K.V. Rama Rao, Member (JRC).
- 2 . Shri N.L . Shankaran, Jt. Secretary (GB).
- 3. Shri K.S.S. Murthy, Adviser (PP).
- 4. Shri R.V. Ranthidevan, Dy. Secretary (P.I.).
- 5. Shri G.V. Rao, Under Secretary.

Deptt. of Agriculture:

- 1. Shri B.K. Saha, Dy. Secretary (CAD).
- 2. Shri V.S. Dinker, Dy. Commissioner (WM).

Central Water Commission

- 1. Shri M.G. Padhye, Member (P&P).
- 2. Shri K. Ramesha Rao, Chief Engineer (TE).
- 3. Shri G.S. Jhakade, Director (TE).
- 4. Shri H.S. Krishnecvamy, Director (TE-I).
- 5. Shri K.S. Raisinghani, Dy. Director (TE).
- 6. Shri T.S. Murthy, Dy. Director (TE).
- 7. Shri J.C. Gup-ta, Deputy Director.
- 8. Shri S.S. Manocha, Dy. Director.
- 9. Shri S.T. Chaudhary, Dy. Director.
- 10. Shri M.L. Katua, Dy. Director.

Department of Power

Shri M.C.Joshi, Under Secretary.

Planning Commission

Shri N.K. Dikshit, Joint Director.

PLANNING COMMISSION (1&CAD DIVISION)

Subject: 13th Meeting of the Advisory Committee in Irrigation, Flood Control and Multi-purpose Projects held on 19.3.80 in Shram Shakti Bhavan, New Delhi.

The Summary Record of the 13th meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose projects held on 19.3.1980 in Shram Shakti Bhavan, is circulated herewith.

> (K.M.Maheshwari) Joint Adviser (I&CAD) Member-Secretary

KELTZ

- Shri C.C. Patel, Secretary, Department of Irrigation.
 Dr. K.C. Thomas, Chairman, Central Water Commission, Bikaner House, New Delhi.
- 3. Shri S.N. Ray, Chairman, Central Electricity Authority, Bikaner House, New Delhi.
- 4. Shri T.R. Satishchandran, Adviser(Energy), Planning Commission.
- 5. Shri S.K. Banerjee, Adviser (I&CAD), Planning Commission.
- 6. Shri D. Shankarguruswami, Jt. Secretary, Plan Finance Division, Ministry of Finance.
- 7. Shri B.M.K. Mattoo, Financial Adviser, Deptt. of Irrigation.
- 8. Shri J.K. Jain, Chairman, Central Groundwater Board, Department of Agriculture.
- 9. Shri P.M. Belliappa, Jt. Secretary, Department of Power.
- 10. Shri Hari Bhushan, Adviser, Technical & Ex-officio, Joint Secretary, Department of Heavy Industry.

Planning Commission Circular No.16(25)(13)/80-I&CAD dt.3.4.1980

Copy to:

Department of Irrigation

- Shri I.P. Kapila, Jt. Secretary(I)
 Shri N.L. Shankaran, Jt. Secretary(GB)
 Shri K.V. Rama Rao, Member(JRC).
 Shri K.S.S.Murthy, Advisor(PP).

- 5. Shri S.K. Aggarwal, Dy. Secretary.
- 6. Shri G.V. Rao, Under Secretary.

Ministry of Finance.

Shri S. Sampatnarayanan, Director (Plan Finance)

Central Water Commission

- 1. Shri Pritam Singh, Member (F&Sc.)
- 2. Shri M.G. Padhye, Member(P&P)
- Shri K. Ramosh Rao, Chiof Engineer(TE).
 Director TE(I)/(II)
- 5. Director (P&P)

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Department of Agriculture

1. Shri G.N. Kathpalia, Joit Commission(WM).

Department of Science (Technology, Technology Bhavan), New Delhi.

- Shri S. Vonkatesh, Joint Socretary.
 Shri Brij Kishore, Deputy Secretary.

Department of Power

Shri Harish Nayyar, Deputy Secretary,

Ganga Flood Control Commission, Patna.

- 1. Shri R. Ghosh, Chairman.
- 2. Shri N. Sanyal, Member.

Central Electricity Authority,

1. Shri C.V. Sarma, Deputy Director.

(K.M. Maheshwari) Member - Secretary

PLANNING COMMISSION (1&CAD DIVISION)

Summary Record of the 13th meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects. held on 19.3.1980 at 18.30 a.m. in the Department of Irrigation Shram Shakti Bhavan, New Delhi.

Names of the officers who participated in the discussion are given in the enclosed annexure.

Onening the discussion, the Chairman mentioned that in respect of some irrigation projects excessive reservoir submergence was noticed vistavis the benefits expected from the projects. In this connection he referred to Tehri Dam in Uttar Pradesh, Silent Valley in Kerala and Heran Dam in Gujarat and wanted the Central Water Commission to examine the various irrigation projects and prepare a list showing the area of submergence and the area benefited which could be made use of in examining the future projects.

The Chairman also desired that suitable norms in this respect may be evolved by an inter-Ministerial Group consisting of the representatives of the Deptt. of Irrigation, Planning Commission, Central Water Commission and some State Governments, which may be headed by Member (P&P), Central Water Commission.

(Action: Deptt. of Irrigation/ Central Water Commission)

The following projects were considered and the Committee's recommendations are as follows:-

I. Multi-purpose Project:

(Rs.4725 lakhs) - Estimated Cost-

The project was considered acceptable subject to the following observations:-

- (i) Additional field and laboratory tests for the foundation of the dam and spillway will be carried out to confirm the engineering proporties. Also, the insitu permeability tests and groating tests for foundation material will be carried out for deciding the foundation treatment.
- (ii) Additional tests will be carried out to confirm the engineering properties to be used in the design of the dam section.

- (iii) The free board requirement will be checked by Savelle's method.
 - (iv) The detailed design of the outlet beneath the dam vise vis the foundation conditions will be done.
 - (v) Further sediment studies will be carried out for allocation of sediment space in the reservoir.
 - (vi) Any suggestions to be made by Member (P&P), C.W.C., after his forthcoming visit to the project area will be taken note of.
- (vii) Suggestions made by the Environmental Appraisal Committee will be taken into account.
- (viii) While planning projects on the rivers falling into Loktak Lake, an integrated water study of the existing and future projects will be made.

(Action; CWC/Planning Commission)

II. Irrigation Projects: Major Projects:

1. Champamati Irrigation Project Estimated Cost: Rs. 1532.15 lakhs.

The project was considered acceptable subject to the observation that the possibility of providing water to Chirag Reserve Forest may be examined and the concurrence of the State Finance Department may be obtained.

(Action CWC/Planning Commission).

 Revised Estimate of Parallel Lower Ganga Canal Project(Uttar Pradesh), Estimated Cost: Rs. 4942.72 lakhs.

The revised estimated cost was noted. It was decided that the State Govt. should expeditiously prepare a project for conjunctive use of surface and ground waters in the command of the Lower Ganga Canal and submit it to the C.W.C. and Planning Commission. Detailed soil survey of the command area should also be carried out and the report sent to the C.W.C. and the Department of Agriculture.

(Action: CWC/Planning Commission)

3. Project for replacement of Lahchura Dam(U.P.) - Estimated Cost: Rs. 852.90 lakhs.

The project was considered acceptable subject to the following observations:-

- (i) Design flood of 5,60,000 cusecs which has been tentatively agreed to may be reviewed on the basis of hydrometerological data to be collected at site.
 - (ii) The suggestions of 'Gates Design Directorate' of C.W.C. regarding hoisting arrangements, provision of sufficient clearance between road bridge bottom and upper nappe of flowing water, provision for trash rack and breast wall, will have to be taken into account at the time of detailed designs.
 - (iii) A geological appraisal by Engineering Geologist of GSI for the proposed new foundation will have to be furnished for final clearance by C. U.C.
 - (iv) Hydraulic model studies for energy dissipation arrangement and a horizontal apron of nominal length with a toe trench to prevent the spillway getting undermined, will have to be carried out.
 - (v) Stability analysis for all the loading conditions will have to be carried out as per I.S.6512-72 at the time of detailed designs.
 - (vi) Stability analysis for the blocks proposed at foundation will have to be checked, at the time of final designs.
 - (vii) The location of the head regulator should be decided taking into account the possibility of silting etc.
 - (viii) The possibility of using lims in place of cement should be considered.

(Action: CWC/Planning Commission)

4. Project for Lining of Distributaries and Minors in Punjab (Phase I) - Estimated Cost: Rs. 15203 lakhs:

The project was found acceptable subject to the following:

- i) Observations on seepage losses for each system will be carried out before and after lining.
- ii) The side slopes of 1:1 provided for canals will be revised at the time of execution wherever necessary.

- iii) It is necessary to exercise caution in future exploitation of ground water in the project area.
- iv) The increase in intensity to be brought cut by lining to a uniform level in the entire project area should be quantified distributorywise.

The clearance from the Indus Wing of the Department of Irrigation from the international angle would be obtained and communicated to Planning Commission by $C_\bullet W_\bullet C_\bullet$

(Action: C.W.C./Planning Commission)

5. North Koel Reservoir Project (Bihar) - Estimated Cost: Rs.11777 lakhs:

The project was found acceptable subject to the following observations:

- (i) The design flood for the dam has been tentatively accepted as 6.91 lakh cusecs. This will have to be reviewed after collecting more data at the dam site during the ensuing flood season. The spillway design has to be finalised for the design flood thus arrived at and keeping the MLL at RL 1200.
- (ii) It has been recommended that the barrage should be tested for a flood discharge of 9 lakh cusecs. This has to be ensured at the time of final design.
- (iii) The observations of gauge and discharge, both at the Kutku dam site and the barrage site, should be continued for having adequate data for operation purposes. It should be ensured that these observations are made according to standard procedures.
- (iv) The concurrence of the State Agriculture Department to the cropping pattern, crop water requirements and intensity of irrigation and of the Finance Department for taking up the project will have to be furnished to C.W.C. and Planning Commission.
- (v) The suitability of the borrow area materials should be assessed after carrying out the necessary investigations.
- (vi) Specifications, drawings of the zone type earth dam section should be finalised after establishing the suitability and availability of materials.

- vii) Triaxial shear tests on adequate number of samples should be carried out for determining the effective shear parameters and the design should be based on effective stress mathod.
- viii) Physical test should be carried out to establish the suitability of the natural sand and rock for use as aggragates in concreteand stone masonry.
- ix) The stipulations made by the Deptt. of Agriculture, while giving the clearance to the project from the project Tiger Angle, should be complied with.
- x) The clearance from the Department of Science and Technology is awaited. Their comments will have to be taken into account at the time of implementation of the project.
 - xi) The details of the utilisation by the existing and proposed minor irrigation projects in the Some Basin should be furnished for record in the Central Water Commission.
 - xii) It should be confirmed that the provision made in the project to meet the shortages in flows at the Sone Barrage site shall not give any claim for higher allocation for the Sone Canal System at a later date.
 - xiii) Detailed drainage schemes should be planned in consultation with Central Water Commission so that optimum design parameters are adopted.
- xiv) An integrated Working Table, taking into consideration all projects in the Sone Basin when firm utilisations have been established, should be prepared and sent to Central Water Commission.
- xv) The dam would be raised by another 10 ft. and the detailed design would be based on the increased height.
- xvi) The reservoir would be so operated that the requirement of the Sone Canal would be fully met.
- xvii) A reservoir development Authority should be formed with the representatives of all concerned State Departments with a view to see that the environmental preservation is the prime consideration.

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(Action: CWC/Planning Commission)

MEDIUM IRRIGATION PROJECTS

1. Hawaipur Lift Irrigation Scheme(Assam)-Estimated Cost - Rs. 198.9 lakhs.

The Committee observed that instead of a lift irrigation project, which may not operate continuously due to power failure etc., an alternative gravity scheme may be examined and the project report for such gravity scheme prepared and put up to the Advisory Committee.

(Action: CWC)

- (2. Bah Project (M.P. Estimated Cost: Rs. 1398 lakhs
- 73. Sagar Project (M.P.) Estimated cost: Rs. 1063.11 lakhs.
- 4. Doraha Tank Project (M.P.) Estimated Cost: Rs. 248.77 lakhs
- 5. Kaliasote Project (M.P.) Estimated Cost: Rs. 932.90 lakhs.
- 6. Tillar Dam Project(M.P.) Estimated Cost: Rs, 577.31 lakhs.

These projects were considered acceptable subject to revision of water rates by the State Government.

In the case of Bah project possibility of extending the command and reducing the sugarcane area should be examined.

In the case of Sagar Project the acceptance is also subject to specific concurrence of State Finance Department for taking up the project.

In respect of Kaliasote the acceptance is also subject to the observation that sullage water of BhopalTown should not be let into any tanks under the project and may be utilised directly for irrigation after necessary treatment/dilution to permissible limits.

In the case of Tillar Dam project, a gauge station should be set up at the Dam site for review of design flood on the basis of observed data and also to build up hydrological data.

(Action: CWC/Planning Commission)

- 7. Bankbal Irrigation Project(Orissa)-Estd. cost Rs,571.975 lakhs
 The project was found acceptable subject to the following:
 - (i) Water rates which are low should be revised.
 - (ii) Discharge observations started at the dam site in 1977 may be continued as they will be of use in the planning of future projects in the area and also for operation.
 - (iii) Short period interval gauge observations may be made in the ensuing monsoon for reviewing the adequacy of the design floods

(Astion: CWC/Planning Commission)

- 8. Kelia Irrigation Project(Gujarat) Estimated Cost: Rs. 284 lakhs.
- 9. Jhuj Irrigation Project(Gujarat) Estimated Cost:Rs.536.3 lakhs.

These projects were considered acceptable subject to the observation that area under wheat should be reduced and the sugarcane area provided/increased correspondingly.

(Action: CWC/Planning Commission)

- 10. Chhapi Irrigation Project(Rajasthan) Estimated Cost: Rs. 590.60 lakhs.
- ¿11. Bilas Irrigation Project(Rajasthan) -Estimated Cost: Rs. 275.20 lakhs.

These projects were found acceptable subject to the following observations:

- i; The design flood should be reviewed after collecting data during the ensuing flood season for estimation on the basis of unit hydrograph method.
- ii) Gauge and discharge observations should be carried out at dam site continuously.

(Action: CWC/Planning Commission

- 12. Ferozepura Storage Scheme (J & K)-Estimated Cost Rs. 1312 lakhs.
- // 13. Varnow Storage Scheme (J & K)-Estimated cost Rs.554 lakhs.

It was observed that the clearance of the Indus Wing of Department of Irrigation from the international angle was yet to be obtained. The project would be put up again after obtaining their clearance.

(Action: C.W.C.)

14. Khuga Irrigation Project(Manipur) - Estimated Cost Rs.1500 lakhs.

The Committee decided that the spillway capacity should be examined by C.W.C. and the project put again for consideration.

(Action: C.W.C.)

- 15. Sankh Irrigation (Maharashtra)-Estimated cost: Rs.352.77 lakhs.
- 16. Mandovi Irrigation Project(Goa)-Estimated Cost Rs. 1310.90 lakhs.
 These projects were found acceptable.

(Action: CWC/Planning Commission)

17. Krishnapuram Reservoir Scheme(Andhra Pradesh) Estimated Cost: Rs.246 lakhs.

The position indicated in the agenda notes was noted.

III. Flood Control Projects:

1. Patna Flood Protection Scheme (Bihar) - Estimated Cost: Rs. 2713 lakhs.

The project was considered acceptable subject to the observation that the growth of the protected area should be regulated so that the drainage of the area is not impeded, as also the growth should conform to the concept of flood plain zoning.

(Action: CWC/Planning Commission)

2. Flood Protection Scheme(Phases I & II) under Ghatal
Master Plan (West Bengal)-Estimated Cost: Rs.4917.22 lakhs.

The project was considered acceptable subject to the following observations:

- i) V.H.F. sets for communication between Kangsabati Dam and the Barrage should be installed for proper operation.
- ii) Bank protection works with rubble pitching would be provided in some vulnerable reaches.
- iii) Soil conservation measures have to be intensified in the area draining into the protected area.

(Action: CWC/Planning Commission.)

List of Officers present in the 13th meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held at 10-30 A.M. on 19th March, 1980 in Shram Shakti Bhavan, New Delhi.

1. Shri C.C. Patel, Secretary, Deptt. of Irrign. - Chairman.

2. Shri S.K. Banerjee, Adviser / Planning Commission.

3. Shri K.M. Maheshwari, Jt. Adviser (Irrign.) - Member-Secy.

Also p-resent:

(I.& CAD)

Deptt. of Irrigation.

- 1. Shri I.P. K-apil-a, Jt. Secy. (I).
- 2. Shri K.V. Rama Rao, Member (I&C).
- 3. Shri K.S.S. Murthy, Adviser (PP).
- 4. Shri S.K. Aggarwal, Dy. Secy. (I).
- 5. Shri P.C. Jain, Dy. Secy. (F).
- 6. Shri G.V. Rao, Under Secy.

Deptt. of Agriculture

Shri G.N. Kathpalia, Jt. Commissioner (WM).

Deptt. of Power

Shri Harish Nayyar, Dy. Secy.

Central Water Commission

- 1. Shri Pritam Singh, Member (F.& Sc.)
- 2. Shri M.G. Padhye, Member (P.& P.)
- 3. Shri K. Ramesha Rao, Chief Engineer (TE).
- 4. Shri H.S. Krishnaswamy, Director (TE.I)
- 5. Shri G.S. Jhakade, Director (TE.II)
- 6. Shri S.N. Chattop-adhyay. Director (Hydrology).

Ganga Flood Control Commission

- 1. Shri N. Sanyal, Member.
- 2. Shri G.S. Narayana Director.

Central Eclectricity Authority

Shri C.V. Sarma, Dy. Director.

Planning Commission

- 1. Shri R.S. Nagaraja, Director (Irrign.)
- 2. Shri N.K. Dikshit, Dy. Adviser (I.& CAD).
- 3. Shri J.N. Nanda, Sr. Research Officer.

10

PLANNING COMMISSION (I&CAD DIVISION)

*..***

Subject: Summary Record of the 13th meeting of the Advisory Committee on Irrigation, Flood Control and, Multipurpose Projects held on 19.3.80 in Shram Shakti Bhavan, New Delhi circulated with Planning Commission circular of even no. dated 3.4.1980.

CORRIGENDUM

In para III (1) and (2) of the Summary Record on page 8.

For "Action: CWC/Planning Commission"

Please read "Action: GFCC/Planning Commission"

(N.K. Dikshit) Dy. Adviser (Irrigation) For Member Secretary

- Shri C.C. Patel, Secretary, Department of Irrigation.
 Dr. K.C. Thomas, Chairman, Central Water Commission,
- Bikaner House, New Delhi.
 3. Shri S.N. Ray, Chairman, Central Electricity Authority, Bikaner House, New Delhi.
- 4. Shri T.R. Satishchandran, Adviser (Energy), Planning Commission.
- 5. Shri S.K.Banerjee, Adviser(I&CAD), Planning Commission.
- 6. Shri D. Shankarguruswami, Jt. Secretary, Plan Finance Div., Ministry of Finance.
- 7. Shri B.M.K. Mattoo, Financial Adviser, Deptt. of Irrigation.
- 8. Shri J.K. Jain, Chairman, Central Groundwater Board, Deptt. of Agriculture.
- 9. Shri P.M. Belliappa, Jt. Secretary, Deptt. of Power.
- 10. Shri Hari Bhushan, Adviser, Technical & Ex-officio, Joint Secretary, Department of Heavy Industry.

Planning Commission Circular No.16(25)(13)/80-I&CAD dt.21.4.1980 Copy to:

Department of Irrigation

- Shri I.P. Kapila, Joint Secretary (I)
- Shri N.L. Shankaran, Jt. Secretary(GB)
 Shri K.V. Rama Rao, Member(JRC).
- 4. Shri K.S.S.Murthy, Adviser (PP).
- 5. Shri S.K. Aggarwal, Dy. Secretary.
- 6. Shri G.V. Rao, Under Secretary.

Ministry of Finance.

1. Shri S. Sampatnarayanan, Director (Plan Finance)

Central Water Commission

- 1. Shri Pritam Singh, Member(F&Sc.)
- 2. Shri M.G. Padhye, Member(P&P)
- 3. Shri K. Ramesh Rao, Chief Engineer(TE).
- 4. Director TE(I)/(II)

5. Director (P&P)

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Department of Agriculture

1. Shri G.N. Kathpalia, Joint Commissioner(WM).

Department of Science (Technology, Technology Bhavan), New Delhi

- 1. Shri S. Venkatesh, Joint Secretary.
- 2. Shri Brij Kishore, Deputy Secretary.

Department of Power

Shri Harish Nayyar, Deputy Secretary,

Ganga Flood Control Commission, Patna.

- 1. Shri R. Ghosh, Chairman.
- 2. Shri N. Sanyal, Member.

Central Electricity Authority.

1. Shri C.V. Sarma, Deputy Director.

PLANNING COMMISSION (I&CAD DIVISION) ****

14th Meeting of the Advisory Committee on Irrigation, Subject: Flood Control and Multi-purpose Projects held on 7.6.80 in Shram Shakti Bhavan, New Delhi.

The Summary Record of the 14th meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 7-6-1980 in Shram Shakti Bhavan, is circulated herewith.

(K.M. Maheshwari) Joint Adviser (I&CAD) Member-Secretary

- 1. Shri C.C. Patel, Secretary, Ministry of Irrigation.
- 2. Shri R. Ghosh, Chairman, Central Water Commission, Bikaner House, New Delhi.
- 3. Shri S.N. Ray, Chairman, Central Electricity Authority, Bikaner House, New Delhi.
- 4. Shri T.R.Satishchandran, Adviser(Energy), Planning Commission.
- 5. Adviser(I&CAD), Planning Commission.
- 6. Shri D. Shankarguruswami, Jt. Secretary, Plan Finance Division, Ministry of Finance.
- 7. Shri B.M.K.Mattoo, Financial Adviser, Ministry of Irrigation. 8. Chairman, Central Groundwater Board, Deptt. of Agriculture.
- 9. Shri P.M. Belliappa, Jt. Secretary, Deptt. of Power.
- 10. Shri Hari Bhushan, Adviser, Technical & Ex-officio, Jt. Secretary, Deptt. of Heavy Industry.

Planning Commission Circular No.16(25)(14)/80-I&CAD Dt.2.7.80

Copy to:

Ministry of Irrigation

- 1. Shri I.P.Kapila, Jt. Secretary(I)
 2. Shri N.L.Shankaran, Jt. Secretary(GB)
- 3. Shri K.V.Rama Rao, Member(JRC)
- 4. Shri K.S.S. Murthy, Adviser(PP)
- 5. Shri G.V. Rao, Under Secretary.

Ministry of Finance

Shri S.Sampatharayanan, Director(Plan Finance)

Central Water Commission

- 1. Shri Pritam Singh, Member (F&Sc.)
- 2. Shri M.G. R. dhye, Member (P&P)
- 3. Shri M.N. Venkatesan, Member(WR)
- 4. Shri K. Ramesh Rao, Chief Engineer (TE)
- 5. Director TE(I)/(II)
- 6. Director (P&P)

Department of Agriculture

Shri G.N.Kathpalia, Joint Commissioner(MM)

Department of Science (Technology, Technology Bhavan), New Delhi.

Shri S. Venkatesh, Joint Secretary.
 Shri Brij Kishore, Deputy Secretary.

(K.M.Maheshwari) Member-Secretary

PLANNING COMMISSION (I&CAD DIVISION)

Summary Record of the 14th Meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects, held on 7th June, 1980 at 3 p.m. in the Ministry of Irrigation, Shram Shakti Bhavan, New Delhi.

Names of the officers who participated in the discussion are given in the enclosed annexure.

The following Projects were considered and the Committee's recommendations are as follows:

- I. Major Irrigation Projects
 - Second Revised Estimate of Pamba Irrigation Project (Kerala)-Estimated cost Rs. 4297 lakhs.

The revised estimated cost was accepted. It was, however, decided that a Committee headed by Member(P&P), Central Water Commission might examine the reasons for increase in the cost in great depth with a view to review the performance of the Scheme.

(Action: CWC/Planning Commission)

 Second Revised Estimate of Periyar Valley Project (Kerala) - Estimated cost Rs.3971.40 lakhs.

The revised estimated cost was accepted.

(Action: CWC/Planning Commission)

3. Second Revised Estimate of Haripura Reservoir Uttar Pradesh)-Estimated cost Rs.691.46 lakhs.

The revised estimated cost was accepted. The Committee, however, desired that the State Govt. should prepare a project for conjunctive use of surface and ground water in the command area and a modernisation project providing lining and send to the Central Water Commission.

(Action: CWC/Planning Commission)

- 4. Revised Estimate of the Western Kosi Canal Project (Bihar) Estimated cost
 - (a) Nepal Portion:

3999.0 lakhs

(b) Indian Portion:

16180.0 lakhs.

Total:

20179.0 lakhs

The revised estimate cost was noted subject to the following observations:

- (i) The State Govt. should provide sufficient funds so as to complete the project by June, 1987.
- (ii) A detailed project report for development of ground water, removal of drainage congestion and command area development should be prepared and submitted to the Central Water Commission and Ministry of Agriculture (Deptt. of Agriculture & Cooperation).
- (iii) The State Govt. should expedite land acquisition so that the progress on the project is not delayed on this account.
 - (iv) In the head reaches of the canal, sufficient pondage should be created for silt exclusion, down stream of the silt ejectors. The deposited silt can be removed during closures of the canal.
 - (v) Embankments should be provided to **protect** the flooded areas in the command.
 - (vi) The areas excluded from the command should be investigated with a view to exploit ground water and for relieving drainage congestion.

(Action: CWC/Planning Commission)

5. Mahi Project(Madhya Pradesh) - Estimated cost Rs. 2551.41

The Committee desired that the State Government should consider the various suggestions/observations from the CWC regarding the project and take special note of the following observations

- (i) Sufficient number of drill holes should be taken up along the spillway to determine the suitability of foundation in consultation with the Teological Survey of India.
- (ii) The location and orientation of spillway should be further examined as suggested by the Central Water Commission. Some pilot cut may also be considered in order to confine the spillway discharge into the specified width of the spill channel.

- (iii) The transmission losses of 33.5% may be reviewed and canal lining proposed where the losses are heavy.
 - (iv) Certificates for the cropping pattern and the yield and rates adopted in the benefit-cost ratio calculations from the State Agriculture Department and concurrence to the project from the State Finance Department are to be furnished.

The cropping pattern proposed should be reviewed with a view to increasing the rabi area.

- (v) The proposals for rehabilitation of the persons to be affected by this project may be formulated keeping in view the contents of the letter No. 27(9)/80-PC, dated 19.5.1980 from the Ministry of Inrigation.
- (vi) The comments, if any, from the Department of Science & Technology on the environmental aspects of the project should be taken into account.

The project, after taking into consideration the CWC suggestions/observations and the above observations, should be modified by the State Government and resubmitted to the Central Water Commission for processing.

(Action: CWC)

0 6. Upper Kangsabati (West Bengal) - estimated cost Rs. 4384 lakhs

The project was considered acceptable subject to the following observations:

- (i) The comments to be made by the Department of Science and Technology should be taken into account before the project is implemented.
- (ii) The State Government should set up a Committee for integrated operation of Upper Kangsabati and Kangsabati Projects.
- (iii) Detailed geological exploration will be carried out before finalising sound rock level at various points.
 - (iv) The spillway design will be checked by model tests.
 - (v) Suitable foundation treatment as suggested by the geologist shall be done in the sheer zone in the left bank of the non-overflow section.
 - (vi) For seismic design IS:1893-1975 shall be followed.

- (vii) Size of foundation gallery will be kept as 1.52/1 x 2.13M(5'x7'). Gallery floor shall be kept at 3 M above the foundation. Porous pipes of 200 nm (8") dia at 3.05 M (10 ft.) centres shall be provided to trap the seepage water from the upstream face of the dam.
- (viii) Suitable adits will be provided.
 - (ix) Requisite laboratory tests on all construction materials will be conducted.
 - (x) The design flood will be reviewed before the final design. For this purpose, the gauge and discharge data at the dam site will be observed during the ensuing mansoon.
- (xi) A detailed review of the water requirements will be made while finalising the modernisation scheme for the existing Kangsabati Project and the water supply as necessary will be augmented by exploiting ground water.

(Action: CWC/Planning Commission)

7. Tangon Valley Project(West Bengal) - Estimated cost Rs. 1360 lakhs.

The project was considered acceptable, subject to the following observations:-

- (i) A gauge and discharge site should be established at the project site immediately for collecting data which will be useful in the operation of the project and also add to the water data in the region.
- (ii) Concurrence of the State Agriculture Department to the cropping pattern, benefit cost ratio etc., should be furnished.
- (iii) The concurrence of the State Finance Department to the project proposals should be furnished.
 - (iv) The provision made for items(corss drainage works, regulators) on lump sum basis should be verified after working out typical detailed estimates. The sources of materials for use in concrete stone pitching etc., should be identified and provision for these materials should be revised suitable. The provision made for dewatering requires to be revised.

- (v) The list of equipment proposed under Spl. T&P may be furnished with justification.
- (vi) Pilot demonstration farms should be set up in the project area for determining the rotational practices in the different seasons.

Secretary(I) agreed to the proposed scheme from the International angle.

(Action:Planning Commission)

8. Bamangola-Habibpur Irrigation Scheme (West Bengal) Estimated cost Rs. 2167.65 lakhs.

The project was found acceptable subject to the following observations:

- (i) The discharge observations of the river Gangarampur should be continued for compiling a record of the water availability for use in the operation of the scheme.
- (ii) The concurrence of the State Agriculture Department and the State Finance Department, should be communicated.
- (iii) The provision made for barrage, regulators, Cross drainage, afflux bunds, flood embankments, roads, bridges and other canal structures should be verified after working out typical detailed estimates. The sources of materials for use in concrete, stone pitching etc., should be identified and provision for its using them should be revised suitably. The provision made for dewatering is required to be revised.
 - (iv) Pilot demonstration farms should be set up in the project area for determining the rotational practices in the different seasons.

(Action: CWC/Planning Commission)

II. Medium Irrigation Projects

 Revised Estimate of Kanupur Canal Scheme (Andhra Pradesh) - Estimated cost Rs. 494.42 lakhs.

The revised cost was noted. It was, however, decided that the State Government should be requested to appoint a Committee to review the benefits from the Scheme to reduce the paddy area and send a report to the Central Water Commission.

(Action: CWC/Planning Commission)

Guhai Irrigation Scheme (Gujarat)
 Estimated cost Rs. 932.82 lakhs.

The project was considered acceptable subject to the following observations:-

- (i) Concurrence of the State Agricultural Department to the yields and the rates adopted for calculation of benefits in working out B.C. ratio would be conveyed by the State Government to the C.W.C.
- (ii) Concurrence: of the State Finance Department for taking up the project would also be conveyed by the State Govt. to the Central Water Commission.
- (iii) The ground water exploration should be be done in the command of the project for conjunctive use of surface and ground water.

(Action: CWC/Planning Commission)

3. Harnav Project Stage-II(Sujarat) Estimated cost Rs.349.36 lakhs.

The project was considered acceptable subject to the following:-

- (i) The concurrence of the State Finance Department for taking up the project should be communicated to the Central Water Commission.
- (ii) The design flood should be reviwed before the final designs are prepared.

(Action: CWC/Planning Commission)

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4. Budhana Nalla Project (Madhya Pradesh) Estimated Cost Rs. 199.58 lakhs.

The Project was found acceptable subject to the following:-

- (i) A gauge station should be set up at the dam site to build up hydrological data.
- (ii) The water rates which are low should be reviewed by the State Government.

(Action: CWC/Planning Commission)

5. Khuga Irrination Project (Manipur) Estimated Lost As. 1900 lakhs.

The Project was found acceptable subject to the following observations:

- (1) The sill level and the size of the gates would be reviewed at the time of detail designs which are proposed to be entrusted to the Central Water Commission.
- (ii) The design flood of 71,580 cusecs should be reviewed by collecting short interpal discharge and rainfall data during the ensuing monsoon for carrying out the flood studies based on unit hydrograph method.

(Action: CWC/ PC)

6. Sawan Bhadon Irrigation Project(Kajasthan)
Estimated cost Rs.418.88 lakhs.

The Project was found acceptable subject to the observation that a gauge and discharge station should be established at the proposed dam site where gauge and discharge observations should be observed at the short intervals during the ensuing monsoon. This data would enable review of the adequacy of the design flood at the time of final designs.

(Action: CWC/Planning Commission)

7. Repairs and Strengthening of Nanak Sagar Dam - Uttar Pradesh - Estimated cost Rs. 332.5 lakhs.

It was observed that the repair works have already been carried out. The causes of failure of NanakSagar Dam during 1967 were examined by a Committee appointed by the Government of Uttar Pradesh. This Committee consisted of Shri A.C. Mitra, Retired Engineer-in-Chief, Shri P.M. Mane, Member (D&R), CWC and Shri Krishnamurari, Chief Engineer, Uttar Pradesh. The Committee suggested remedial measures in batches for execution. Modifications in the pitching of the upstream slope of the dam were subsequently suggested by another Technical Committee consisting of Shri A.C. Mitra, Shri P.M. Mane, Shri Jagdish Prasad, Shri J.P. Jain and Shri O.D. Sharma. The repairs and strengthening as indicated in the CWC note are as recommended by these Committees.

The revised cost was noted.

(Action: CWE/Planning Commission)

ANNEXURE

List of Officers present in the 14th meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held at 3 p.m. on 7th June, 1980 in Shram Shakti Bhavan, New Delhi.

- 1. Shri C.C. Patel, Secretary, Ministry of Irrigation.
- ... Chairman

- 2. Shri B.M. Mattoo, F.A. Ministry of Irrigation
- 3. Shri K.M. Maheshwari, Jt. Adviser(I&CAD), Planning Commission

... Member-Secretary

Also present:

Ministry of Irrigation

- 1. Shri N.L. Shankaran, Jt. Secretary(GB)
- 2. Shri K.V. Rama Rao, Member (JRC)
- 3. Shri G.V.Rac, Under Secretary

Department of Agriculture & Cooperation

1. Shri G.N. Kathpalia, Jt. Commissioner (UM)

Central Water Commission

- 1. Shri M.N. Venkatesan, Member (LR)
- 2. Shri K. Ramesha Rao, Chief Engineer (TE)
- Shri Y,D. Pendse, Director(TE)
- 4. Shri T.S. Murthy, Dy. Director(TE)
- 5. Shri B.B. Vats, Dy. Director (TE)
- 6. Shri A. Narayana Rao, Dy. Director(TE)
- 7. Shri K.J. Raisinghani, Dy. Director (TE)
- 8. Shri D.K. Bablani, Dy. Director(TE)
- 9. Shri S.S. Manocha, Dy. Director(TE)
- 10. Shri M.L. Karwa, Dy. Director (TE)

Planning Commission

- 1. Shri R.S. Nagaraja, Dy. Adviser(Irrigation)
- 2. Shri N.K. Dikshit, Dy. Adviser(Irrigation)
- 3. Shri J.N. Nanda, Sr. Research Officer.

PLANMING COMMISSION (I&CAD DIVISION)

15th Meeting of the Advisory Committee in Irrigation, Subject: Flood Control and Multi-purpose Projects held on 28.11.80 in Shram Shakti Bhavan, New Delhi.

The Summary Record of the 15th Meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose projects held on 28.11.1980 in Shram Shakti Bhavan, is circulated herewith.

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(K.M. Maheshwari) Joint Advisor(I&CAD) & Momber-Secretary

1. Shri C.C.Patel, Secretary, Ministry of Irrigation.

- 2. Shri R. Ghosh, Chairman, Control Water Commission, Sawa Bhavan, R. K. Puram New Dolhi.
- 3. Shri S.N.Ray, Chairman, Central Electricity Authority, Sowa Bhavan, R.K. Puram, New Delhi.
- 4. Shri T.R. Satish Chandran, Adviser(Energy), Planning Commission.

5. Shri K.S.S. Murthy, Advisor(I&CAD), Planning Commission.

- 6. Shri D. Shankarguruswami, Jt. Secretary, Plan Finance Division, Ministry of Finance.
- 7. Shri B.M.K. Mattoo, Financial Adviser, Ministry of Irrigation. 8. Chairman, Contral Groundwater Board, Ministry of Company.

9. Shri P.M. Belliappa, Jt. Secretary, Deptt. of Power. 10. Shri Hari Bhushan, Advisor, Technical & Ex-officio, Joint Secretary, Deptt. of Heavy Industry.

Planming Commission Circular No.16(25)(13)780-1&CAD Dt.: 19.12,1980

Copy to: MINISTRY OF I REIGATION

- 1. Shri I. P. Kapila, Jt. Secretary(I)
- 2. Shri N.L.Shankaran, Jt.Secretary(GB)
- 3. Shri K. V. Rama Rao, Member(JRC).
- 4. Shri G.N.Kathpalia, Chief Engineer(MI)

- 5. Shri A.R. S. Murthy, Dy. Secretary(P.II)
 6. Shri P.G. Jain, Dy. Secretary(F)
 7. Shri T. D. Joshi, Under Secretary(B&T) Shastri Bhavan.

MINISTRY OF PENANCE.

Civi G. Sampahnereyanan, Afrector (Plan Financo)

CENTRAL VALER COMMISSION

- 1. Shri Pritam Singh, Member(D&R)
 2. Shri M.G.Pe Thye, Member(P&F)
 3. Shri K.Ramesh Rao, Chief Engineer(TE)
 4. Birector TE(I)/(II)
- 5. Director (P&P)

DEPARTMENT OF SCIENCE & TECHNOLOGY (TECHNOLOGY BHAVAN)

- 1. Shri S. Vonkatosh, Join's Secretary.
- 2. Shri Brij Kishore, Poputy Socretary.

GANGA FLOOD CONTROL COMMISSION Shri N. Sanyel, Obatrman

> (K.M.Maheshwari) Member - Secretary

PLANNENG COMMESSION (18CAD DEVISION)

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Summary Record of the 15th Meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose projects held on 28,11.80 at 3.30 P.M. in Shram Shakti Bhavan, New Delhi.

The names of Officers present at the Meeting are given in the enclosed Annexure.

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The following projects were considered and the Committee's recommendations are as follows:-

1: A MAJOR I RRIGATION PROJECTS:

- 1. Levi sed Estimate of Pazhassi Irrigation Project (Kerala) Astimated cost 8.4200 lakhs.
- 2. Revised Estimate of Loktak Lift Irrigation Project (Mamipur)
 Estimated cost 85.1686 Lakhs.

The Revised Estimates of these projects were considered acceptable.

(Action: Planning Commission)

The Revised Estimated cost was accepted subject to the following observations:-

- i) The design flood should be estimated after collecting the requisite data and in consultation with the Hydrology Directorate of the Central Water Commission.
- ii) On the basis of the design flood estimated as stated above, the remedial measures should be taken to ensure the safety of the dam. This would enable efficient operation of the gates both manually and by electrical operation and also for making arrangements for flood forecasting.

(Action: GWC/Planning Commission)

0 4. Punasi Reserveir Project (Bihar) - Estimated cost 8.2609 lakhs.

The Project was considered acceptable subject to the following observations:-

that will ascrue as a result of the additional life storage provided, but have not been considered in benefit-cost-ratio calculations.

- ii) The proposals for rehabilitation of the persons affected by the spreacet may be formulated keeping in view the contents of Ministry of Irrigation letter No.27(9)/80-PC dated: 19.5.80.
- iii) Concurrence of the State Finance Department has to be furnished.
- iv) Arragements should be made for planning and implementation of soil conservation measures by the concerned authorities as the catchment conditions warrant them.
- v) Possibility of extending irrigation on the right bank be investigated.
- vi) The clearance from Environmental angle from the Deptt, of Science & Technology has to be obtained.

(Action: GWC/Planning Commission)

5. Construction of Shingoda Barrage Project (U.P.) - Estimated cost & 245 lakhs.

The Project was found acceptable subject to the following observations:

- i) Studies of standard project flood have to be made after collecting requisite data as suggested by CWC.
- ii) No provision has been made in the design of the gates for stor log arrangements. Since the Project has already been advanced to such a stage this cannot be done. It has been agreed to supply details of the gated structure to the CWC for taking remedial measures as required.
- ili) To the exterm possible, the comments of 0.00 relating to the design of the barrage will be kept in view.

(Action: CWC/Planning Commission)

6. Mahi Irrigation Project (M.P.) - Estimated cost R. 2710.46 lakhs.

The freject was considered acceptable, subject to the observation that the clearance from environmental angle is obtained from the Deptt. of Science & Technology.

(Action: CWC/Planning Commission)

7. Modernization of existing channels in Harvana (Phase-I)
- Estimated cost 8:.7414.68 lakhs.

it was stated in the CWC Note that the necessary details for exponention of the Project had not been supplied by Haryana Covernment. Since this is a Vorld Bank assisted Project and sufficient investment has already been made on it, the Committee

took the view that the Project could be considered acceptable subject to the condition that while examining Stage-II of the Project, which is to be proposed for further World Bank Assistance, the details of the entire Canal System under both the stages should be examined by CWG together with the combined benefit cost ratio for both the stages of the Project. The Committee stressed that without acceptance of the Planning Commission, Haryana Modernisation-II shall not be posed to World Bank.

(Action: CWC)

& Rajghat Canal Project (Madhwa Pradesh) .- Estimated cost & 4615 lakha.

It was observed from the GWO Note that the concurrence of the U.P. Government has yet to be obtained for the alignment of the canel for a longth of 45 kms., lying in U.P. Territory. The Committee decided that this matter should be taken up by Ministry of Irrigation with the Betwa Blver Board and the Project re-supprinted for further consideration.

(Action: CWC/Ministry of Irrgn.)

9. Masan Reservoir Project (Bihar) - estimated cost Me.3473 lakhs.

The Project was considered acceptable subject to the following observations:-

- i) At the time of preparation of detailed designs and before actual implementation of the Project the following points would be taken into considerations
 - a) The rumoff and the design flood will be reviewed after collecting more data as suggested by the Central Water Commission.
 - b) The cropping pattern, crop water requirements, etc., will be reviewed based on the detailed soil surveys of the command area.
 - c) The design of the earth dam will be prepared after carrying out the necessary surveys and investigations as suggested by the Central Water Commission and taking into account the relevant Indian Standards.
 - i) The location of the spillway will be decided based on the complete sub-surface exploratory data and relative secomies.
- of the State Finance Department should a communicated.
- iii) The comments of the Department of Science and Technology on environmental aspects should be taken into account and provisions as necessary should be made in the project estimate.

- iv) The proposals for rehabilitation of the persons affected by the project should be formulated keeping in view the contents of latter %.27(9)/80-FC, dated: 19.5.80 from the Ministry of -rrigation, addressed to the State Covernments.
 - v) Soil conservation measures should be planned in the catchment area of the dam to reduce the silt load.

(Action: GWC/Planning Commission)

II: MEDIUM IRRIGATION SCHEMES:

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1. Revised Estimate of Giri Irrigation Project (Himachal Pradesh) - Estimated cost 85.657 lakhs.

The revised estimate was accepted subject to clearance of the schome from the State Finance Department in respect of increase in cost.

(Action: GLC/Planning Commission)

2. Lakhundar Dam Project (Madhya Pradesh) - Estimated cost

The Project was found acceptable subject to the State Covt., exploring the possibility of providing irrigation on the Left Bank of Lakhundar River from this Project.

(Action: GWG/Planming Commission)

3. Mawaipur Lift Irrigation Scheme (Assam) - Estimated cost. Rs. 198.9 lakhs.

The Project was considered acceptable subject to examination by the CSC to locate the pumping site at a higher point upstream of the confluence of the River Kepili with Diyung.

(Action: CWC/Planning Commission)

4. Chir paul Froiset (Madhya Pradesh) - Estimated cost

The Project was found acceptable subject to the following cobservations:

- i) The State Government should set up a gauge station at or near the dam site for review of design flood on the basis of observed data and also to buildup hydrological data which will be useful in the operation of the dam.
 - ii) The water rates which are on the low side should be reviewed.
- iii) Concurrence of the State Sagricultural Deptt. to the assumptions made in the calculation of B.C. Ratio should be obtained and communicated.

(Action: CWC/Planning Commission)

5. Vembekottai Roservoir Project (Ismil Nadu) - Estimated cost No. 365.5 Lakhs.

It was observed that the availability of water assumed in the Project was based on the hydrological data available for only three years. In view of the meagre hydrological data, the Committee decided that the Project may be accepted subject to the irrigated area being reduced from 8,100 acres to 6,000 acres.

(Action: GWC/Planning Commission)

6. Effluent Irrigation Scheme from ON Na Treatment Plant to Monrauli and Najafgarh Blocks of Delhi - Estimated cost Rs,686 lakhs.

The Project was found acceptable subject to the condition that mo large scale urbanisation takes place in the benefitted area up to the year 2000 A.D. as per Delhi Master Plan, and also water rates for commercial crops like vegetables under this Project would be increased. Wheat may not be ecommical.

(Action: ChC/Planning Commission)

7. Manu Irrigation Project (Tripura) - Estimated cost
Rs.818.54 Lakhs.

The Project was considered acceptable subject to the concurrence of the State Finance and Agricultural Depts., being obtained and communicated.

(Action: CWC/Planring Commission)

8. Hadaf Irrigation Scheme (Gujarat) - Estimated cost Rs. 677.64 lakhs.

The Project was found acceptable subject to the following:-

- i) The free board provided i.e., 5.4 m. should be reviewed so as to bring it to the minimum required height.
- ii) The gauge and discharge observations par Hadaf River should be continued about 2 Kms. down-stream of the dam site.

(Action: CLC/Planning Commission)

9. Badanala Irrigadion Project (Orissa) - Estimated cost
Rs.1139.258 lakhs.

The Project was found acceptable subject to the following:-

- i) Water rates which are on the low side should be reviewed.
- ii) The location of the spillway should be finalised in consultation with the JW.

(Action: CWC/Planning Commission)

10. Kasartese Project (M.P) - Estimated cost & 601.6 lakhs.

The Project was found acceptable subject to the following observations:

- i) It has been mentioned by the State Covernment that gauging at the dam site has been commenced since 1979. This should be continued with discharge observations by current meter for:-
 - a) establishing rainfall—Yumff relationship for reviewing water availability with a view to arriving at optimum operational schedule for water utilisation;

b) review of the design flood on the basis of observed short duration ises, hourly gauge data; and

- c) building up hydrological data which will be useful in the operation of the dam.
- ii) Review of the water rates which are on the low side.

(Action: CWG/Planning Commission)

11. Nakti Reservoir Scheme (fi har) - Estimated cost Rs.414.2 lakhs.
The Project was found acceptable.

(Action: Blanning Commission)

- 12. Narihalla Project (Karnataka) Fatinated cost 8.350 Jakha.

 The Project was found acceptable subject to the following:
 - i) The State Government should furnish the cost allocable to the Irrigation and water supply aspects of the Project to the Central Water Commission and Planning Commission.
- ii) The capacity of the canals should be reviewed taking into account the transmission losses of about 50%.

(Action: OWO/Planming Commission)

13. Vamenapuram Terigation Project (Karala) - Estimated cost

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It was observed from the CMC Note that cost per hectare of the gross irrigated area worked out to Rs.28630/- which is considered high compared to other irrigation projects in the region. The Committee, therefore, decided that the estimated cost of the Project should be reviewed in order to bring down the cost and re-submit the Project for further consideration.

(Action: CWC)

14. Natuwaci Irrigation Scheme (Maharashtra) - Estimated cost

The Project was considered acceptable subject to the following observations: -

- i) The estimated yield has to be checked with actual observed data in the catchment or adjacent basin and the irrigation intensity adopted as required. (The reduction in the irrigated area would still give B.C. Ratio of over 1.5).
- ii) An abstract of the latest estimated cost and the revised B.C. Ratio for the latest cost and the benefits adjusted as in (i) above, should be furnished to CNC and P.C.

(Action: CWC/Plenning Commission)

III: FLOOD CONTROL PROJECTS:

- 2 1. Protection works for Kosi Flood Embantments and Afflux bunds (Eihar) Estimated cost & 289.65 lakus.
- 2. Strengthening of embankment and arti-emcion works
 between 3.9 to 35 Kms. in Piprasi-pipraghat Embankments (Bihar)
 Estimated cost Rs. 290.03 lakhs.

Thuse project s were considered acceptable. In the case of Project at 2: above, the Committee desired that the Ganga Flood Control Commission should monitor the progress on the Project properly.

(Action: GFCC/Planning Commission)

A 3. Estimate for Revetment and slope protection works along
Right Bank of river Ganga between Digha to Didargani(Bihar)

- Estimated cost Rs. 155 Lakhs.

Since the Project cost is less than Rs.2 crores, the recommendation of the GPDC should be forwarded to Planning Commission for according necessary acceptance.

(Action: GFJC)

4. Construction of Supplementary Drain(Delhi) - Estimated go at Rs. 2507 lakhs.

Member (Floods), CWC stated that approval of the Sahibi Committee for taking up this Project has already been obtained, although it was stated in the CWC Note that it was still awaited. The Committee decided that the benefit-cost-ratio should be re-examined in consultation with Shri I.P. Kapila, Joint Secretary, Ministry of Irrigation and Shri B.M.K.Mattoo, Financial Adviser, Ministry of Irrigation. The Committee also recommended that Chairman, CWC should give his decision regarding the allocation of cost of the scheme between Lelhi and Haryana.

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List of Officers present in the 15th Meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held at 3.30 P.M. on 28th No vember, 1980 in Shram Shakti Bhavan, New Delhi.

- 1. Shri G.C.Patel. Chai rman Secretary, Ministry of Irrgn.
- 2. Shri R. Ghosh, Chairman, C. W. C.
- 3. Shri B.M.X.Mattoo. Financial Advisor, Ministry of Irrgn.
- 4. Shri K.M. Maheshwari,
 Joint Adviser(I&CAD), Planning Commission. Mam ber-Secv.

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M M STRY OF IRRIGATION

- 1. Shri I.P. Kapila, Jt. Secretary(I)
- 2. Shri N.L. Sharkaran, Jt. Secretary (GB)
 3. Shri K.V. Rama Rao, Mamber (JRC)
- 4. Shri G.N.Kathpalia, Chief Engineer(MI)
 5. Shri A.R.S.Murthy, Dy.Secretary(P.II)
 6. Shri P.G.Jain, Dy. Secretary(F)
 7. Shri T.D.Joshi, Under Secretary(F)

CENTRAL WATER COMMERSION

- 1. Shri M.G.Padbyo, Member(P&P)
- 2. Shri Pri tem Singh, Member (Floods)
- 3. Shri K. Remesh R.o., Chief Engineer (TE)
- 4. Shri M.S.Rso, Director(TEI)
 5. Shri Y.D.Pandse, Director(TE-II)
- S. Shri J.G.Gupta, Dv.Director.
- 7. Shri C.K. Ballani, Dy. Director 8. Shri S.S. Mamocha, Dy. Director
- 9. Shri B.B. Vats, Dy. Director
- 10. Shri M.L. Karva, Dy. Director 11. Shri A. Narayana Rao, Dy. Director.

GANGA FLOOD CONTROL COMMESSION

- 1. Shri NaSanyal, Chairman
- 2. Shri R.P.S. Hr, Extra Asstt. Mirector.

PLANMING COMMISSION

- 1. Shot R.S. Nagaraja, Dy. Mdviser 2. Shri N.K. Dikshit, Dy. Adviser.

PLANTING CONSTISSION (Incad DIVISIO)

16th Meeting of the Advisory Committee in Irrigation, Subject: Flood Control and Multi-purpose Projects held on 28.3.1981 in Shram Shakti Bhavan, New Delhi.

The Summary Record of the 16th Meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 28.3.1981 in Shram Shakti Bhavan, is circulated herewith.

(K.M. Maheshwari Jt. Adviser (I&CAD) & Member-Secretary

Shri C.C.Patel, Secretary, Ministry of Irrigation. 1.

2. Shri R.Chosh, Chairman, Central Water Commission; Sewa Bhavan, R.K.Puram, New Delhi.

з. Shri S.N.Ray, Chairman, Central Electricity Authority, Sewa Bhavan, R.K. Puram, New Delhi.

4. Shri T.R.Soldish Chandran, Adviser (Energy), Planning Commission,

5. Shri K.S.S.Murthy, Advisor(I&CAD), Planning Commission.

- Shri D. Shankarguruswami, Jt Secretary, Plan Finance Division, 6. Ministry of Finance.
- Shri BM K Mattoo, Financial Adviser, Ministry of Irrigation. 7. Chairman, Central Groundwater Board, Ministry of Irrigation. 8.

Jt. Secretary, Deptt. of Power, Ministry of Energy. 9.

Shri Hari Bhushan, Adviser, Technical & Ex-officio, Joint Secretary, Deptt. of Heavy Industry.

Planning Commission Circular No-16(25)(15/01-18 CAD Datod: 22-4.1981

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MINISTRY OF IRRIGATION

Shri I.P.Kapila, Jt.Secretary(I)

2. Shri N.L. Shankaran, Jt. Secretary (GB) 3. Shri K.V.Rama Roo, Member (JRC)

4. Shri G.N.Kathpalia, Chief Engineer(MI) 5. Shri A.R.S. Murthy, Dy. Secretary (P.JI)

6. Shri R.B. Shah, Dy. Secretary (P.I)

7. Shri T.D. Joshi, Under Secretary (B&T) Shastri Bhavan. 8. Shri C.D. Koche, Under Secretary.

MINISTRY OF FIN. N.C.

1. Shri S.Sangatharayanan, Director(Plan Finance)

CENTRAL WITER COMMISSION

- 1. Shri Pritom Singh, Momber (D&R)
- 2. Shri G.M. Vaidya, Momber (F&P)
 3. Shri K.Ramesh Rao, Chief Engineer(TE)
 4. Director TE(I)/(II)
- 5. Director (P&P)

DEPTT, OF ENVIRONMENT (TECHNOLOGY BHAVAN), NEW DELHI.

- 1. Shri N.D.Jayal, Joint Secretary
- 2. Shri Brij Kishore, Deputy Secretary.

GANGA FLOOD CONTROL COMMISSION, Sinchai Bhavan, Patna,

Shri N.Sonyal, Chairman

CENTRAL ELECTRICITY AUTHORITY

Shri G.V.Sarma, Dy.Birector.

(K.M. Moheshword) Member-Secretary

PLANNING COMMISSION (1&CAD DIVISION)

Summary Record of the 16th Meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose projects held on 28.3.1981 at 3P.M. in Sharm Shakti Bhavan, New Delhi.

The names of the Officers present at the Meeting $\psi_{\mathbf{ro}}$ given in the enclosed annexure.

The following projects were considered and the Committee's recommendations are as follows:-

1. MAJOR IRRIGATION PROJECTS:

1. Muvattupuzha Valley Irrigation Project(Kerala)estimated cost %.4808.15 lakhs.

It was observed that the intensity of irrigation proposed under this Project was 224% which was considered very high. The Committee decided that the possibility of extending the command on the right bank should be examined and the Project resubmitted for consideration.

The Project proposes to supply 700 cusecs of water for the News Print Factory at Mutakulam as also 65 cusecs for water suppl to greater Cochin. The Committee considered that the water requirement for the News Print Factory was very high and the possibility of minimising the water use by recirculation should

also be examined. Effluent from the News Print Factory should be properly treated to the standards prescribed by the Deptt. of Environment/I.S.I.

(Action: C.W.C.)

Sri Sail m Ri ht Bank Canal Project(Andhra Pradesh)-estimated cost 6,22022 lakhs.

In the CWC's Note on the Project, it was stated that the total water requirement for the Project is 19 TMC. This would to partly met from 11 TMC of regenerated flow which would be available to the State after 1985-86 (according to the Report of the Krishna Water Disputes Tribunal) and the balance from the saving effected by modernisation of the K.C. Canal system or alternative from the allocation of 45 TMC of the Godavari Waters to be diverted to the Krishna basin. It was further stated that in view of the above undertaking of the State Government conveyed to the Ministry of Irrigation/CWC, it could be considered that no inter-state aspects are involved. In view of this, the availability of 8 TMC of water for the project would depend on the remodelling of K.C.Canal or the completion of Goodvri Diversion Link.

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The approach channel, head regulator, 16.34 km. long main canal upto cross regulator at the tail end(including the cross regulator) are proposed to serve Madras City Water Supply also. According to the CWC Note, no part of the cost of these common works is boing shown as allocable to Madras Water Supply as the details have yet to be worked out. As the entire cost is at present charged to irrigation project (Sri Sailam Right Bank Canal) of Andhra Pradesh, it was clarified by the representatives of the Ministry of Irrigation at the meeting that any clearance given to the Scheme would not attract any inter-state aspects as mentioned in the Agreement dated: 28th October, 1977 amongst the States of Andhra Pradesh, Karnataka, Maharashtra and Tamil Nadu regarding conveying the 15 TMC of Krishna Waters for water supply to Madras City.

After some discussion, the project was considered acceptable subject to the following further observations:-

- (i) The estimate of the balancing reservoir should be properly prepared by conducting detailed contour survey.
- (ii) The materials proposed for construction of the balancing reservoirs should be tested adequately for their engineering properties as well as quantity surveys be carried out. Also foundation studies be carried out.
- iii) Firm advice should be obtained from the Geologist regarding the lime-stone present in the foundation and in the bed of Gorzkallu balancing reservoir and water tightness and the remedial measures if any that have to be taken.
- iv) Length of canal tunnel upstream of the Dwk balancing reservoir and its design should be reviewed.
- v) Reports on command area development and soil survey should be prepared expeditiously.
- vi) Work on the balancing reservoir shouldbe taken up only after the investigations indicated above are completed and the feasibility of the dam is fully established.
- vii) The State Government should take into account the observations of the Deptt. of principmental if any, made at the time of the clearance of the Project from the environmental angle. The proposals for rehabilitation of the persons affected by this Project may be formulated by the State Government keeping in view the contents of the Ministry of Irrigation's letter dated: 19th May, 1980 in this regard.

3. Nandur Madhmashwar Project(Maharashtra) - estimated cost R.7266 lakhs.

The Project was found acceptable subject to the following:

- Cropping pattern proposed under the Project should be revised based on the experience gained in the Jayakwadi Project.
- ii) Discharge observations are to be carried out at each of the reservoir sites and the Nandur Madhmeshwar weir continuously. This is required for carrying out integrated operation of reservoirs. Observations should also be made at short intervals during the flood season for one or two years to check the adequacy of the design flood adopted.
- iii) Further geological investigations and sub surface explorations suggested by the Geologist should be carried out expeditiously for preparation of detailed designs. Percolation tests shouldalso be carried out to determine the nature of foundation treatment.
- iv) The proposals for rehabilitation of the persons affected by the project may be formulated keeping in view the contents of letter No.27(9)/80-PC dated 19th May 1980 from the Ministry of Irrigation.
- V) The utilisation proposed may be reviewed based on the present approach for estimating water requirement as this may give additional benefit in the command of the Nandur Madhmeshwar project.

(Action: EWC/Planning Commission

Samakoi Irrigation Project(Orissa) - estimutated cost %.2635.24 lakhs.

The Project was considered acceptable subject to the following observations:

- 1) Review of the design flood and the design of spillway, based on more observed data.
- ii) Further geological exploration as suggested by the geologist should be completed and final concurrence obtained from the geologist.
- iii) The proposals for rehabilitation of the persons affected by this project, may be formulated keeping in view the contents of the letter No.27(9)/80-PC dated: 19.5.1980 df from the Ministry of Irrigation.

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(iv) The State Government should take into account the comments, if any, of the Department of Environment to be made on this Project before implementation.

(Action: CWC/Planning Commission)

5. Sajnam Dam Project (Uttar Pradesh) - Estimated cost Rs.844 lakhs.

The project was considered acceptable subject to the $C \cdot C \cdot \hat{A}$, being reduced so as to increase the intensity of irrigation to about 70-80 per cent as against 59 per cent proposed.

(ACTION: E.W.C./Planning Commission)

II. MEDIUM PROJECTS

1. Revised Estimate of Khera Canal Project(Uttar Pradesh)-Estimated Cost R.418.667 lakhs.

The revised estimated cost was considered acceptable subject to the approval of the State Finance Department being obtained and communicated by the State Government.

(ACTION: CWC/Planning Commission)

2. Revised Estimate of Som Kagdar Irrigation Project (Rajasthan) - Estimated Cost Rs. 1003.6 lakhs.

∠updating

It was observed that the revised estimate had been prepared based on the 1976 rates and assuming 20% increase in the price level for/the cost. The benefit cost ratio was worked out as 0.65 which is too low. The Committee, therefore, decided that the State Government should modify the Project, with a view to improving the 8.C.Ratio by economising cost and increasing the benefits under the Project.

(Action: CWC)

3. Revised Estimate of Deo Irrigation Scheme (Gujarat)-Estimated cost Rs. 1200 lakhs.

The revised estimated cost was accepted subject to the observation that the State Government should encourage early paddy instead of the late paddy proposed under the project.

(Action:CWC/Planning Commission)

4. Kunwari Lift Irrigation Scheme (Madhya Pradesh)-Estimated cost D. 183.31 lakhs.

The Project was considered acceptable subject to the following observations:-

- Continuation of the hydrological observation at the project site.
- ii) Review of water rates which are on the low side.
- iii)An essurance should be obtained from the M.P. State Electricity Board with regard to the availability of adequate power on commissioning this project.

(Action: CWC/Planning Commission)

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- 5. Demi II Irrigation Scheme(Gujarat)—estimated cost & 537.5 lakhs.
- 6. Aji III Irrigation Scheme(Gujarat)-estimsted cost %.13/3.1 lakhs.
- Aji II Irrigation Scheme (Gujarat)—estimated cost 8.622.3 lakhs.

These projects were considered acceptable. In the case of Demi II the acceptance is subject to coverage of more Ara area under wheat as the Delta proposed is very high.

(Action: CWC/Planning Commission)

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Latratu Reservoir Project(Bihar) - estimated cost %.1098.18 lakhs.

- The project was found acceptable subject to the following:i)The cost of the distribution system was considered low
 and the State Government should review the position and
 send the modified estimate to the Central Water Commission.
- ii)The cost of field channels upto 8/5 hectare block should be included in the project cost according to the guidelines issued by Planning Commission in October, 1979.
- iii) The concurrence of the State Finance Department for taking up the project should be furnished by the State Government.
- iv) The concurrence of the State Agricultural Department to the cropping appattern proposed under the project should be furnished.
 - v)The Committee decided that concurrence of the State

 Electricity Department regarding the proposed utilisation
 on the project unstream of Koel Karo Hydro—Electric Project

is not considered necessary in view of the high priority and non-availability of alternative source of water for irrigation schemes. This decision would apply to similar other irrigation projects in Bihar.

(Action: CWC/Planning Commission)

9. Japkara Reservoir Project(Bihar) - estimated cost %-203.71 lakhs.

The project was found acceptable subject to the following:-

- i)The cost of field channels up to 8/5 hectare block should be included in the project cost according to the guidelines issued by Planning Commission in October, 1979.
- ii)The concurrence of the State Finance Deptt. for taking UP the project should be furnished by the State Government.
- iii)The concurrence of the State Agricultural Department to the cropping pattern proposed under the project should be furnished.

(Action: CWC/Planning Commission)

10. Suru Reservoir Project(8ihar) - estimated cost 6.312.15 lakhs.

The Project was considered acceptable subject to the following observations:-

- i)The cost of the distribution system was considered low.
 The State Sovernment should review the position and send the modified estimate to the Central Water Commission
- ii)Before finalisation of the designs, the following suggestions of the CWC should be taken into considered ation:
 - a)Further exploration in the bed of the river and the banks, and the water percolation tests as suggested by the geologists should be carried out.
 - b)The engineering properties of the micaschist rock and permeability values of the sub-surface should be determined.
 - c) The foundation investigations at the chute spillway site should be carried out.
- iii)The concurrence of the State Finance Department for taking up the project should be furnished by the State Government.

(iv) The concurrence of the State Agricultural Department to the cropping pattern proposed under the project should be furnished.

(Action: CWC/Planning Commission)

Tarlo Reservoir Project(Bihar) - estimated cost B. 573.55 lakhs.

The project was found acceptable subject to the following observations:-

- i) The spillway capacity proposed should be rechecked for its adequacy before finalisation of designs.
- ii) The cost of the distribution system was considered low, The State Government should review the position and send the modified estimate to the Central Water Commission.
- iii)The flows available from the Inter-mediate catchment between the proposed dam and the existing weir should be taken into account and the irrigation increased to the extent possible.
 - iv)The concurrence of the State Finance Department for taking up the pproject should be furnished by the State Government.
 - v) The concurrence of the State Agricultural Department to the cropping pattern proposed under the project should be furnished.

(Action: CWC/Planning Commission)

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Sonua Reservoir Scheme(Bihar)-estimated cost Rs. 892.37 lakhs.

The Project was found acceptable subject to the following observations:-

- i) The concurrence of the State Finance Department for taking up the Project should be furnished by the State Government.
- ii) The concurrence of the State Agricultural Department to the cropping pattern proposed under the project should be furnished.
- iii) The culturable commanded area should be extended or arabi area increased under the project.

(Action: CWC/Planning Commission)

13. Nandini Reservoir Project(Bihar)-estimated cost Rs.447.62 | Lakhs.

The Project was considered acceptable subject to the concurrence by the State Finance Department for taking up the the project and ItateAgricultural Department to the cropping pattern proposed under the project.

(Action: CWC/Planning Commission)

- 14. Kasarsai Irrigation Project(Maharashtra) estimated cost R. 270.00 lakhs.
- 15. Khairi Irrigation Project (Maharashtra) estimated cost Rs. 237. 40 lakhs.
- 16. Wumbhi Lift Irrigation Project(Maharashtra)- estimated cost Rs. 516.00 lakhs.

These projects were considered acceptable. In the case of Kasarsai Irrigation project, the acceptance is subject to consideration of providing lining, if economically found possible.

(Action: CWC/Planning Commission)

17. Andra Reservoir Scheme(Andhra Pradesh) - estimated cost [s.540.14 lakhs.

The Project was considered acceptable subject to the following observations:-

- i) The water losses in the canal system and the crop water requirements assumed under the project should be reviewed.
- ii) The water rates which are on the low side should be raviewed.
- iii)As the delta proposed under the project is very high, the State Government should examine the possibility of increasing the sommand area on both sides of the river.

(Action: CWC/Planning Commission)

18. Jhanjhavathi Reservoir Project(Andhra Pradesh) - estimated cost Rs. 1509 lakhs.

It was observed that the concurrence of the Orissa Covernment to the project proposals of Andhra Pradesh Covt. was still awaited. The Committee decided that the project should be modified by reducing sugarmane upto about 10%

and increasing the command area by about 50%. By increasing the command area, the project would become a major project and should therefore, be resubmitted as such for reconsideration by the Committee.

(Action: CMC)

Neupur Medium Irrigation Project (Maharashtra) - estimated cost N. 189.18 lakhs.

&

Palsi Medium Irrigation Project(Maharashtra) - estimated cost Rs.318.57.

These projects were considered acceptable subject to the reduction of the culturable commanded area by about 20%.

(Action: CWC/Planning Commission)

21. Sindworni Reservoir Project(Bihar) - estimated cost Rs. 445.30 lakhs.

The project was found acceptable subject to the reduction of paddy area during kharif and suitable increase in the rabi area.

(Action: CWC/Planning Commission)

22. Karwappa Nalla Irrigation Project(Maharashtra) - estimated cost Rs. 470.21 lakhs.

Donoargaon Tank Irrigation Project(Maharashtra)estimated cost &. 215.0 lakhs.

These projects were found acceptable. In the case of the scheme at \$1.No.22 above, the acceptance is subject to the reduction of CCA by 25%. In the case of the \$25% Scheme at \$1.No.23 the acceptance is subject to introduction of selective lining under the project to realise the duty proposed.

(Action: CWC/Planning Commission)

24. Khudia Reservoir Project(Bihar) - estimated cost %. 131.60 lakhs.

It was observed that the Project isproposed to firm up the existing irrigation under this or Project by providing storage upstroom of the existing Khudia weir. Since the assured water supply would be available from the project for the existing irrigation, the Committee decided that the existing canal system should be modernised by re-modelling

and and improvement. After modification, the Project would re—submitted to the Committee for further consideration.

(Action : C.W.C.)

III: FLOOD CONTROL PROJECTS

1. Extension of Kumla-Balan Embankment Phase 2 from
Darjic to KotharAm(Biher) — estimated cost

Rs.493.71 lakhs. The project was found acceptable

(Action:Planning Commission)

2. Anti-erosion works and Retired embankments from

0-35 KM in Pipraxi- Pipraghat reach on Right
Bank of the Gandak(Bihar)- estimated cost

Rs.392.67 lakhs.

It was mentioned by Chairman, GFCC that the elignment has been agreed to by a High Level Committee, which has been recommended by C.W.P.R.S., Pune and accepted by the State Governments. The project was considered acceptable.

(Action: Planning Commission)

nnexure

List of Officers present in the 16th Meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held at 3 P.M. on 28th March, 1981 in Shram Shakti Bhavan, New Dalhi.

- 1. Shri C.C.Patel, Secretary, Ministry of Irrgn.
- ... Chairman

- 2. Shri R. Ghosh, Chairman, C.W.C.
- Shri KS.S.Murthy, 3. Adviser (I&CAD), Planning Commission
- 4. Shri B.M.K.Mattoo, Financial Adviser, Ministry of Irrgn.
- ... Member-Secretary 5. Shri K.M.Maheshwari, Jt. Advisor(I&CAD), Planning Commission

Also present

Ministry of Irrigation

- 1. Shri N.L. Shankaran, Jt. Secretary(GB)
 2. Shri G.N. Kathpalia, Chief Engineer(MI)
- 3. Shri A.R.S. Murthy, Dy. Secretary (P.II)
- 4. Shri R.B. Shah, Dy. Secretary (PI)
- 5. Shri T.D.Joshi, Under Secretary(B&T) 6. Shri C.D. Koche, Under Secretary

CENTRAL WATER COMMISSION

- 1. Shri G.M. Vaidya, Member(P&P)
- 2. Shri K.Ramesh Rao, Chief Engineer (T.E)
- 3. Shri M. S. Rao, Director (TEI)
- 4. Shri Y.D. Pandse, Director (TE-II)
- 5. Shri K.K.Agerwal, Dy.Director 6. Shri O.K.Bablani, Dy Director 7. Shri S.S.Manocha, Dy.Director

- 8. Shri B.B. Vats, Dy. Director
- 9. Shri M.L.Karva, Dy.Director
- 10. Shri S.K.Banerjee, Dy.Director

GANGA FLOOD CONTROL COMMISSION

Shri N. Sanyal, Chairman,

CENTRAL ELECTRICITY AUTHORITY

Shri C.W. Sarma, Dy. Director,

PLANNING COMPISSION

- 1. Shri R. S. Nagaraja, Dy. ndviser
- 2. Shri N.K.Dikshit, Dy.Adviser

PLANNING COMMISSION (I&CAD DIVISION)

Subject: 17th Meeting of the Advisory Committee in Irrigation Flood Control and Multi⊸purpose Projects held on 24.7.1981 in Shram Shakti Bhavan, New Delhi.

The Summary Record of the 17th Meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects, held on 24.7.1981 in Shram Shakti-Bhavan. Now DoIhi, in Control.

> (N.K. Dikshit) Dy. Adviser(I&CAD) for Member-Secretary

Shri C.C. Patel, Secretary, Manistry of Irrigation.

Shri R. Ghosh, Chairman, Central Water Commission, Sewa Bhavan, : R.K. Puram, New Delhi.

Shri S.N. Ray, Chairman, Central Electricity Authority, Sewa Bhavan, R.K. Puram, New Delhi.

4. Adviser (Energy), Planning Commission.

Shri K.S.S. Murthy, Adviser (I&CAD), Planning Commission.

Shri D. Shankarguruswami, Jt. Secretary, Plan Finance Division, Ministry of Finance.

Shri B.M.K.Mattoo, Financial Adviser, Ministry of Irrigation. Chairman, Central Groundwater Board, Ministry of Irrigation.

9. Ot. Secretary, Deptt. of Power, Ministry of Energy.

10. Joint Secretary, Deptt. of Heavy Industry.

Planning Commission Circular No. 16(25)(17)/81-1&CAD Dated 29.8.1981

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MINISTRY OF IRRIGATION

Shri I.P. Kapila, Jt. Secretary(I)
 Shri N.L. Shankaran, Jt. Secretary(GB)

3. Shri K.V.Rama Rao, Member(JRC)

4. Shri G.N. Kathpalia, Chief Engineer(MI)

5. Shri A.R.S.Murthy, Dy.Secretary(P.II)
6. Shri P.C. Jain, Dy. Secretary(F)

7. Shri T.D.Joshi, Under Secretary (B&T) Shastri Bhavan.

8. Shri C.D.Koche, Under Secretary.

MINISTRY OF FINANCE

1. Shri S. Sampatharayanan, Director (Plan Finance)

CENTRAL WATER COMMISSION

- Shri Pritam Singh, Member (D&R)
- Shri G.M. Vaidya, Member(P&P)
- Shri K.Ramesh Rao, Chief Engineer (TE)

 Director (P&P) 3.-
- 5.

DEPTT. OF ENVIRONMENT (TECHNOLOGY BHAVAN), NEW DELHI.

- 1. Shri N.D.Jayal, Joint Secretary
- 2. Shri Brij Kishore, Deputy Secretary.

GANGA FLOOD CONTROL COMMISSION, N SINCHAI BHAVAN. PATNA.

- Shri N. Sanyal, Chairman
- Shri N.K. Sarma, Member 2.

DEPARTMENT OF POWER STATE

Shri N.L. Khanna, Dy. Secretary.

(N.K. Dikshit) Dy. Adviser(I&CAD)

for Member Secretary.

PLANNING COMMISSION (1&CAD DIVISION)

.....

Summary Record of the 17th Meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 24.7.1981 at 3 P.M. in Shram Shakti Chavan, New Delhi.

The names of the officers present at the Meeting are given in the enclosed annexure.

The following projects were considered and the Committee's recommendations are as follows:-

I. MULTIPURPOSE PROJECTS:

1. Shahpur Kandi Borrage and Power Plant Schemo(Punjab) - Estimated cost Rs. 12430 lakhs.

It was observed that the Project is essentially a hydropower Project but also provides water for the Ravi Canal
Scheme of Jammu & Kashmir. The power component of the
project is yet to be cleared by the Central Electricity
Authority. After some discussion, the Committee observed as
given below:

- i) The Shahpur Kandi barrage would to implemented in a conrdinated manner with the Their Dam. With this stipulation, the spillway for Shahpur Kandi would be designed for maximum flood discharge passing over the spillway of Their dam.
- ii) Overload capacity may be examined while ordering the generating units so that the full energy potential available in 90% years could be generated.
- iii)Detailed plant and machinery planning will be done by Project Authority and submitted to Central Water Commission for clearance before initiating procurement action.
- iv)The concurrence of J&K Government for the amount to be contributed for the difference in costs between the Ravi Canal taking off from Their Dam and Shahpur Kandi will be obtained and communicated.

- The Project Authority should take into account the observations made from exvironmental angle by the Deptt. of Environment v) at the time of implementation of the project.
- vi) Revised benefit cost ratio of the project should be worked out by the State Government after taking into account the revised estimate of Ravi Canal Project to be prepared by J&K Government.

(Action: CWC/CEA)

2. Revised Estimate of Lakhwar Vyasi Pariojana (U.P.) - Estimated cost 8.25202 lakhs.

It was observed that the revised estimated cost did not provide adequately for the following items:-

i) Rehabilitation of displaced persons.

ii) Soil conservation & afforestation measures in critical areas of the catchment.

iii) Design adequacy for the type of dam proposed.
iv) Sharing of cost between irrigation and power sectors.

It was also observed that the power portion of the project is yet to be examined by the Central Electricity Authority. After some discussion, the Committee decided that the Project modified on the above lines should be put up for fonsideration aqain.

(Action: CWC/CEA)

II. MAJORARRIGATION PROJECTS:

1. Revised Estimate of Tawi Lift Irrigation Scheme (J&K) -Estimated cost Rs.712 lakhs.

The revised estimated cost was considered acceptable subject to the stipulation that project components should restrict utilisation of the waters to within the Chenab Basin.

(Action: CWC/Planning Commission

Puthimari Irrigation Project (Assam) - Estimated Cost 2. Rs. 2582 lakhs.

The Project was considered acceptable subject to the following observations:-

- i)Roview of design flood for the barrage and the major acquaducts on Motonga and Balti after collecting further hydrological data.
- ii) The Canal alignment and the falls on themain canal will be planned keeping in view the generation of hydro-power.

iii) The results of the analysis of sediments and Love hole data at the barrage site will be taken into account in the design of barrage.

The drainage system will be designed for disposal of 3 days iv) storm rainfall of 5 year frequency in 3 period of 7 days.

Concurrence of the State Finance Department for taking up the ν) Project should/be communicated.

The provision made for water courses and field channels upto vi) 5/8 ha. block needs to be reviewed and increased suitably.

vii) The project has to be cleared from the Environmental angle.

(Action: CWC/Deptt.of Engironment/ 'Planning Commission).

3. Muvattpuzha Valley Irrigation Project (Kerala)- Estimated Gost Rs. 4808.15 lakhs.

The Project was considered acceptable subject to the following observations:-

- The design flood would be reviewed after collecting the required data and in consultation with Hydrology Dte., of CWC for providing additional surplusing capacity as necessary.
- ii) The side slopes to be adopted for canal section in reaches other than sound rock will be checked by stability analysis before execution.
- iii)The pressure relief valves will be provided in the lined canals as necessary.
- iv) The State Government will take into account the observations to be made by the Department of Environment on the environmental aspects of the Project.

v) The provision made for drainage in the estimate should be reviewed and increased suitably.

vi) The offLuent from the News Print Factory at Mulakulam should be properly treated so as to make it fit for irrigation use down-stream, in accordance with the standards for effluent 'laid down by ISI and Deptt, of Environment.

(Action CWC/Deptt. of Environment/ P.C.)

III. MEDIUM IRRIGATION SCHEMES:

1. Rangawali River Medium Irrigation Project (Maharashtra) -

Estimated cost & 352.80 lakhs.

2. Amarawati River Medium Irrigation Project (Maharashtra) Estimated cost & 463.12 lakhs.

3. Sonwad Medium Irrigation Project (Maharashtra) - Estimated cost Rs.313.69 lakhs.

These projects were considered acceptable subject to the following:-

i) The intensity of irrigation proposed would need to be reviewed for revising it upwardly, wherever feasible.

ii) The provision made for water courses and field channels up to 5/8 ha. block was on the low side which reeded to be increased.

iii)The design flood would need to be revised taking into account the hourly rainfall in the area. The design flood is likely to be about 40-50% more than theoremsetopted, in these projects.

iv) In the case of Sonwæd project, the provision made for rehabilitation of the population that would be affected by the proposed project, is on the low side and needs to be reviewed by the State Government.

(Action: CWC/Planning Commission)

- 4. Shahanur River Medium Irrigation Project (Maharashtra) -Estimated cost Rs.877.05 lakhs.
 - 5. Koradi Nalla Medium Irrigation Project (Maharashtra) Estimated cost & 379.35 lakhs.
- 6. Borgaon Tank Project (Maharashtra) -Estimated cost & 161.69 lakhs.
- 7. Dehli River Medium Irrigation Project (Maharashtra) Estimated cost & 648.43 lakhs.
 - 8. Bahula River Medium Irrigation Project (Maharashtra) Estimated cost &.591.81.
 - 9. Hivra River Medium Irrigation Project (Maharashtra) Estimated cost & 343.54 lakhs.

These projects were considered acceptable.

(Action: CUC/Planning Commission)

- 10. Madan Tank Medium Irritation Project (Maharashtra) -Estimated cost Rs.308.23 lakhs.
- 11. Anjani River Medium Irrigation Project (Maharashtra) -Estimated cost & 491.22 lakhs.

These projects were found acceptable subject to the observation that the provision made for rehabilitation would need to be reviewed as it was found to be on the low side.

(Action: CWC/Planning Commission)

- 12. Torna River Medium Irrigation Project (Maharashtra)-Estimated cost Rs.146.265 lakhs.
- 13. Mun River Medium Irrigation Project (Maharashtra) Estimated cost R. 534. 77 lakhs.

These projects were considered acceptable.

(Action: CWC/Planning Commission)

- 14. Dakranala Pump Canal Scheme (Phase II) (Gibar) Estimated cost Rs.475.95 lakhs.
 - The Project was found acceptable subject to the following:-
- i) The concurrence of the State Finance Department for taking up this project should be furnished by the State Government to the Central Water Commission and Planning Commission.
- ii) The water rates presently charged are on the low side keeping in view the high operation cost assumed in the Project. The State Government should review the position with a view to realising fully the operation cost by way of water rates.

(Action: CWC/Planning Commission)

15. Kansbahal Medium Irrigation Project (Orissa) - Estimated cost & 539.30 lakhs.

The Project was found acceptable subject to the following:-

- i) Adequate provision should be made in the estimate for construction of water courses and field channels upto 5/8 ha. block.
- ii) The gauge and discharge observations should be continued at the dam site.
- iii) Water rates which are on the low side should be reviewed by the State Government.

(Action: CLC/Planning Commission)

16. Upper Jonk Irrigation Project (Orissa) - Estimated cost R. 1277.73 lakhs.

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The Project was considered acceptable subject to the following:

- i) Provision made for water courses and field channels upto 5/8 ha. block was considered low and wouldneed to be reviewed by the "State Government.
- ii) The cauge and discharge observations at the dam site should be continued for building up hydrological data useful in the operation of the Project.
- iii) Water rates which are on the low side should be reviewed by the State Government.

(Action: CWC/Planning Commission)

17. Bhadar Reservoir Project(Panchmahals) (Gujarat) - Estimated cost & 1311.06 lakhs.

The Project was considered acceptable subject to the followin observations:-

- i) In working out the yield from the catchment, the portion of the catchment in the Gujarat State has only een considered. An additional 10% yield from Rajasthan has been assumed as regeneration. The approval of the Scheme will not, however, give any prescriptive rights to the Gujarat State to the additional water thus utilised till such time the Government of Rajasthan constructs scheme for utilising the waters from their catchment area.
- ii)Provision for additional spillway Bay and ungated waste weir/
 breaching section on the left bank which was agreed to by the
 State representatives with the Central Water Commission should
 by made.
- iii)Since the intensity of irrigation is only 68.5% thepossibility of reducing the CCA to effect economy in the distribution system shouldbe examined by the State Covernment.

(Action: CWC/Planning Commission)

18. 8alh Valley Irrigation Project (H.P.) - Estimated cost 8.302.71 lakhs.

The project was considered acceptable subject to the following:

- i) Approval of the Bhakra and Beas Management Board for variable withdrawals of water from Beas, Sutlej link channel in different months should be obtained by the State Government.
- ii) Water rates which are on the low side should be reviewed by the State Government.

(Action: CWC/Planning Commission)

19. Buti Nala Irrigation Project (Maharashtra) - Estimated cost Rs.882.83 lakhs.

The project was considered acceptable subject to the condition that the State Government should explore the possibility of having some projects upstream to make optimum use of the available water, since the utilisation at the dam site is restricted due to storage limitation.

(Action: CWC/Planning Commission)

20. Pohar Nala Irrigation Project (Maharashtra) - Estimated cost Rs.662.251 lakhs.

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...7/-

The Project was found acceptable subject to the furnishing of the concurrence of the State Agriculture Department to the proposed cropping pattern and water requirement by the State من veriment to the Central Water Commission and Planning Commissi

(Action: CLC/Planning (mmission)

11. Garada Irrination Project (Rajasthān) - Estimate cost Rs. 1021.60 larhs.

The Project was considered acceptable subject to the following: .

The provision for rehabilitation made is low and would need to be reviewed by the State Government.

i) The provisi on made for water courses and field channels upto 5/8 ha. block is also low and needs to be made adequately.

- iii) The concurrence of the State Finance Department should be furnished to the Central Water Commission and Planning Commission.
- iv) The waste weir for the diversion dam should be designed for the flood from its catchment with a coefficient of 1800 in Dicken's formula and the earthen flank should be provided with a free board of at least 2 metres above the computed Maximum Water Level.

(Action: CMC/Planning Commission

22. Kasjor Reservoir Project (Bihar) - Estimated Cost Rs. 866.26 lakhs.

The Project was considered acceptable subject to the following:

i) The concurrence of the State Agriculture Department to the cropping pattern, crop water requirements and crop yield and their price has to be furnished.

ii) The concurrence of the State. Finance Department for taking up the project has to be dommunicated.

iii) The spillway has to be designed to cater for an increased flow from 943 cumecs (33,000 cusecs) to 1133 cumecs (40,000 cusecs).

iv) A minimum free-board of 3 m may be provided for the dam.

v). The state Government should make provision for penstocks in the dam in order to develop hydro power, making use of tailrace waters of Sarbura power-house located upstream of the dam, in consultation with the State Electricity Board.

(Action: CUC/Planning Commission)

23. Upper Sankh Roservoir Project (Bihar) - Estimated cost Rs. 918. 94 lakhs.

...8/-

The Project was found acceptable subject to the following:

i) The concurrence of the State Agriculture Japartment to the cropping pattern, crop water requirements, crop yield and their price shouldbe communicated by the State Government.

ii) Concurrence of the State Revenue Department, to the rate of land acquired should be communicated by the State Government.

iii)The concurrence of the State Finance Department for taking up this Project should be communicated by the State Covernment.

(Action: CLC/Planning Commission)

24. Vaniar Reservoir Project (Tamil Nadu) - Estimated cost & 560 lakhs.

The Project was found acceptable subject to the following:

- i) The State Government should explore the possibility of increasing the CCA, as the yield assumed under the project was considered low.
- ii)Fwll details of the calculation of benefit before and after irrigation which have not been furnished in the Report should be supplied by State Government, to the Central Water Commission.

(Action: CWC/Planning Commission)

25. Ichambadi Anicut (Tamil Nadu) - Estimated cost Rs. 229.53 lakhis.

The Project was considered acceptable subject to the observation that the full details in support of the B.C. Ratio delay:

lations regarding benefits before and after irrigation should be furnished by the State Government to the Central Water Commission.

(Action: CWC/Planning Commission)

IV. FLOOD CONTROL

1. AntiErosion Works on Left Bank of River Gamga (Bihar) Estimated cost [s. 499.72 lakhs.

The Project was considered acceptable.

(Action: Planning Commission)

- 2. Revised estimate of Darbhanga Town Protection works scheme (Bihar) Estimated cost %.314.00 lakhs.
- Revised Estimate of Buxar Koelwar Embankment (Bihar) -Estimated cost Rs. 2628.00 lakhs.

These revised estimates were considered acceptable.

(Action: Planning Commission)

List of Officers present in the 17th Meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purposes Projects held at 3 P.M. on 24th July, 1981 in Shram Shakti Bhavan, New Dalhi.

- 1. Shri C.C. Patel, Secretary, Ministry of Irrigation . Chairmar
- 2. Shri R. Ghosh, Chairman, C.W.C.
- 3. Shri K.M. Məhəshwəri, ..Member-Secretary Joint Adviser(I&CAD), Planning Commission

Also Present

Ministry of Irrigation

- 1. Shri N.L. Shankaran, Jt. Secretary(GB)
- 2. Shri K.V. Rama Rao, Member (JRC)
- 3, Shri I.P. Kapila, Jt. Secy.(I)
 4. Shri G.N. Kathpalia, Chief Engineer(MI)
 5. Shri A.R.S. Murthy, Dy. Secretary(P.II)
- 6. Shri P.C. Jain, Dy. Secretary (F)
- 7. Shri R.S. Saxena, Jt. Commissioner(WM)
- 8. Shri S.K. Aggarwal, Dy. Secy.(I)
- 9. Shri G.B. Johri, Dy. Commissioner (LM)
- 10. Shri T.D. Joshi, Under Secretary(8&T)

CENTRAL WATER COMMISSION

- 1. Shri G.M. Vəidya, Member(P&P)
- 2. Shri K. Ramesh Rao, Chief Engineer(TE)
- Shri M.S. Rao, Director (TEI)

- 4. Shri D.K. Bablani, Dy. Director
 5. Shri S.S. Manocha, Dy. Director
 6. Shri B.B. Vats, Dy. Director
 7. Shri M.L. Karva, Dy. Director
 8. Shri S.K. Banerjee, Dy. Director
- 9, Shri S. Venkata Rao, Dy. Director

GANGA FLOOD CONTROL COMMISSION

- 1. Shri N. Sanyal, Chairman 2. Shri N.K. Sharma, Member

Department of Power Shri N.L. Khanna, Dy. Secy.

- Planning Commission 1. ShriR.S. Nagaraja, Dy. Adviser(Irri.)
 - Shri T.Ramachandran, Dy. Adviser(P&E)
 - 3. Shriw.K. Dikshit, Dy. Adviser(Irri.)

PLANNING COMMISSION (I & CAD DIVISION)

Subject: 18th Meeting of the Advisory Committee in Irrigation Flood Control and Multi-purpose Project held on 23.11.81 & 1.12.81 in Shram Shakti Bhavan, New Delhi.

The Summary Record of the 18th Meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 23.11.81 & 1.12.81 in Shram Shakti Bhavan, New Delhi, is circulated herewith.

> (K.M.MAHESHWARI) JOINT ADVISER (I& CAD) MEMBER-SECRETARY

Shri C.C.Patel, Secretary, Ministry of Irrigation.

2. Shri R.Ghosh, Chairman, Central Water Commission, Sewa Bhavan, R.K.Puram, New Delhi.

3. Shri S.N.Ney, Chairman, Central Electricity Authority, Sewa Bhavan, R.K.Puram, New Delhi.

4. Shri D. Shankraguru Swami, Adviser(Energy), Planning Commission

5. Shri K.S.S.Murthy, Adviser(I&CAD), Planning Commission. 6. Joint Secretary, Plan Finance Division, Ministry of Finance.

7. Shri B.M.K.Mattoo, Financial Adviser, Ministry of Irrigation. 8. Chairman, Central Ground Water Board, Ministry of Irrigation.

9. Jt. Secretary, Deptt. of Power, Ministry of Energy. 10. Joint Secretary, Deptt. of Heavy Industry. 11. Joint Secretary, Department of Environment.

Planning Commission Circular No. 16(25)/18/81-1&CAD dt. 5.1.1982.

Sopy to:

Ministry of Irrigation

Shri B.K.Rac, Addl. Secretary.

Shri K.V.Rama Rao, Jt. Secretary(I)
 Shri N.L.Shankaran, Jt. Secretary(GB)
 Shri R.Rangachari, Member(JRC)
 Shri R.S.Saksena, Jt. Commissioner(LM)

5. Shri S.K.Aggarwala, Dy.Secretary.

7. Shri R.B. Shah, Dy. Secretary.

8. Shri T.D.Joshi, Under-Secretary.

Ministry of Finance(Plan Finance Division)

Shri Krishna Kumar, Dy. Secretary.

Central Water Commission

- Shri Pritam Singh, Member(0&R)
 Shri G.M. Gzidya, Member(P&P)
 Shri S.N.Chattopadhyay, Chief Engineer(TE)
 Director TE(I)/(II)
 Director (P&P)

Department of Environment (Technology Bhavan), New Delhi.

- 1. Dr. Maudgil, Principal Scientific Officer.
- 2. Shri Brij Kishore, Deputy Secretary.

Ganga Flood Control Commission, Sinchai Bhavan, Patna(Bihar)

- 1. Shri N. Sanyal, Chairman
- 2. Shri N.K.Sarma, Member.

Department of Power

Shri N.L. Khanna, Dy. Secretary.

(K.M.MAHESHLARI) JOINT ADVISER(I& CAD) MEMBER-SECRETARY.

PLANNING COMMISSION (I & CAD DIVISION)

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Summary Record of the 18th Meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 23:11.81 and 1.12.81 in Shram Shakti Bhavan, New Delhi.

Names of the Officers present at the Meeting are given in the enclosed Annexure.

The following Projects were considered and the Committee's Recommendations are as follows:

I. MULTIPURPOSE PROJECTS

1. Subernarekha Multipurpose Project (Bihar) - Estimated Cost Rs. 48090 lakhs.

The Project was discussed at length and the Committee desired that the Project Report should be modified taking into consideration the following observations:--

- i) Since the Project is in the pipeline for the World
 Bank assistance, a combined Project for both Bihar
 and Orissa, should be prepared and the sharing of cost
 among the participating States should be agreed to
 by the States concerned.
- ii) The intensity of irrigation assumed in the Project as considered high and therefore, the possibility of increasing the CCA should be explored.
- iii) The concurrence of the concerned Deptt/Agencies for Industrial water supply should be obtained.
- iv) The concurrence of the State Finance Department for taking up the Project should be furnished.
- v) The concurrence of the State Agricultural Department to the cropping pattern, crop water requirements, crop yields and crop rates has to be furnished.

- vi) The data on the silt load in the Subernarekha River should be gone into and the design of the Dam be finalised in consultation with the CWC on the basis of up-to-date data.
- vii) Other observations made by the Central Water Commission, should also be taken into account in revising the Project.

(Action: OWC)

2. Shahpur Kandi Barrage and Power Plant Scheme (Punjab) - estimated cost Rs. 12430 lakhs.

In the CWC Note, it was stated that the Shahpur Kandi Barrage would be implemented with the Thein Dam Project and this was necessary for the economical design of spillway of Shahpur Kandi Bærrage and also from possible siltation consideration at Shahpur Kandi, if it was implemented earlier than Thein Dam. The consideration of this Project was postponed as the Thein Dam Project is yet to be approved by Planning Commission for want of an Agreement on shaming power benefits therefrom.

(Action: CWC)

3. Revised estimate of Lakhwar Vyasi Project(U.P.) - estimated Cost Rs. 27642 lakhs.

It was observed that the additional irrigation benefits envisaged under the Project seemed to be on the high side compared to the live storage and commitments of the run of the river for existing uses. The Committee, therefore, decided that the Contral Water Commission and the Water Management Division of the Ministry of Irrigation should re-examine the irrigation benefits.

(Action: CWC/W.M.Div. of M/o Irrigation)

II. MAJOR IRRIGATION PROJECTS

1. Kanhar Irrigation Project (U.P.) - estimated cost & 3946.93

It was observed from the CWC Note that the concurrence from the States of Bihar & Madhya Pradesh to the submergence in their territory was yet to be received from these States. The Committee, therefore, decided that the Project should be put up at a subsequent meeting after obtaining the concurrence of Madhya Pradesh and Bihar in this regard. The concurrence of the State Finance Department may also be obtained before reconsideration of the Project by the Committee.

(Action: CWC)

2. Lower Dudhna Project(Maharashtra) - estimated cost Rs.5320.66 lakhs.

The Project was considered acceptable subject to the following observations:-

- i) The free board to be provided in the Dam should be at least about 3 metres.
- ii) The Irrigation intensity should be reduced by exploring the possibility of extending the canal command.
- iii) Design flood should be reviewed after preparing suitable unit hydrographs for the dam site on the basis of hourly gauges at the site.
- iv) To adjudge the performance of reservoir, working tables may be prepared for 35 years.
- v) Detailed soil survey of the command may be carried out concurrently with the project construction.
- vi) Under-drainage arrangements shall be provided below lining in conformity to CBIP technical report No.14 IS 4558.
- vii) Specific concurrence from the State Finance Deptt. for

modified cost shall be obtained and reported to the Central Water Commission and Planning Commission.

(Action: CwC/Planning Commission)

3. Revised astimated of Bardikardi Irrigation Scheme (Assam)astimate cost R. 1487.88 lakhs.

The Project was considered acceptable subject to the following observations:-

- i) The concurrence of the State Finance Department to the revised estimate should be obtained and communicated.
- ii)The approval of the Agricultural Department for the crop yields and rates should be obtained and communicated.
- iii) It should be varified whether command area required protection from floods and if so, suitable provision be made accordingly in the Project estimate.

(Action:CWC/Planning Commission)

4. Modernisation of Existing Channels in Haryana (Phase-I&II)
- Estimated Cost Phase-I:Rs.7711 lakhs & Phase-II Rs.8978 lakhs

The Project was considered acceptable subject to the observation that the clearance of this Project should not imply to give any new prescriptive right to the State with regard to the water utilised in both the systems.

(Action: CLC/Planning Commission)

5. Siktie Barrage Project(Ajoy) (Bihar)-estimated cost Rs. 6603 lakhs.

The Committee decided that the Project should be recast taking into consideration the following observations:—

- i) The intensity of Kharif Irrigation assumed in the Project was high and should/be reduced to about 90% maximum.
- ii) The water evailability under this Project should be examined by Member(P&P), Central Water Commission in conjunction with the upstream storages contemplated on the Ajoy River.

(Action: CWC)5/-

6. Revised estimate of Selauli Irrigation Project - (Goe) - Estimated Cost Rs. 3529.05 lakhs.

It was ob. rold that the Ravisud estimated cost of certain items of works were very high compared to the original senctioned estimate. The Committee, therefore, decided that Member(P&P), Central Water Commission should go into the itemwise estimated cost taking into consideration the latest/tendered rates and quantities.

(Action: CWC)

7. Revised estimate of Potteru Irrigetion Project(Orissa) - estimated cost & 5841.61 lakhs.

The Project was considered acceptable. Before according acceptance of the Scheme, the State Government whould be requested to intimate the decision taken by the State Cabinot regarding revision of water rates which was reported to be under consideration.

(Action: CWC/Planning Commission)

8. Revised estimate of the Phulwars Reservoir Scheme(Biher) - estimated cost Rs. 2156 lakhs.

The Committee decided that the Project shouldbe recast taking into account the following:-

- i) The area proposed to be irrigated seemed to be high and should be looked into by Central Water Commission.
- ii) The paddy area shouldbe restricted to achieve the designation.

(Action: CWC)

III: MEDIUM IRRIGATION PROJECTS:

1. Surangi Roservoir Scheme(Bihar) - estimated cost Rs. 214.85 lakhs.

The Project was considered acceptable subject to the following observations:-

- i) Intensity of irrigation in the rabi season should be increased to about 35% in good year of rainfall.
- ii)The concurrence of State Agriculture Department to the

Crop water requirements has to be furnished.

- iii) The concurrance of the State Finance Japantaent for taking up the Project has to be communicated.
- iv) A minimum frac-board of 3 matres may be provided for the dom.
- v) If the spillway foundation is located in good strata, prosent arrangement may stand. With proper planning and better management, thiscon by restricted to a reasonable limit. In that case the 8.C.ratio may become slightly less; but as the project is situated in a tribal area, /even this may be allowed,/if there is a chance of the cost of actual construction exceeding the present estimated cost.

(Action: CWC/Planning Commission)

- Sukli Project(Rojesthon) estimated cost Rs. 548.75 lakhs. The Project was considered acceptable subject to the a following:
 - i) The concurrence of the State Finance Department for taking up the project has to be obtained and furnished.
 - ii) The need for ecquisition of the land up to MWL may be considered.
 - iii) The designed spillway espacity was too low and would need to be rechecked by Central Water Commission.

(Action: CLC/Planning Commission)

Rovised estimate of Koil Lift Irrigation Scheme (J&K) ustimated cost Rs. 556 lakhs.

The Project was considered acceptable subject to the followino:-

- i) The duties assumed in the Project are law. The command eres should/be increased and the lift of water be reduced.
- ii) The provision for field channels in the Project estimate should be increased.

(Action: CWC/Planning Commission,

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- 4. Remrekha Resurvoir Project(Bihar) estimated cost & 686 lakhs.

 The Committee decided that the Project should be revised taking into recount the following observations:
 - i) If the concurrence of the Madhya Pradesh Government to utilise the water from their catchments cannot be obtained, the yield from the catchments within the Sihar Territory should only be considered for working out the water availability.
 - ii) The concurrence of the State Agriculture Department to crop water requirement has to be furnished.
 - iii) The concurrence of the State Finance Department for taking up the project has to be communicated.
 - iv) A minimum of free-board of 3 metre may be provided for the dam.

(Action: CWC)

5. Revised estimate of strengthening of Sardasagar Dam(U.P.) - estimated cost Rs. 648.84 lakhs.

The Project was considered acceptable subject to the observation that the Reservoir should be filled up gradually ever a period of 2-3 years keeping a close watch on the effect of such filling from year to year.

(Action: CWE/Planning Commission

- 6. Deverjen Medium Irrigation Project(Maharashtra) estimated cost & 152.65 lakhs.
- 7. Rui Medium Irrigation Project (Maharashtra) → estimated cost Rs. 178.18 lakhs.

These Projects were considered acceptable. In respect of Devarjan Project, the acceptance is subject to the observation that the B.C.Ratio absuld be nevisedlen the basis of reduced ECA as the duties assumed in the Project were considered high. The revised B.E.Ratio calculations should be furnished by the State Government to the Central Water Commission and Planning Commission.

(Action: CWC/Planning Commission)

8. Revised estimate of Tral Lift Irrigation Schome (J&K) - estimated cost & 1491.50 lakhs.

The Committee decided that the cropping pattern proposed under the Project should be examined by an agronomist.

(Action : CWC)

 Revised Estimate of Rajpora Lift Irrigation Scheme(J&K) estimated cost As. 846 Jakhs.

Since the revised cost is too high compared to the original sanctioned cost, the Committee decided that the revised estimate should be carefully examined by a Committee under the Central Water Commission. The concurrence of the State Finance Deptt. should be obtained and communicated.

(Action: CWC)

10. Bandia Walla Irrigation Project (Madhya Pradesh) - estimated cost %. 180.05 lakhs.

The Project was considered acceptable subject to the observation that the area proposed to be irrigated which was considered large should be reduced to about 4,500 acres and the revised 6.C.Ratio workerout accordingly. The revised B.C.Ratio calculations should be sent to the Central Water Commission and the Planning Commission.

(Action: CWC/Planning Commission)

11. Kanhargeon Tank Irrigation Project(Madhya Pradesh) - estimated cost %, 522.27 lakhs,

The Project was considered acceptable subject to the observation that the Irrigation should be restricted to only 8 months in the year and cropping pattern particularly sugarcane area should be modified accordingly.

(Action: CWC/Planning Commission)

12. Revised Estimate of Lucen Irrigation Project (Rejesthen) - patimet d cost (. 550 lokhs.

The Project was considered acceptable.

(Action: CMC/Flanning Commission)

13. Baski Irrigation-cum-Water Supply Project(Bihar) - estimated cost &. 1302 lakhs.

The Committee decided that the Project should be re-examined taking into account the following observations:-

- i) The Sharing of cost by Heavy Engineering Corporation for industrial water supply should be decided and consent of HEC obtained. The reliability for industrial water supply should be taken as 95%.
- ii) The concurrence of the State Agriculture Department to the crop water requirements and the cropping pattern has to be furnished.
- iii) The concurrence of the State Finance Department for taking up the project has to be furnished.
- iv) The free-board should be increased by one metre.
 - v) Cost estimate should be revised taking into account the increased storage to be provided for industrial water supply.

(Action: CWC)

14. Rongai Valley Irrigation Project(Meghalaya) - estimate coet Rs. 420.21 lakhs.

It was observed that the intensity of irrigation assumed in the Project was very high. The Committee decided that a team from the Central Water Commission should visit the Project and give a Report after examining the adequacy of the foundation investigations for the barrage and the details of the command area etc.

(Action: CLC)

- 15. Panzan Irrigation Project(Maharachtra) estimated cost 8. 250.11 lakhs.
- 16. Parwan Lift Irrigation Scheme(Rajasthan) astimated cost Rs. 379.00 lakhs.

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17. Vamanapuram Irrigation Project(Kerala) - estimated cost Rs. 3640 lakas.

Consideration of these Projects (S1. 15,16 & 17) was postponed to the next meeting.

IV: FLOOD CONTROL:

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1. Tamluk Drainage Scheme in the Distt. of Midnagore (West Bengal) - estimated cost Rs. 848 lakhs.

The Project was considered acceptable.

(Action: GFCC/Planning Commission)

List of Officers present at the 18th meating of the Advisory Committee on Irrigation, Flood Control and Multi-purpose projects held in Whosm Chakti Shavan on 23.11.1981 and 1,12,81,

Shri C.C. Patal, Socretary Chairman Ministry of Irrigation.

Shri K.S.S.Murthy, Advisor(1&CAD)P.C. 2.

Shri B.M.K.Mattoo, F.A. Ministry of Irrigation.

Shri K.M. Maheshwari, Joint Adviser (I&CAD)...Member Secretary Planning Commission.

Also present

MINISTRY OF IRRIGATION

1. Shri B.K.Rao, Addl. Secretary.

2. Shri K.V.Rama Rao, Jt. Secretary(I)

3. Shri N.L.Shankaran, Jt. Secretary(GB)
4. Shri R.Rangachari, Member(JRC)
5. Shri R.S. Saksena, Jt. Commissioner(WM)
6. Shri S.K. Aggarwala, Dy. Secretary.

7. Shri R.B.Shāh, Dy. Secretary.

8. Shri T.D.Joshi, Under-Secretary.

MINISTRY OF FINANCE (PLAN FINANCE DIVISION)

Shri Krishna Kumar, Dy. Secretary.

CENTROL WATER COMMISSION

Shri Pritam Singh, Member(D&R)

2. Shri G.M. Vaidya, Member(P&P)

3. Shri 5.N.Chattopadhyay, Chief Engineer (TE)

4. Shri M.G. Sadapandam, Chief Engineer (PPC)

5. Shri M.S.Rao, Director(TEI)

6. Shri B.B.Karjagi, Director(TEII)

PLANNING COMMISSION

1. Shri R.S. Nagaraja, Dy. Adviser

2. Shri N.K.Dikshit, Dy. Adviser

CENTRAL ELECTRICITY AUTHORITY

1. Shri C.V. Sarma, Dy. Director.

HLANNING COMMISSION (I & CAD DIVISION) 计分类计

Subject: 19th Meeting of the Advisory Committee in Irrigation Flood Control and Multi-purpose Project held on 3.3.1982 in Shram Shakti Bhavan. New Delhi.

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The Summary Record of the 19th Meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Project held on 3.3.1982 in Shram Shakti Bhavan, New Delhi, is circulated herewith.

> (N.K. DIKSHIT) DEFUTY ADVISER (18:CAD) For MEMBER - SECRETARY

1. Shri C.C. Patel, Secretary, Ministry of Irrigation.

- Shri R. Ghosh, Chairman, Central Water Commission, Sawa Bhavan, R.K. Puram, New Delhi.
- Shri S.N. Ray, Chairman, Central Electricity Authority, Sewa Hhavan, R.K. Puram, New Delhi.
- Shri D. Shankraguru Swami, Adviser (Energy), Flanning Commission.
- Shri K.S.S. Murthy, Adviser (I&CAD), Planning Commission.
- Joint Secretary, Plan Finance Division, Ministry of Finance.
- Shri B.M.K. Mattoo, Financial Adviser, Ministry of Irrigation.
 Chairman, Central Ground Water Board, Ministry of Irrigation.
- Joint Secretary, Deptt. of Power, Ministry of Energy.
- 10. Joint Secretary, Deptt. of Heavy Industry. 11. Joint Secretary, Department of Environment.

Planning Commission Circular No.16(25)/19/82-J&CAD dated 16.3.1982.

Copy to:

Ministry of Irrigation

- Shri B.K. Rao, Addl. Secretary.
- Shri P.K. Acharya, Adviser.
- Shri R. Rangachari, Member(JEC)
- Shri S.K. Aggarwala, Commissioner, Indus Water. Shri R.S. Saksena, Jt. Commissioner(WM)
- Shri A.R.S. Murthy, Dy. Secretary.
- Shri P.C. Jain, Dy. Secretary.
- Shri T.D. Joshi, Under-Secretary.

Central Water Commission

- Shri Pritam Singh, Member (DER)
- Shri G.M. Vaidya, Member (REP)
- Shri Gurucharan Singh, Member(Floods)
- Shri S.N. Chattopadhyay, Chief Engineer(TE)
- Director TE(I)/(II) V
- Director (F&P) Director (FO II)

Department of Environment (Technology Bhavan), New Delhi,

- 1. Dr. Maudgil, Principal Scientific Officer. 2. Shri Brij Kishore, Deputy Secretary,

Ganga Flood Control Commission, Sinchai Bhavan, Patna (Bihar)

Shri N , Sanyal, Chairman.

Department of Power

Shri H.C. Kachhwaha, Director,

(N.K. DIKSHIT)

DEFUTY ADVISER (I&CAD) for MEMBER - SECRET ARY.

PLATING OF WIUSION)

Summary Record of the 19th Masting of the Advisory Committee on Irrigation, Flood Gertesl and Multipurpose Projects held on 3.8.1982 in Saram Shakti Bhavan, New Delhi.

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Names of the Officers present at the Meeting are given in the

It the outset, Adviser (I&CAD), Planning Commission mentioned that in view of the constraint of resources there are very little possibilities of taking up new projects in a number of States. He, therefore, suggested that the efforts of the CWC may be concentrated on examination of unapproved on-going major and medium irrigation projects, a list of which prepared in Planning Commission was handed over to the Chief Engineer (TE), Central Water Commission.

(Action: CWC)

The following projects were considered and the Committee's recommendations are as follows:-

I. MULTIPUPPOSE PROJECTS:

1. Suberm ekha Multipurpose Project(Orissa) - estimated cost

It was observed from the CWC Note that the sharing of cost of committees and with sproject were worked out on a tentative basis which was yet to be concurred in by the States of Bihar, Orissa and Wash Bengal. After some discussion, the Committee decided that Member (Pop). Gentral Satur Commission should call an inter-state meeting with the representatives of the concerned States to discuss the allocation of cost among the vertices States, as also for the different uses of water i.e., irrelation, power, flood control, water supply and industrial use. Representatives of the concerned Ministries of the Government of India, as also of the I & CAD Division, Power and Energy Division,

Water Supply Division and Industry Division of the Planning Commission would be requested to participate in the meeting.

The Representative of the Central Water Commission stated that the Orissa Government wanted the Centra to bear the entire cost of flood control component of the Project. Since flood control is a state subject, the Committee decided that the State Government should bear the entire cost of flood control also. With regard to the preparation of a report on the CAD component under the Project, it was agreed that this report would be prepared within the next five years, as it will take some time for creation of irrigation potential on this Project.

(Action: CWC)

 Bagmati Irrigation and Flood Control Project(Bihar) - estimated cost Rs. 18570 lakhs.

It was observed that the concurrence of the State Finance Deptt., was yet to be received. It was stated by the CWC Representative that this concurrence has since been received by them. It was decided that CWC would communicate the same to Planning Commission.

(Action: CWC)

It was observed that Bagmati Irrigation Project estimated to cost
Rs. 578 lakhs and Bagmati Flood Control Project estimated to cost Rs. 654

Lakhs were approved by Planning Commission in 1970. After some discussion,
the Project was considered acceptable subject to the following observations:-

i) The project is planned for not more than 60 percent of the water available at 75 percent dependability, and that irrigation intensities may be so fixed as to permit full use of ground water available. Irrigation intensity for surface water may not be more than 100 percent.

- ii) It is stated that during high flood stages of the river 50,000 cuseds would flow through the off-take point of Belwadher.

 **The point may be tested in a hydraulic model if needed.
- iii) The final design of the barrage will be based on the model test before execution is taken up.
- iv) At the time of detailed design of gates, provision for suitable free board may be made.
- v) The presence release valves shall be provided in the canals lining as per relevant I.S. Specifications.
- vi) As the ground water level in the command area is very high,
 suitable remedial measures shall be taken by the State Government
 in consultation with the Central Ground Water Board, to mak
 mitigate the possible adverse effect in past-irrigation condition.
- vii) The ground water availability within the command of the project has to be worked out more realistically. Thereafter, the number of tubewells required for conjunctive use may be determined taking into account those already available in the command area and realistic provision for the additional tubewells made in the estimate.
- India in consultation with HMG, Nepal to prevent the avulsion of Bagmeti River into Monusmara river lest the project as prepared may be rendered ineffective.
 - ix) A confirmation has to be obtained from the Bihar State

 Electricity Reard that the electric power would be made

 available for the project tubewells and furnished.

X) The provision of the tubewells in the project will be subject to the approval of the Central Ground Water Board.

(Action: Planning Commission)

II. MAJOR IRRIGATION PROJECTS:

1. Second Revised Estimate of Kuttiadi Irrigation Project (Kerala)
-- estimated on the 4484.75 lakhs.

It was observed that the concurrence of the State Finance Department to the Revised Estimate was still awaited. It was decided that the CWC would obtain the concurrence of the State Finance Department and communicate to Planning Commission.

(Action: CWC)

The Project was considered acceptable subject to the observation that the cropping pattern proposed under this Project would be diversified on the pattern of that proposed under Kallada Irrigation Project in the State. The Planning Commission would process the acceptance of the Scheme after receipt of the concurrence of the State Finance Department as mentioned above.

(Action: Planning Commission)

2. Kanhar Irrigation Project (U.P.) - estimated cost Rs. 8946.93 lakhs.

It was observed that the cost of the Dam was high compared to the total water utilisation of 0.15 MAF proposed under the Project. The Committee, a therefore, decided that the CMC should scrutinise cost of the Dam with a view to reduce it by allowing for minimum submergence under the Project. The accommence of State Finance is also awaited.

(Action: CWC)

3. Revised Estimate of Salauli Irrigation Project(Goa) - estimated cost No. 3529.03 Lakhs.

The Revised Estimated cost was considered acceptable subject to the observation that the Government of Goa, Daman and Diu should set up a Special Committee of the various Departments including the Legal Department of the Union Territory to determine the procedure for fixing the minimum compensation for submerged area including certain mines which seem to have been fully exploited.

(Action: CWC/Planning Commission)

III: MEDIUM IRRIGATION PROJECTS:

1. Panzan Irrigation Project(Maharashtra) - estimated cost Rs. 250.11 lakhs.

It was observed that the spillway capacity provided under the Project was considered very high. +The Project was, however, considered acceptable subject to the design flood and spillway capacity being reviewed by the State Government.

(Action: CWC/Planning Commission)

2. Parwan Lift Irrigation Scheme(Rajasthan) - estimated cost

The Project was considered acceptable subject to the observation that the location of the pumping station should be reviewed in consultation with the Central Water & Power Research Station, Pune in order to provide suitable protection works at the pumping site.

(Action: CWC/Planning Commission)

3. Vamanapuram Irrigation Project (Kerala) - estimated cost Rs. 3640.00 lakhs.

Since the concurrence of the State Finance Department was yet to be received, it was decided that the CWC would obtain the same from the State Government and communicate to the Planning Commission.

(Action: CWC)

The Project was considered acceptable subject to the following observations:

- i) The Project Authorities have agreed to review the design flood by rational method before taking up the detailed designs.
- ii) The Project construction pariod should be reduced from 8 years to 5 years in order to keep down the cost of the Project.
- iii) The proposal for rehabilitation of the oustees may be formulated keeping in view the contents of letter No. 27(91)/80-PC dated:

 19.5.1980 of the Ministry of Irrigation.
- iv) The concurrence of the State Revenue Department to the rates for acquisition of land should be obtained.

The Planning Commission would process the Scheme for acceptance after the concurrence of the State Finance Department is communicated by CWC.

(Action: Flanning Commission)

4. Mazam Irrigation Project (Gujarat) - estimated cost & 1099.75 lakhs.

The Project was considered acceptable.

(Action: CWC/Planning Commission)

5. Revised Estimate of Impart Barrage (Manipur) - estimated cost Ma. 462, A Lakara

Since the concurrence of the State Finance Department was still to be obtained, it was decided that the CVC would obtain and communicate the errs to the Planting Colomission.

(Action: CWC)

The Project was considered acceptable. The Flanning Commission would process this Scheme for acceptance, after receipt of the concurrence of the State Finance Department.

(Action: Planning Commission)

6. Umaria Irrigation Project (Gujarat) restimated cost Rs. 282. 319 lakhs.

It was observed that the water allowance provided for crops such as gram, cotton and vegetables was considered very high. Since the Project benefits backward and drought prone area, the Committee felt that the paddy area proposed under the Project should be reduced and the area under the dry crops should be increased correspondingly. After modification of the project on the above lines, it would be put up again for consideration of the Committee.

(Action: CMC)

endone

- 7. Barni Irrigation Project (Rajasthan) estimated cost Rs. 525.38 lakhs.
 - 8. Lhasi Irrigation Project (Rajasthan) estimated cost Rs. 544.86 Lakhs.

Since the concurrence of the State Finance Department, had not been received, it was decided that the CWC would obtain this from the State Government and communicate to the Planning Commission.

(Action: CWC)

These projects were ensidered acceptable. The Planning Commission would process the acceptance of the Schemes after receipt of the encurrence of the State Finance Department.

(Action: Planning Commission)

9. Kelavarapalli Reservoir Scheme (Tamil Nadu) - estimated oost Rs. 551.5 lakks.

The Project was considered acceptable.

(Action: CWC/Planning Commission)

10. Ajgaibinath Pump Canal Scheme(Bihar) - estimated cost

Since the concurrence of the State Finance Department had not been received, in this decided that the CVC would obtain the same from the State Government and communicate to Planning Commission.

(Action: CWC)

The Project was appeldered acceptable subject to the following observations:-

- i) Since the operation cost proposed under the Project was higher than the water rates presently charged, the State Government should review the water rates for realising the operation cost in full.
- ii) The cropping pattern as finalised by the Water Management Division of the Ministry of Irrigation has to be strictly enforced to achieve the desired benefits. The concurrence of the State

 Agriculture Department to the cropping pattern and crop water requirement should be furnished.
- the results of the trial pit data.

(Action: CWC/Planning Commission)

IV: FLOOD CONTROL PROJECTS:

- 1. Constn. of Ujina Diversion Drain & Remodelling Ujina Drainage System (Harvana) - estimated cost R. 3167.00 lakhs.
- 2. Constn. of Baria Sansartola Bund (U.P) estimated cost

These projects were considered acceptable.

(Action: GFCC/CWC/Planning Commission)

Annexure

List of Officers present at the 19th meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose projects held in Shram Shakti Bhavan on 3.3.1982.

- 1. Shri C.C.Patel, Secretary, ... Chairman Ministry of Irrigation.
- 2. Shri K.S.S.Murthy, Adviser(I&CAD), PC.
- 3. Shri B.M.A. hattoo, F.A. Ministry of Irrgn.
- 4. Shri K M Mahe shwari, Jt . Adviser (I&CAD), PC ... Member-Secy.

Also present

MINISTRY OF IRRIGATION

- 1. Shri B.K. Rao, Addl. Secretary.
- 2. Shri P.K. Acharya, Adviser.
- 3. Shri k.Rengachari, Member(JRC)
- 4. Shri S.k. Aggarwala, Commission r, Indus Water.
- 5. Shri R.S.Saksena, Jt.Commissioner(Wi)
- 6. Shri P.C. Jain, Dy . Secretary.
- 7. Shri A.R.S.Murthy, Dy.Secretary.

CENTRAL WATER COMMISSION

- 1. Shri Pritam Singh, Member(D&R)
 - 2. Shri G.M . Vajdya, Member (P&P)
 - 3. Shri S.N. Chattopadhyay, Chief ingineer (TE)
 - 4. Shri B.B.Karjagi, Director(TE.II)
 - 5. Shri V.G. Chanekar, Director(F.C.D.II)

MINISTRY OF IN RGY

1. Shri h.C. Kachhwaha, Director.

PLANNING COMMISSIN

1. Shri N. N. Dikshit, Dy. Adviser

PLANNING COMMISSION (I & CAD DIVISION)

Subject: 20th Meeting of the Advisory Committee on Irrigation Flood Control and Multi-purpose Project held on 10.5.1982 in Shram Shakti Bhavan, New Delhi.

被告诉讼的证据

The Summary Record of the 20th Meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 10.5.1982 in Shram Shakti Bhavan, New Delhi, is circulated herewith.

(K.M. MAHESHWARI) JOINT ADVISER (IACAD) MEMBER-SECRETARY

1. Sh. C.C. Patel, Secretary, Ministry of Irrigation.

2. Sh. R. Chosh, Chairman, Central Water Commission, Sewa Bhavan, R.K.Puram, New Delhi.

3. Shri S.N.Roy, Chairman, Central Electricity Authority,

Seva Bhavan, R.K.Puram, New Delhi.

4. Sh. D.Shankraguru Swami, Adviser(Energy), Planning Commission.

5. Shri : K.S.S.Murthy, Adviser(I&CAD), Planning Commission.

6. Joint Secretary, Plan Finance Division, Ministry of Finance.

7. Shri B.M.K.Mattoo, Financial Adviser, Ministry of Irrigation.

8. Chairman, Central Ground Water Board, Ministry of Irrigation.

9. Joint Secretary, Deptt. of Power, Ministry of Energy. 18.Joint Secretary, Deptt. of Heavy Industry.

11. Joint Secretary, Department of Environment.

Planning Commission Circular No.16(25)/20/82-1&CAD dt.24.5.82.

Copy to:

Ministry of Irrigation

- Sh. B.K.Rao, Addl. Secretary.
- Sh. P.K. Acharya, Adviser. Sh. R.Rangachari, Member(JRC)
- Sh. S.K.Aggerwele, Commissioner, Indus Water. Sh. R.S. Saksena, Jt. Commissioner(LM) Sh. A.R.S.Murthy, Dy.Secretary. Sh. P.C.Jain, Dy. Secretary.

- Sh. T.D. Joshi, Under-Secretary.

Central Water Commission, Sewa Bhavan, R.K. Puram, New Delhi.

Shri Pritam Singh, Member (D&R).

2. Sh. G.M. Vaidya, Member (P&P).

. Member (Floods)

Sh. S.N. Chattopadhyay, Chief Engineer(TE)
Diractor TE(I)/(II)

Director(P&P)/Director(FC II)

Department of Environment (Bikanor House,

Dr. Maudgil, Principal Scientific Officer.

Sh. Brij Kishore, Deputy Secretary. 2.

Ganga Flood Control Commission, Sinchai Bhavan, Patna(Bihar)

Shri N.Sanyal, Chairman.

Department of Power

Shri H.C. Kachhwaha, Director.

(K.M.Maheshwari) Joint Adviser (I&CADO Member-Secretary.

PLANNING COMMISSION (I & CAD DIVISION)

Summary Record of the 20th meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 10.5.1982 in Shram Shakti Ghavan, New Delhi.

Names of the Officers present at the meeting are given in the onclosed Annexure.

2. The note on the revised estimate for Upper Krishna Project Stage— I of Karnataka, prepared by the Central Water Commission formed the basis of discussion. On an enquiry made by the Chairman of the Committee regarding committed use of Krishna waters by Karnataka State, Shri G.M. Vaidya, Member (P&P), CBC informed that according to the Award of the Krishna Water Tribunal, the share of Kornataka is 700 TMC (exclusive of regeneration) and the total water utilisation committed on the irrigation projects sanctioned so for including water utilisation of119 TMC for Upper Krishna Project Stage — I would be about 604 TMC. This included the minor irrigation use up to date. Shri Vaidya, further informed that there will be further cushion in the Karnatake share of Krishna waters even after sanctioning of Stage — II of the Project.

The Chairman desired that wherever water allocations have been awarded by the Tribunals the CWC should prepare a Note on the Water account invariably along with the Note for the Advisory Committee so that a view could be taken by the Committee about the implication of sanctioning the Project under sonsideration.

.... (Action: CWE)

The Representatives of the CWC further mentioned that the Government of Karnataka have prepared a Master Plan for utilizing the entire share of Krishma waters and have listed the Projects to be taken up along—with the water utilisation proposed under each of the projects. The Chairman desired that the list of proposed projects under the Master Plan should be carefully scrutinised by the CwC in order to verify the schemes proposed to be dropped by the State Government—to accommodate the water utilisation under Upper Krishna Project Stage — II. CwC is also required to check the details of committed uses which were submitted by them to the Krishna River Disputes Tribunal and examine whether the committed uses as per present list tallies with the earlier details.

(Action CWC)

- 4. The CWC note mentions that the Stage I project was earlier cleared by the Planning Commission for an estimated cost of R. 283.65 crores. The following main works were approved under this scheme:
 - i) Narayanpur dam to its ultimate height corresponding to an FRL of 492.25m (1615').
 - ii) Narayanpur L.B.C. 78Km. long & distribution system to irrigate annually an area of 4.41 lakh ha.
 - iii) Almatti dam for an FRL of 512.20 m (1680') with provision for installing crest gates 12.2 m (40') high over the spillway crest level of 500 m (1640').
 - iv) Almatti L.B.C. 50 Km long & distribution system to irrigate annually an area of 0.17 lakh ha.

It was observed by the Committee that the details of cost of additional works to be taken upto elevation 500 m (1640¹) may be got from the State Government. The proposal now received from the CWC is to build the Almatti dam upto an elevation of 500 m (1640¹) in full width so as to convey the concurrence of Government of India to the World Bank. After discussion, the Committee recommended that the clearance of the Government of India, for raising Almatti Dam in full width up to elevation 500 m (1640¹) may be accorded subject to the observation that the revised estimate be submitted by the State Government urgently to CWC and thereafter, CWC may please put up the whole case of revised estimates of Upper Krishna State - I Project to the Advisery Committee for its consideration.

(Action: CWC/Planning Commission)

ANNEXURE

List of Officers present in the 20th meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held at 3.00 P.M. on 10th May, 1982 in Shram Shakti Bhavan, New Dalhi.

- 1. Shri C.C.Patel, Secretary, Ministry of Irrigation .. Chairman
- 2. Shri R. Ghosh, Chairman, GWC.
- 3. Shri K.S.S.Murthy, Adviser(I&CaD), Planning Commission.
- 4. Shri B.M.K.Mattoo, F.A., Ministry of Irrigation.
- 5. Shri K.M. Maheshvari, Jt.Adviser (T&CAD),
 Planning Commission.Member-Secy.

Also present:

Ministry of Isriestica

- 1. Sari B.K.Rao, Additional Secretary.
- 2. Shri R.B.Shah, Dy.Secretary.
- 3. Shri A.K.S.Murthy, Dy.Secretary.

Central Water Commission

- 1. Shri G.M. Vaidya, Member (PEP)
- 2. Shri M.S.Rao, Mroctor (TE-I)
- 3. Shri B.B.Karjagi, Mirector(TE-II)
- 4. Shri S. Venkata Rao, Dy. Director.
- 5. Shri B.K. Bableni, Dy Director.
- 6. Shri B.B. Vats, Dy. Director.

Planning Commission

- 1. Shri N.K.Dikshit, Dy.Adviser(I&CAD)
- 2. Shri B, Venkata Rao, Research Officer.

Planning Commission (I&CAD Division) ***

Subject: Special Meeting of the Advisory Committee in Irrigation Flood Control and Multipurpose Project to consider Subermarekha Multipurpose Project held on 30.6.1982 in Sheam Shakti Bhavan, New Delhi,

The Summary Record of the Special Meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Project to consider Subernarekha Multipurpose Project held on 30.6.1982 in Shram Shakti Bhavan, New Delhi, is circulated herewith,

> (K.M.Maheshwari) Joint Adviser (I&CAD) Member-Secretary

Sh, C.C. Patel, Secy., Ministry of Irrigation.

.'. Mater Chairman, Central Water Commission, Sewa Bhavan, 2. R.K. Purama New Delhi.

Sh. S.N. Hay, Chairman, Central Electricity Authority, Sewa Bhavan, R.K. Puram, New Delhi.

Sh. D. Shankraguru, Swami, Adviser (Energy), Planning Commission.

5. Sh.K.S.S. Murany, Adviser (I&CAD), Planning Commission.

6. Jt. Secretary, Plan Finance Division, Ministry of Finance.
7. Sh. B.M.K.Mattoo, Financial Adviser, Ministry of Irrigation.
8. Chairman, Central Ground Water Board, Ministry of Irrigation.
9. Jt. Secy. Dept. of Power, Ministry of Energy.

10. Jt. Secy. Deptt. of Environment.

P.C. U.O. NO. 16(25)/21/82-I&CAD dt. 7.7.1982.

Copy to:

Ministry of Irrigation, S.S. Bhavan, New Celhi

Addl. Secy.

Sh. P.K. . charya, Adviser

3. Sh. R.S. Saksena, Jt. Commissioner(WM)

4. Wh. A.R.S. Murthy, Dy. Secy.

5. Sh. P.C. Jain, Dy, Secy. 6. Sh. R.B. Sh.h, Dy. Secy.

7. Sh. K.L. Machok, Under Secy. 8. Sh. V.S. Dinker, Dy. Commissioner, CAD & WM

Central Water Commission, Sewa Bhavan, R.K. Puram, N. Delhi.

- Sh. Pritam Singh, Member
- 2.
- Member (P&P)/ Member (FC) Sh. S.N. Chistopadhyay, Chief Engineer(TE) Sh. B.B. Karjagi, Diractor(TE) 3.
- Sh. M.S. Rao, Director (TE) 5.
- Sh. B.B. Vata, Dy. Director(TE) Sh. S.V. Ruo, Dy. Director(TE) G.
- Director (P&P)

Department of Environment, Bikaner House, New Delhi

Or. S. Maudgal, Director Sh. Brij Kishore, Dy. Secy.

Department of Power

Sh. H.C. Kachhwaha, Director.

Ministry of Finance

Sh. V.Srinivasan, Jt. Director.

Ministry of Heavy Industry

Sh. T.C. Bhatia, Under Secy.

(K.M.Maheshwari) Joint Adviser (I&CAD) Member-Secretary

. PLANNING COMMISSION (IRRIGATION & CAD DIVISION)

. . . .

Subject: Summary Record of the Special meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose projects to consider Subrenarekha Multipurpose Project, held on 30th June, 1982.

A special meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects was held on 30th June, 1982 in the Ministry of Irrigation under the Chairmanship of Secretary, Ministry of Irrigation to consider the Subernarekha Multipurpose Project.

- 2. A list of officers who attended the meeting is given in the Annexure.
- The Central Water Commission had earlier put up the notes for this project in respect of Bihar and Orissa portions. The Bihar project was parlier considered by the Advisory Committee in its 18th meeting or 23.11.1981 and 1.12.1981 while the Orissa project was considered by the Committee on 3rd March, 1982 wherein the Committee made the following observations:

"...Member(P&P), Central Water Commission should call an inter-state meeting with the representatives of the concerned States to discuss the allocation of cost among the various States, as also for the different uses of water, i.e. irrigation, power, flood control, water supply and industrial use. Representatives of the concerned Ministries of the Government of India, as also of the I & CAD Division, Power and Energy Division, Water Supply Division and Industry Division of the Planning Commission would be requested to participate in the meeting.

The representative of the Central Water Commission stated that the Orissa Government wanted the Centre to bear the entire cost of flood control is a state subject, the Committee decided that component the State Gov rnment should bear the entire cost of flood control nent ofalso. With regard to the preparation of a report on the CAD the component under the Project, it was agreed that this report would be prepared which in the next five years, as it will take some protime for creation of irrigation potential on this project. Since

ficed control

In complaince, CWC prepared a supplementary note on the two projects for consideration of the Committee. The Bihar and Orissa projects together with this supplementary note were discussed in the meeting on 30. 1.1982.

- Shri K.S.S. Murthy, Advisor, Irrigation and CAD, Planning Commission stated that the Committee may like to consider the implementation of major projects in phases so that the project is completed in a planned way for each phase within a specified time. Shri Murthy further mentioned that such an approach would result in ⊛voiding to a grest extent, the time and cost over—run of major irrigation projects. The Shairman mentioned that it may be difficult to implement one phase and then take up other phases as the necessity of the second and subsequent phases may arise even when the earlier phase is in progress to some extent. The Chairman was further of the view that implementation in phases may not avoid time and cost over-run of major irrigation projects. The Chairman ouggasted that the better arrangement would be to process for cost escalation. The Ministry have suggested this approach to the Planning Commission so that sufficient funds are provided for the project will be known from the very beginning, which would take care of the escalation factors, funds would naturally have to be provided since the inception of the project and therefore time and cost over-run cases could be minimised. This question needs further examination and discussions.
- 5. About the Subernarekha project, Shri G.M. Vaidya, Member(P&P), ELC, mentioned that there are two issues regarding this project:
 - a) intensity of irrigation assumed in the Bihar project was 153 per cent which is high, and
 - b) the sharing of cost between the participating States of the common works
- 6. After some discussion, the Committee agreed to the proposal of Bihar Government for the proposed irrigation intensity.
- 7. There was some discussion on the sharing of cost of Bihar portion of the project as given by CWC in their note. The proposed break up of the cost for Bihar project as given by CWC is quoted below:

Subernerekha (Bihar)

(Rs. Crores)

	Water supply	Irrigation	Flood control	<u>Total</u>
Biher	72.11	306.37	÷	378.48
Ørissa		66,90	30.67	97.57
tust Bental West Bental Total:	<u>.</u> 72.11	2.22 375.49	2.63 33.30	4.85 480,90
·				3/-

- 8. After discussion, the Committee recommended the following:
 - 1. All cost of flood control shall be borne by the concerned State Governments from their funds; (Action CWC, Ministry of Irrigation & Planning Commission)
 - The capital cost of the Bihar project for water supply benefits shall be charged to irrigation and a suitable rate for the supply of water to industry, drinking facilities, etc. shall be charged by the project authorities as approved by the State Covernment. The revised BC ratio shall be worked out by CWC on this basis and intimated to Planning Commission.

(Action : CWC)

The details of area likely to be benefited from the flood control damage after construction of storages on Subernarekha and the BC ratio for flood control shall be worked out by CWC and intimated to Planning Commission. It was mentioned in the meeting that a Committee under Shri J. Tripathi, the then Member, CWC, had gone into the flood control aspects of Subernarekha and the data available in this Committee's report may be utilised by CWC, with suitable updating of the data.

(Action : CWC)

4. The West Bengal Government has not yet concurred with the proposed share cost of the common works to be charged to them. The CDC supplementary note mentions that the representative of Government of Bihar stated in a meeting with CDC that" in case the Government of West Bengal do not meet their share cost, the Government of West Bengal would be free at any time to pay their share and get the benefits. " Copies of the written undertaking to this effect by the Bihar Government may be sent by CDC to the Ministry of Irrigation and Planning. Commission. Simultaneously, copies of the undertaking given by the Drissa Government to bear the proposed share of cost as mentioned above may be submitted by CDC to Ministry of Irrigation and Planning Commission.

Ministry of Irrigation shall issue their clearance from inter-State angle after examining the relevant issues.

(Action: CWC/Ministry of Irrigation)

5. Specific consurrance of the Finance Departments of Bihar, Orissa and West Bengel be obtained by CWC and communicated to Planning commission in respect of concurrance to bear the cost of Subernarekha project entirely from the State funds of all sectors.

(Action : CWC)

6. Clearance of the project from environmental angle is awaited from the Department of Environment.

(Action: CWC/Department of Engironment)

7. CWC has made certain observations on the projects for Bihar and Orissa. Subject to these observations and after compliance of all points as mentioned above by the concerned Central organisations, the acceptance of the project shall be taken up in the Planning Commission.

(Action: Planning Commission)

<u>Annaxure</u>

List of Officers present at the Special meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpoca projects held in Shram Shakti Bhavan on 30.6.1982.

Shri C.C. Patel, Secretary

Chairman

Ministry of Irrigation

Shri K.S.S. Murthy, Adviser (I&CAD), P.C.

Shri B.M.K. Mattoo, F.A., Ministry of Irrigation.
Shri K.M.Maheshuzri, Jt.Adviser(I&CAD), PC ... Member-Secretary

Also present

Ministry of Irrigation

- 1.
- Shri P.C. Jain, Dy. Secretary. Shri A.R.S. Murthy, Dy. Secretary. 2.
- Shri R.B. Shah, Dy. Secretary
- 4. Shri K.L. Madhok, Under Secretary
- Shri V.S. Dinkar, Dy. Commissioner, CAD & MM.

Central Water Commission, Sawa Bhavan, Sewa Bhavan, R.K. Puram,

- Shri Pritam Singh, Member (D&R)
- Shri G.M. Vaidya, Member(P&P) 2.

З.

- Shri K.V. Ramarao, Member Shri B.B.Karjagi, Director(TE.II) Shri M.S. Rao, Director(TE) 4.
- 5.
- Shri B.B. Vats, Dy. Director(TE) 6.
- Shri S.V. Rao, Cy. Director (TE) 7

Ministry of Finance.

Sh. V. Srinivasan, Jt. Director, Plan Finance.

<u>Ministry of Heavy Industry</u>

Sh. T.C. Bhatia, Under Secy.

Deptt. of Environment

Dr. S. Maudgal, Director.

<u>Planning Commission</u>

- Sh. R.S. Nagaraja, Dy. Adviser -
- Sh. J.N. Nande, Senior Research Officer

Pļanning Commission (I&CAD Division)

Subject: 21st meeting of the Advisory Committee on irrigation, Flood Control and Multi-purpose Project held on 8.7.1982 in Shram Shakti Bhavan, New Delhi.

The Summary Record of the 21st meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 8.7.82 in Shram Shakti Bhavan, New Delhi is circulated herewith.

> (K.M.Maheshwari) Joint Advisory (I&CAD) Member-Secretary

Sh. C.C. Patel, Secretary, Ministry of Irrigation. Sh. M.G. Padhye, ChairmanCentral Water Commission, Sowo 2.

Bhovon, R.K. Puram, New Delhi. Sh. S.N. Roy, Chairman, Central Electricity Authority, Sewa Bhavan, R.K. Puram, New Delhi.

Sh. D. Shankraguru Swami, Adviser (Energy), Planning Commissio

5. Sh. K.S.S. Murthy, Adviser(I&CAD), Planning Commission.
6. Joint Secy. Plan Finance Division, Ministry of Finance.
7. Sh. B.M.K.Mattoo, Financial Adviser, Ministry of Finance.
8. Chairman, Central Ground Water Board, Ministry of Irrigation.

9. Joint Secy, Deptt. of Power, Ministry of Energy.

10. Joint Secy., Deptt. of Heavy Industry. 11. Joint Secy., Department of Environment.

Planning Commission Circular No.16(25)/21/82-1&CAD dt.20.7.82.

Copy to:

Ministry of Irrigation, S.S. Bhavan, New Delhi.

Sh. C.S. Hukmani, Joint Secretary.

- Sh. P.K.Acharya, Adviser.
 Sh. R.Rangachari, Member(JRC)
 Sh. S.K.Aggarwala, (mmissioner, Indus Water.
 Sh. R.S. Saksena, Jt. Commissioner(WM)
 Sh. A.R.S. Murthy, Dy. Secretary.
 Sh. P.C.Jain, Dy. Secretary.

6.

7.

Sh. T.D. Joshi, Under-Secretary.

Central Mater Commission, Saus Shovan, R.K. Puram, New Dalhi.

- Sh. Pritam Singh, Member(D&R)
 Sh. S. Sabingtor, Member(P&P)
 Member(Floods)

- Sh. S.N.Chattopadhyay, Chief Engineer (TE)
- Director TE(I)/(II)
 Director(P&P)/Director (FCII)

Department of Environment, Bikaner House, New Delhi.

- Or. Maudgal, Director
- Sh. Brij Kishore, Deputy Secretary. 2.

Ganga Flood Control Commission, Sinchai Bhavan, Patna(Bihar)

Sh. N. Sanyal, Chairman.

Department of Power

Sh. H.C. Kachhwaha, Director.

(K.M.Mahoshwari) Joint Adviser (I&CADO Member-Sccratary.

Planning Commission (I& CAD Division)

. . .

Summary Record of the 21st mesting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 8.7.1982 in Shram Shakti Bhavan, New Delhi.

. . .

Names of the officers present at the meeting are given in the enclosed Annexure.

The following Projects were considered and the Committee's recommendations are as follows:-

I. Major Irrication Projects

i) <u>Chimoni Irrigation Project(Kerala) - Estimated Cost Rs. 2343 lakhs.</u>

It was observed that the project may be put up to the Advisory Committee after examining the present irrigation system, the availability of funds for this project and after satisfying that the benefits projected can really accrue by a field visit to the project by the representatives of the Central Water Commission and whether the excess water can be utilised in the upper areas. CWC observations are to be complied with and environmental clearance obtained.

(Action: CWC)

2) Tilaiya Ohadhar Diversion Project (Bihar) -Estimated cost Rs. 4674 Idkhs.

It was decided that the project may be put up to the Advisory Committee after complying/examining the following aspects:-

- a) The concurrence of the West Bengal Govt.
- b) Approval of DVC for allocation of cost.
- c) Availability of more water from the Dhadhar river.
- d) Geological report on the proposed tunnel.
- e) The rate of silting, the future life of the reservoir and requirement of catchment protection works.
- f) CWC observations.

(Action : CUC)

3. Auranca Reservoir Project (Bihar) - Estimated cost Rs. 12540 lakhs.

It was decided that the project may be put up to the Advisory Committee after complying with the following observations:-

a) Possibility of power generation between North-Koel and Mohammad Ganj barrage.

- b) Provision of chute spillway will involve the problem of retrogression and the main river garge will have to be filled in one season for a height of 54.87 metres (180 feet) with consequent constaints and higher cost during construction. The alternative of providing a masonry spillway on the main dam along with drill hole details may be examined.
- e) The construction sequence and flood diversion programme has to be discussed with the State officers.
- d) The Central Water Commission should send the clearance from the Department of Environmont: for this project.

e) A chapter on the rehabilitation details should form a part of the project report.

f) The alignment of the canal in the head reaches and the technical construction details involved have to be discussed with the State officers.

f) CWC observations.

(Action: CWC)

Lower Tirna Project (Maharashtra) -Estimated cost R. 3765 lekhs.

It was observed that the hot weather losses would be more and, therefore, carry-over storage was not desirable. Regeneration flow may not also materialise. Therefore, the project was considered acceptable subject to reducing the height of the dam by one metre and subject to the compliance of the following recommendations of the Central Water Commission:-

- a) Design flood of 10, 700 m³/sec. is accepted on an ad-hoc basis subject to verfication at design stage after collecting more reliable and accurate information on river discharge.
- b) A report on Command Area Development will be prepared and forwarded to CWC.
- c) Observations, if any, of the Department of environment from an environment angle will be taken into account.
- d) Other observations of CWC will be attended to during the stage of detailed designs and implementation of the Project.

(Action: CWC/Planning Commission)

5. Jaspur Reservoir Project(Haryana) - Estimated cost %. 2941 lakhs.

It was decided that the project may be put up to the Advisory Committee again after examining and complying with the following aspects:-

a) The nominal discharge to be released downstream

of the barrage for use in the portion of the river through Punjab territory shall be 5 cusecs.

- b) Ground water use has been contemplated in the project. Therefore, the benefit-cost-ratio has to be reworked taking into consideration the ground water scheme also. Benefits are to be checked assuming yields as achieved in Harvana.
- c) As the seepage losses would be more below the barrage, water tightness and the engineering measures adopted will have to be examined.
- d) The siltation rate and the useful life of the reservoir.

e) Clearance from the Department of Environment.

f) Provision should be made for soil conservation measures to the extent of atlease 10% of the cost of the project.

g) Other observations by CWC.

(Action: CWC)

6) Ohanaura Reservoir Project(Haryana) -Estimated cost & 3068 lakhs.

It was decided that the project would be put up to the Advisory Committee again after compliance of the following observations:-

- a) Benefits from fisheries shall be omitted and benefits from bed cultivation included.
- b) Water tightness has to be ensured.
- c) CWC observations.

(Action: CWC)

II. Medium Irrigation Projects

1) Rampuri Pick Up Weir Cum Pulpulla Dummy Storage Irrigation Project (M.P.)Estimated cost Rs. 634.33 lakhs.

The project was considered acceptable subject to the following observations:-

- a) It is a diversion project and discharge data are not available in the pick up weir site. A gaugestation may be set up at the pickup weir site to review water availability and design flood on the basis of observed data.
- b) Free board in the feeder channel may be increased to allow higher discharge for filling up the dummy storage in less than 60 days.
- c) Review of water rates which are on low side.

(Action:CWC/Planning Commission)

2) Dokariya Tank Irrigation Project(M.P.)-Estimated cost Rs, 228, 99 lakhs.

The project was considered acceptable.

(Action: Planning Commission)

3) Deila Deuda Irrigation Project (M.P.) -Estimated cost Rs. 1643 lakhs.

The project was considered acceptable subject to the project authorities setting up a hydrological network for collection of reliable data for finalisation of the reservoir operation rules.

(Action: EWE/Planning Commission)

Dhan—Singh Toli Reservoir Schema(Bihar)— Estimated cost R. 476.2 lakhs.

The project is to be put up to the Advisory Committee after compliance of the following observations:-

- a) The length of spillway may be revised so that the value of C in the discharge formula remains within the permissible limits.
- to crop pattern and water requirements, rate of yield of crops and prices may be furnished.

c) The concurrence of State Finance Department for taking up the project may be furnished.

d) Provisions as considered necessary for drinking water supply to the rural area may be made.

 To enable exploitation of power potential at a future date, suitable provision may be made for the intitial installations, like penstocks, etc.

f) The gorge filling programme in one season is to be reviewed by EUC.

(Action: CWC)

5). Bethali Irrication Project(Rajasthan)-Estimated cost R. 525.40 lakhs.

The project was considered acceptable subject to furnishing the concurrence of the State Finance Department for taking up the project. After concurrence of State Finance is received, acceptance by Planning Commission shall be issued.

(Action: CWC/Planning Commission)

- 6), Bori River Irrigation Project(Maharashtra) Estimated cost R. 762.42 lakhs.
 - 7). Patoson Irrigation Project(Maharashtra)-Estimated cost %.739.09 lakhs.

8). Hetwane Irrigation Project(Maharashtra) -Estimated cost &. 1955,95 lakhs.

The above three projects were considered acceptable subject to working out realistic benefit-cost-ratio for the Hetwane Irrigation project as the value of production after irrigation appears more.

(Action: CWC/Planning Commission)

III. Flood Control Projects.

Protection works for Kosi Flood Embankments (Bihar) - Estimated cost No. 513.31 lakhs.

The project was considered acceptable.

The Advisory Committee also decided that for all the future projects a high level committee with representatives from the Centre shall be constituted to foresee the likely damages in the coming years, thereby enabling collection of material at the expected site of damage. This would avoid coming up with proposals at the last moment for renewal works. The State should also fix norms for maintenance and patroling and provide suitable funds accordingly.

(Action:GFCC/C⊌C/Ministry of Irrigation/ Planning Commission)

The following projects, which could not be considered in this meeting, will be considered in the next meeting of the Advisory Committee:-

No 🕳	Sl. No. of Names of project	State	Estimated cost Rs. lakhs.
1.	Multi-purpose project 25 Revised estimate for Ranapratap Sagar project(Chambal St.II) 1rrigation projects(Major) Raising of Kota Barrage by 2 ft.	Rajasthan	3641,00
2.	/27 Irrigation projects(Major) Raising of Kota Barrage by 2 ft.	Rajasthan	91,00
3.	30 Remodelling of Kanchi Irrigation	Aibar	443,00
4.	Irrication projects(Medium) Revised estimate of Phulwaria reservoir scheme(Supplementary n	Bihar	2156.00
5 ₄ _ ′		Bihar `	644.81
6.) 29 Rovised estimate of Gumeni Barrage scheme	Bihar	1871,77

(Action: Planning Commission)

AND MILE

Lind of Officers present in the 21st muching of the Advisory Committee on Irrigation, room Control and Multipurpose Projects held on 8.7.82 in Shram Shakti Bhawan, New Delhi.

- Chai rman 1. Shri C.C. Patel, Secretary, Ministry of Irrigation
- 2. Shri M.G. Padhye, Chairman, -- GWC
- Shri B. M. K. Mattoo, F. A. & Jt. Secretary 3. Ministry of Irrigation
- ... Member-Secretar 40 Shri K.M. Maheshwari, Jt.Adviser (I&CAD) Planning Commission

Also present

Ministry of Irrigation

- Shri C.S. Hukmani, Jt. Secretary (Indus) 1.
- 2. Shri N. R. Banerjee, Superintending Engineer (MI)
- 3. Shri V.S. Dinkar, DC(Soils)
- Shri K.K. Saksena, Specialist (I) 4.

Central Water Commission

- Shri S. Babington, Chief Engineer (Mon.I) 1.
- 2, Shri S.N. Chattopadhyay, Chief Engineer (TE)
- Shri B.B. Karajagi, Director (TE) 3.
- Shri M.S. Rao, Director (TE-I) 4.
- 5.
- Shri T.S. Murthy, Director (PPC)
 Shri S.T. Thomas, Director (Hydrology)
 Shri M.L. Kaura, Dy. Director 6.
- 7.
- 8. Shri K.K. Agarwal, Dy.Director
- 9. Shri S.C. Gupta, Dy.Director
- 10.
- Shri B.B. Vats, Dy.Director Shri S.K. Banerjee, Dy.Director 11.
- 12. Shri L.N. Gupta, Dy.Director
- 13. Shri M. V. Chandrasekhar, Dy. Director
- 14 . Shri Rati Bhan, EAD

Ganga Flood Control Commission

Shri N.K. Sarma, Member

Planning Commission

Shri R.S. Nagaraja, Dy. Adviser (Irrigation)

PLANNING COMMISSION (Iacau Division) 经验证证证

Subject: 22nd Mesting of the Advisory Committee on Irrigation Flood Control and Multi-purpose Projects held on 6.1.1983 in Shram Shakti Bhavan, Now Dolhi.

The Summary Record of the 22nd Maeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects hold on 6.1.1983 in Shram Shakti Bhavan, New Delhi is circulated herewith.

> (R.S. Nagaraja) Joint Adviser (I&CAD) Momber-Secretary

- 1. Shri M.G. Padhya, Socretary, Ministry of Irrigation S.S.Bhavan, New Dalhi.
- 2. Shri Pritam Singh, Chairman, C.W.C., Sowa Bhayan, R.K.Puram, New Dolhi.
- 3. Shri S.N. Roy, Chairman, C.E.A., Sawa Bhavan, R.K.Puram, New Dolhi.

- 4. Shri D. Shankaraguru Swami, Advisor(Energy); Planning Commission
 5. Shri K.S.S. Murthy, Consultant(I&CAD), Planning Commission
 6. Joint Secretary, Plan Finance Division, Ministry of Finance,
 North Block, New Dolhi.
- 7. Smt. Priya Prakash, Financial Advisor, Ministry of Irrigation, S.S. Bhavan, New Dolhi.
- 8. Chairman, C.G.W.B., Ministry of Irrigation

- 9. Joint Sucretary, Deptt. of Power, Ministry of Energy.
 10. Joint Secretary, Deptt. of Heavy Industry.
 11. Joint Secretary, Department of Entironment, Bikaner House, New Dolhi.

Planning Commission Cir. No.16(25)/23/83-I&CAD dt.23.2.1983

Copy to:

Ministry of Irrigation

- Shri K. Ramanujam, Addl. Sccrotery
- 2. Shri K.R. Chandrasekharan, Joint Secretary(GB)

- 3. Shri C.S. Hukmani, Jt. Secretary(Indus)
 4. Shri R. Rangachari, Member(JRC)
 5. Shri R.V. Suryanarayana, Dy. Secretary
 6. Shri R.S. Saksena, Joint Commissioner(LM)
 7. Shri A.R.S. Murthy, Deputy Secretary

Central Water Commission, Sewa Bhavan, R.K. Puram, New Delhi.

- 1. Member (D&R)
- 2. Member (P&P)
- 3. Shri S.N. Chattopadhyay, Chief Engineer(TE)
- 4. Director (TE) I/II.

Dopartment of Environment(Bikaner House, Shahjahan Road, Now Dolhi.

1. Dr. Maudgil, Director

Ganga FloodControl Commission, Sinchai Bhovan, Patna (Bihar)

1. Shri N. Sanyal, Chaiman

Narmada Control Authority,

1. Shri K.V. Rama Rao, Chairman

2. Shri H.P.S. Murthy, Member (Electrical)

Central Electricity Authority, R.K. Puram, Sawa Bhavan, New Dolhi.

1. Shri V.V. Remakrishna Reo, Director, H.E., Planning

(R.S. Nagaraja) Joint Advisor (I&CAD) Momber - Secretary

PLANNING COMMISSION (I&CAD DIVISION)

Summary Record of the 22nd meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 6.1.1983 in Shram Shakti Bhavan, New Delhi.

Names of the Officers present at the meeting are given in the enclosed Annexure.

The following Projects were considered and the Committee's recommendations are as follows:-

I. MULTIPURPUSE PROJECT:

The project was discussed and the Committe considered it acceptable subject to the following observations:

- i) It was mentioned that in the C.W.C. notes the allocation of cost between the different benefits and the sharing amongst the participating States was worked out as per the directions of the Narmada Waters Dispute Tribunal. The Central Water Commission's Note may be circulated to the participating States for information of their share cost.
- ii) The Contral Ground Water Board should examine the proposals regarding utilisation of ground water in the project command through tubowells, quality of available ground water, the proposals for drainage arrangements and also adequacy of the provisions made for these both physical and financial,
- iii) In working out the B.C. ratio, the cost of land development has been taken into account which is not in conformity with the present method of working out in conformity with the present method of working out for irrigation B.C. Ratio/be modified by excluding the cost of land projects. It was development. It was also suggested sensitivity analysis suggested that be carried out to ascertain the affect on B.C. ratio. the B.C.Ratio Although the period of construction of/project was stated as 17 years, no time schedule for phased power benefits has been considered in the C.W.C. note. The representative of the C.E.A. mentioned that in order to work out the time schedule for Power, the phasing of construction of the Dam be furnished to them. This

may be done by C.W.C.

- v) The representative of the Planning Commission roised the question of sanctioning the project in phases. It was expelined by the Chairman that phasing of the project acceptable to all the participant States may not be possible. So it was decided that this project with such a long time schedule should be periodically say, once in 5 years, reviewed by the Advisory Committee.
- vi) The Committee was informed that the focal group consitituted by the Ministry of Irrigation has examined the estimates and the comments of the focal group have been suitably incorporated.
- vii) It was mentioned that in some reaches of the canal system there are possibilities of hydro power generation. The power thus generated can convibe used to lift water in/reaches of canal. The C.W.C. should look into this aspect of power generation and also the possibility of use of power for lifting water so as provide irrigation to higher areas.
 - viii) It was noted that the project report for irrigation from the Narmada Canal in Rajasthan territory was yet to be submitted by Rajasthan Government to C.W.C. The C.W.C. may request the State Government to submit the report as soon as possible.
 - ix) Clearance from the environmental angle should be expedited.
 - x) Provision made of rehabilitation of oustees from the project areas should be examined by the concerned State Governments.

(Action:CWC;C.E.A.:Planning - Commission)

II. MAJUR INRIGATION PROJECTS:

) Siktia (Ajoy) Barrage Project(Bihar)-astimated cost Rs.6603 lakha.

The project was considered acceptable subject to the following observations:

- i) An integrated working table for the Punesi Reservoir scheme and Siktie Berrage project should be prepared and submitted to C.W.C. for record.
- ii) 773 HaM(6232 Acft) of water of the additional storage of the Punasi Reservoir remains unutilised. The balance storage after accounting for the transit losses should be utilised to increase irrigation in rabi season in the Siktia command.

Zoertain

iii) As per the Inter-state Agreement of 19th July, 1978 reached between Bihar and West Bengal on Damodar, Barakar, Ajoy, Mayurakshi, Siddheshwari, Noon Beel and Mahananda river Basins, Bihar has been allowed to construct Siktia Barrage and four reservoir projects in the basin. As a result Bihar has proposed Punasi, Burhai, Sarkunda and Dhakwa Reservoir Projects. Of these, Punasi has been accepted by Advisory Committee on 28.11.1980 subject to observations. Burhai Reservoir Project is under examination in C.W.C. Other projects have/stated that the water availability for these so far. The project projects would be worked out after taking into consideration the requirements of the Siktia Barrage. Further, it is felt that after construction of the storage projects mentioned above, the position of water availability at Siktia Barrage is likely to improve because of the upstream storages and also the regeneration in the intermediate reach.

∠not been received authorities have

- iv)At the time of consideration of the other three reservoir projects integrated working tables to ascertain the success of the system as a whole have to be prepared.
- v) Concurrence of the State Finance Department for the updated estimate has to be furnished.

TheCentral Water Commission would obtain the concurrence of the State Finance Department and communicate to the Planning Commission for processing the issue of letter of acceptance.

(Action: EWC/Planning Commission).

Raising of Kota Barrage(Rajasthan)-ostimated cost Rs. 91 lakhs.

The project was considered acceptable subject to the following observations:-.

- i) The system analysis of the Chambal basin should be planned to arrive at an optimum release from integrated operation of the three power stations in the cascade upsteam of Kota Barrage, according to the demand for irrigation.
- ii) Since the hydraulic Jump is not clearly formed according to the calculations dank by the Project Authorities due to available hard rock, anchoring of cistern apron with anchor bars should be looked into at the time of detailed design.

- iii) Condurrence of the State Finance Department for taking up the project is to be obtained.
 - iv) Concurrence of the Inter-State Control Board of Rejesther and Medhys Prodesh is to be obtained for taking up the project.
 - v) Estimated cost of Kota Barrage, Right and Loft Main Canals whose share cost has been considered in Working out the B.C. Ratio ought to be confirmed by the Inter-State Control Board.
 - vi) B.d. Ratio now worked out on conventional basis needs review.

The C.w.C. will obtain the concurrence of the State Finance Department, and the Inter-state Control Board mentioned above and convey the same to the Planning Commission for processing the issue of letter of-acceptance.

(Action: CWC/Planning Commission)

Kanchi Irrigation Project(Bihar) - estimated cost Rs.485,57 lakhs.

The project was considered acceptable subject to the following observations:-

- i) Concurrence of the State Finance Department for taking up the project is to be furnished.
- ii) Concurrence of the State Agricultural Doptt. to the cropping pattern, crop water requirement, inputs, yields and of parameters taken in the 8.0. Ratio calculations has to be furnished.
- iii) A copy of the order issued for charging half of the water rates approved by the State Government would be furnished to the Central Water Commission and Planning Commission.
 - iv) Suitable upward revision of water rates may be considered to obviete the need for continuous subsidy by the State Government.
 - v) In the absence of data, the maximum observed design flood of 1970 has been adopted for the design of wair. However, hydraulic and hydro-meteorological observations should be conducted at the weir site for assessing yield and design flood.
 - vi)The suitability of the area for irrigated agriculture may be got certified by the concerned soil survey officer of the State.

The concurrence of the State Finance Deptt, would be obtained by the Central Water Demmission and conveyed to the Planning Commission before issue of the letter of accoptance.

(Action: CWC/Planning Commission)

Chimoni Irrigation Project(Kerala)-estimated cost Rs. 2343 lakhs.

It was observed from the C.W.C. note on the Project that there are 12 outstanding observations to be complied with. The Committee decided that the Project modified in compliance with the observations may be put up to the Committee again for consideration.

(Action: Central Water Commission)

(Action: Central Water Commission Mahi Irrigation Project(Madhya Pradesh) - estimated cost Rs. 6238 lakhs.

It was observed from the CWC note on the project that a subsidiary Dam has been proposed on Ramkherg Tributory in the latest proposels after the scheme was cleared by the Deptt. of Environment from the environmental angle. The C.W.C. may obtain the clearance from the Deptt. of Environment to the new proposal before the Planning Commission would process the scheme for acceptance. C.W.C. may also obtain the concurrence of State Finance Department and communicate to Planning Commission.

Tourse Vr.

(Action: CWC/Planning Commission)

Rajghat Canal Irrigation Scheme (Madhya Pradesh) - estimated cost Rs.4615 lakhs.

The project was considered acceptable subject to the following observations:-

- i) Although the Govt. of U.P. has no objection to the alignment of Datia Carrier Canal system passing through a portion of the District of Jhansi, the Concurrence to the final alienment should be obtained from the Govt. of Utter Prodesh after the elignment is finalised with the advice of the U.P. Irrication Deptt.
- ii) The estimated cost shall be suitably updated and revised abstract of cost along with the modified B.C. Rotic and financial return statements should be forwarded to the Contral Water Commission and Planning Commission as soon as possible.

(Action: CWC/Planning Commission)

8. Auronga Reservoir Project(Bihar)-estimated cost Rs.12,540 lakhs.

The project was considered acceptable subject to the following observations:

- i) In view of the large carthwork to be donce in one season for the river closure section, the closure operation has to be done very carefully. Adequate pre-construction investigations have to be carried out before the closure operation.
- ii) Concurrence of the State Finance Deptt. for taking up the scheme should be furnished.
- iii) Concurrence of the State Agriculture Deptt, to the crop pattern, crop water requirements, yields, rates, inputs etc., in the B.C. ratio calculations should be furnished.
 - iv) The hydrology of the project is of preliminary nature and not based on the data observed at the dam site. As already indicated, a detailed study has to be done after collecting the necessary data before final designs and execution of the project.
 - v) A carry over storage of 0.1933 MAF has been provided in the reservoir. The utility of the carry over may be reviewed and storage capacity may be optimised at the construction stage.
 - vi) Command of Jinjoi lies in the over all command of Auranga. Combined working tables for the system for a long period may be furnished.
- vii) A contour map of the Auranga Command Area at 1.5 M interval marking command; of Jinjoi and Maila separately may be furnished.
- viii) State Government's approval for charging 50 paise per thousand gallons of water for industrial supply adopted in the project may be furnished.
 - ix) As agreed to by the State Government, the suggestion made by the C.W.C. regarding designs may be complied with at the time of detailed designs and execution.
 - x) Provision has been made in the estimate for rehabilitation and compensation as a result of land acquisition for the project. However, the Ministry of Irrigation letter No.27/91/80-PC dated 19.5.1980 should also be kept in view while framing the detailed proposels for rehabilitation. C.W.C. will obtain the concurrence of the State Finance Department and convey the same to Planning Commission before the letter of acceptance is issued.

III. MEDIUM IRAIGATION PROJECTS

9) Revised estimate of Phulwaria Reservoir Scheme(Bihar)estmated cost Rs.2156 lakhs.

It was observed from the C.L.C. Note that the points raised by the Committee at its meeting held on 23.11.1981 have not been adequately covered. It was agreed that the C.W.C. would circulate a modified note to the Members of the Committee for consideration.

(Action: C.W.C.)

10. Satpotka Roservoir(Bihar)-estimated cost Rs. 595 lakhs.

It was observed that the benefit cost ratio worked out for this project is 1.26 and the project is proposed to serve tribal area of Singhbhum District of Biher. The Committee decided that C.W.C. should ro-examine the project with a view to reducing the estimated cost and for improving the B.C. Ratio on this project.

(Action: C.W.C.)

1. Uben Irrigation Scheme(Gujarat)—estimated cost Rs.594*80
lakhs.

The project may be put up to the Advisory Committee ofter a review of B.C. Ratio calculations.

(Action: CUC)

12. Revised estimate of Sekmai Barrage Project(Manipur)estimated cost Rs.537 lokhs.

The revised estimate was considered acceptable subject to the State Government furnishing the concurrence of the State Finance Deptt. to the revised cost and the concurrence of the State Revenue Deptt. for charging the betterment levey on this project. The C.L.C. would obtain the concurrence from the State Government and convey the same to the Planning Commission for processing the letter of acceptance.

(Action: CWC/Planning Commission)

Dec Irrigation Project (Orissa) - astimated cost Rs. 1945. 20 lacs.

The project was considered acceptable subject to the following observations:-

- i) The concurrence of the State Finance Department is to be furnished.
- ii) Review of design flood based on observed data during the stage of detailed design.

The C.W.C. will obtain the concurrence of the State Finance Department and convey the same to the Planning Commission before issue of the letter of acceptance.

(Action: CWC/P.C.)

Urmodi Irrigation Project(Maharashtra)-estimated cost

The project was considered acceptable.

√8. Borchar Nalla Tank Project(M.P.)

(Action: Planning Commission)

Consideration of the following projects was postponed to the next meeting:

Estimated cost(Rs.lacs) Multipurpose Projects Rovised estimate of Ranapratap sagar `Project(Chambal Stage II)(Rajasthān) 3641.00 Modium Schemes 🎠 Revised estimate of Torai Reservoir Project (Sihar) 1597.79 Revised estimate of Sunder Reservoir(Bihar) 644.81 Gurmani Roservoir(Bihar) 1871.77 ~do∽ (4. Piplad Irrigation Project(Rajasthan) 507.85 ວົ. Rovisad esta. ກ່າງ Somkagdor Irrigation Project (Rajasthan) 1038.29 76. Barnai Tank Project (.M.P.) 77. Baghua Irrigation Project(Orissa) 426.15

(Action:Planning Commission)

499.94

378.62

List of Officers present in the 22nd meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 6.1.198% in Shram Shakti Bhavan, New Dolhi.

- 1. Shri M.G. Padhye, Sccretary Chairman Ministry of Irrigation
- 2. Shri K.S.S. Murthy, Consultant, Planning Commission
- 3. Smt. Priya Prakash, F.A. & Jt. Secretary, Ministry of Irrication.
- 4. Shri R.S. Nagaraja, Jt. Advisor(I&CAD).. Member-Secretary, Planning Commission

Also Present

Ministry of Irrigation

- 1. Shri K. Ramanujam, Addl. Socretory
- Shri K.R. Chandrasekharan, Jt. Sccretary(GB)
 Dr. B.D. Pathak, Chairman, C.G.W.B.
 Shri R.S. Saxona, Chicf Engineer(MI)

- 5. Shri A.R.S. Murthy, Dy. Secretary.
- 6. Shri R.V. Suryanarayana, Dy. Secretary.

Central Water Commission

- 1. Shri P.K. Acharya, Member(D&R)
- 2. Shri Gokul Prasad, Member(P&P)
- 3. Shri M.G. Sadanandam, Chief Engineer
 4. Shri S.N. Chattopadhyay, Chief Engineer(TE)
 5. Shri M.S. Rao, Director (TE.I)
 6. Shri B.B. Karajagi, Director (TE.II)
 7. Shri R.S. Mathur, Dy. Director

- 8. Shri S.G. Gupta, Dy. Director
- 9. Shri M.L. Kaura, Dy. Director 10. Shri B.B. Vats, Dy. Director
- 11. Shri D.K. Bablani, Dy. Director

Narmada Control Authority.

- Shri K.V. Rama Rao, Chairman
- 2. Shri H.P.S. Murthy, Momber (Electrical)

Department of Environment

1. Dr. (Ms) N. Bhat

Control Electricity Authority

1. Shri V.V. Ramakrishna Rao, Director, H.E. Planning

Planning Commission

- 1. Shri N.K. Dikshit, Dy. Advisor(I&CAD)
- 2. Shri Shailandra Sharma, Dy. Advisar(Power)

Planning Commission (I & CAD Division)

Subject: 23rd meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held in 3.3.83. in Shram Shakti Bhavan. New Delhi.

The Summary Record of the 23rd meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 3.3.1983 in Shram Shakti Bhavan, New Delhi is circulated herewith.

> (Ras. Nagaraja) Joint Adviser (I&CAD) Member-Secretary

- 1. Shri M.G. Padhye, Secretary, Ministry of Irrigation, 5.5. Bhavan, New Delhi.
- 2. Shri Pritam Singh, Chairman, CWC, Sewa Bhavan, R.K. Puram, New Delhi.
- 3. Shri S.N. Roy, Chairman, C.E.A., Sewa Bhavan, R.K.Puram, New Delhi.
- 4. Shri D. Shankaraguru Swami, Adviser(Energy), Planning Commiss-
- 5. Shri K.S.S. Murthy, Consultant(I&CAD), Planning Commission.
- 6. Joint Secretary, Plan Finance Division, Ministry of Finance, North Block, New Delhi.
- 7. Smt. Priya Prakash, Financial Adviser, Ministry of Irrigation, S.S. Bhavan, New Delhi.
- 8. Chairman, C.G.W.B., Ministry of Irrigation.

- 9. Joint Secretary, Deptt. of Power, Ministry of Energy. 10.Jt.Secretary, Deptt. of Heavy Industry. 11.Jt.Secretary, Deptt. of Environment, Bikaner House, N. Delhi.

Planning Commission Cir. No. 16(25)/23/83-I&CAD dt. 16.3.83.

Copy_to:

Ministry of Irrication, S.S. Bha 1. Sh. K.Ramanujam, Addl. Secretary. S.S. Bhavan, New Delhi.

- 2. Sh. K.R. Chandrasekharan, Jt. Secretary(GB)
- 3. Sh. C.S. Hukmani, Jt. Secretary(Indus)
- 4. Sh. R. Rangachari, Member(JRC)
- 5. Shri R.V. Suryanarayana, Dy. Secretary 6. Sh. R.S. Saksena, Jt. Commissioner(LM)
- 7. Sh. A.R.S. Murthy, Dy. Secretary.
- 8. Sh. M.R. Single, Under Secretary (B&T)

Central Later Commission, Sewa Shavan, R.K. Puram, New Delhi.

- Member (D&R)
- Member (P&P) 2.
- Shri S.N. Chattopadhyay, Chief Engineer(TE) Director (TE) I/II 3.

Department of Environment(Bikaner House), Shahjahan Road, New Delhi.

Dr. Maudqil, Director.

Ganga Flood Control Commission, Sinchai Bhavan,

Shri N. Sanyal, Chairman.

(R.S. Nagaraja) Joint Adviser (I&CAD)

Member-Secretary

Planning Commission (I&CAD Division)

. . . .

Summary Record of the 23rd Meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 3.3.83 in Shaam Shakti Bhavan, New Delhi.

Names of Officers present at the meeting are given in the enclosed Annexure.

The following projects were considered and the Committee's recommendations are as follows:-

I Multi-purpose Projects

1. Revised Estimate of Ranapratap Sagar Project(Chambal Stage II) (M.P. & Rajasthan) - Estimated cost Rs. 3641 lakhs.

The revised estimate was considered acceptable subject to:

- The concurrence of Party States to the sharing of revised cost has to be obtained from the concerned States;
- ii)The concurrence of the Rajasthan State Finance Deptt. has to be obtained.

The CLC would obtain the concurrence of the State Govts. as mentioned above and convey the same to the Planning Commission for processing the issue of letter of acceptance.

(Action: Cac/Planning Commission)

II) Major Irrigation Projects

 Tilliya Dhadhar Diversion project(Bihar) - Estimated cost Rs. 4674 lakhs.

The Committee noted that the concurrence of D.V.C. and West Bengal Govt. was yet to be received and decided that the Ministry of Irrigation should issue a clear directive on issues involved such as land acquisition at Maithon Dam for full flood storage, sharing of cost of Tilaiya Dam and advice the Planning Commission about the acceptance of the scheme.

(Action: Ministry of Irrigation)

3. Revised Estimate of Phulwaria Reservoir Scheme (Bihar) - Estimate cost Rs. 2156 lakhs.

The project was considered acceptable subject to the following:-

i) Concurrence of the State Agriculture Department to the revised cropping pattern and crop water requirement should be furnished.

/ Finance

(ii) Concurrence of the State/Department for taking up the project should be furnished.

The CWC would obtain the above concurrence from the State Govt. and convey the same to Planning Commission.

(Action: CWC/Planning Commission)

4. I. Medium Irrigation Projects

4. Revised Estimate of Sunder Reservoir Project - Estimated cost Rs. 544.81 lakhs (Bihar)

The revised estimate was considered acceptable subject to the following:-

- 1. In order to optimally utilise the extra storage provided in the reservoir, the intensity of irrigation may be increased by providing Rabi Irrigation.
- 2. Provision as considered necessary for drinking water supply to rural areas may be made.
- 3. The concurrence of the State Finance Department for the revised cost may be obtained.

The CWC would obtain the concurrence of the State Finlace Department and convey the same to Planning Commission.

(Action: CWC/Planning Commission)

5. Revised Estimate of Gumani Reservoir Project(Bihar) - Estimated cost Rs. 1871.77 lakhs.

The revised estimate was considered acceptable subject to following observations:-

- To enable exploitation of power potential at a future date, suitable provision for installation of penstocks may be made.
- Provision as considered necessary for drinking water supply to the rural areas may be made.
- The concurrence of the State Finance Department for the revised cost may be obtained.

The CwC would obtain the concurrence of the State Finance Department and convey the same to Planning Commission.

(Action:CWC/Planning Commission)

- 3 -

6. Revised Estimate of Torai Reservoir Project - (Bihar) - Estimated cost Rs. 1597.79 lakhs.

The revised estimate was considered acceptable subject to the following:-

- The concurrence of the State Finance Department for the revised cost has to be obtained.
- Provision as considered necessary for supply of the drinking water to the rural areas may be made.
- 3. To enable exploitation of power potential at a future date, suitable provisions may be made for the install ation of penstocks.

The concurrence of the State Finance Department would be obtained & communicated to Planning Commission by CWC.

(Action: CWC/Planning Commission)

7. Revised Estimate of Somkagdar Irrigation Project (Rajasthan) Estimate cost Rs. 1038.29 lakhs.

The Committee was informed that the State Govt. has reported the estimated cost as Rs.1450 lakhs in the State Annual Plan document for 1983-84. The Committee decided that the CWC should write to the State Govt. for updating the revised estimate.

(Action: CUC)

5. Piplad Irrigation Project-(Rajasthan) - Estimated cost Rs. 507.85 lakhs

The Committee was informed that the Scheme has not been proposed by the Rajasthan Govt. for inclusion in the Plan. The scheme may be put up to the Committee after its inclusion in the Plan and funds are provided for it by the State Govt.

(Action: CWC)

O. Barnai Tank Project-(M.P.) - Estimated cost Rs. 426.15 lakhs.

The Committee was informed that the State Govt. has reported the estimated cost as Rs.950 lakhs in the State Annual Plan Document for 1983-84. It was decided that the CWC should write to the State Govt. for updating of the estimate.

(Action: CWC)

1J. Baghua Irrigation Project- (Orissa) - Estimated cost of Rs. 634.74 lakhs.

The Committee considered the project acceptable.

(Action: Planning Commission)

....4/-

11. Barchar Nalla Tank Project (M.P.) - Estimated cost Rs. 378.92 lakhs.

The project was considered acceptable.

(Action:Planning Commission)

- IV Flood Control Projects
- Amwakhas Spur Project on Right Bank of Gandak in U.P. Estimated cost Rs. 322.44 lakhs.

The project was considered acceptable.

(Action: Planning Commission)

2. Revised estimate for Sone Embankment Scheme- (Bihar) Estimated cost Rs. 431.29 lakhs.

The revised estimate was found acceptable.

(Action: Planning Commission)

List of Officers present in the 23rd meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 3,3.83 in Shæam Shakti Bhavan, New Delhi.

- Shri M.G. Padhye. Secretary 1. Chairman Ministry of Irrigation
- Shri K.S.S. Murthy, Consultant, Planning Commission. Smt. Priya Prakash, F.A. & Jt. Secretary
- Ministry of Irrigation.
- Shri R.S. Nagaraja, Jt. Adviser (I&CAD).... Member-Secretary. Planning Commission.

Also Present

Ministry of Irrigation, S.S. Bhavan, New Delhi.

- Sh. K.Ramanujam, Addl. Secy.
- 2. Sh. C.S. Hukmani, Jt. Secy.(I)
- 3. Sh. K.R. Chandrasekharan, Jt. Secy.(GB)
 4. Sh. R. Rangachari, Member(JRC)
 5. Dr. B.D. Pathak, Chairman, C.G.L.B.

- 6. Sh. R.S. Saksena, Jt. Commissioner (UM)
 7. Sh. A.R.S. Murthy, Dy. Secy.(P I)
 8. Sh. R.V. Suryanarayana, Dy. Secy.(P.II)
- 9. Sh. Ram Saran, Dy. Commissioner(CAD)

Central Water Commission, Sewa Bhavan, R.K.Puram, New Delhi.

- Sh. 'G: M: Prasad, Member(P&P)
- Sh. M.G. balanandam, Chief Engineer.
- Sh. S.N. Chattopadhyay, CE(TE) Sh. M.S. Rao, Director(TE.I) 3.
- 4.
- Sh. B.8. Karajagi, Director(TE.II) 5.

- 6. Sh. R.S. Mathur, Dy, Director
 7. Sh. B.B. Vats, Dy, Director
 8. Sh. M.L. Kavra, Dy, Director
 9. Sh. V.N. Sharma, Dy, Director
 10. Sh. Raj Shai, EAD.
- 11. Sh. D.N. Dhiya, EAD.

G.F.C.C.

Sh. N.K. Sarma, Member.

Planning Commission

- 1. Shri N.K. Dikshit, Dy. Adviser
- 2. Shri A.S. Gupta, Senior Research Officer.

PLANNING COMMISSION (I&CAD DIVISION)

Subject: 24th meeting of the Advisory Committee on irrigation, flood Control and Multi-ourpose Project held on 7.6.1983 in Shram Thakti Bhavan, New Dalhi.

The Summary Record of the 24th mosting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 7.6.1983 in Shram Shakti Bhavan, New Delhi is circulated herewith.

> Joint Adviser (I&CAD)& Member-Secretary

1. Shri M.G. Padhye, Secretary, Ministry of Irrigation S.S. Bhayan, New Delhi.

2. Shri Pritam Singh, Chairman, C.W.C., Sewa Bhavan, R.K. Puram, New Delhi.

3. Shri S.N. Roy, Chairman, C.E.A., Sewa Bhavan, R.K. Puram, New Delhi.

4. Adviser (Energy), Planning Commission
5. Joint Secretary, Plan Finance Division, Ministry of Finance North Block, New Delhi.
6. Smt. Priya Prakesh, Financial Adviser, Ministry of

Irrigation S.S. Bhavan, New Dolhi.

R. Chairman, C.G.W.B., Ministry of Irrigation d. Joint Secretary, Department of Power Ministry of Energy. 9. Joint Secretary, Department of Heavy Industry. 10.Joint Secretary, Department of Environment, Bikaner House, New Delhi.

Planning Commission Circular No.16(25)/24/83-I&CADdt.17.6.8

Copy to:

1. Ministry of irrigation, S.S. Bhavan, New Delhi.

1. Shri K. Ramanujam, Addl. Secretary 2. Shri K.R. Chandrasekharan, Jt. Secretary (GB)

3. Shri C.S. Hukmani, Jt. Secretary (Indus) 4. Shri R. Rangachari, Member (JRC)

- 5. Shri R.V. Suryanarayana, Deputy Secretary
 6. Shri R.S. Saksena, Jt.Commissioner (WM)
 7. Shri A.R.S. Murthy, Deputy Secretary
 6. Under Secretary (B&T)
 9. Shri Ramach Chandra, Director (JRC)
 10. Shri P.C. Jain, Dy.Secretary (F)

- 2. Central Water Commission, Sewa Bhavan, R.K. Puram, New Delhi.

 - Member (D&R)
 Member (P&P)
 Member (Floods)
 Shri S.N. Chattopadhyay, Chief Engineer (TE)
 - Director (TE) I /II
- 3. Department of emnyironment (Bikanar House, Shehajshan Road, New Delhi.

Dr. Maudgil, Director

4. Ganga Flood Control Commission, Sinchai Bhayan, Patna Shri N. Sanyal, Chairman.

PLANNING COMMISSION (180A)

Summary record of the 24th meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 7.6.83 in the Committee Room, Shram Shakti Bhayan, New Delhi.

Names of Officers present at the meeting are given in the enclosed Annexure.

The following Projects were considered and the Committee's recommendations are as follows:-

I. Major Irrigation Projects

(1) Lower Godavari (Vishnuouri) Project (Maharashtra) - Estimated cost Rs. 7893 lakhs.

The project was considered acceptable subject to the following observations:-

- i) A design flood value of 11.73 lakh cusecs (33220 cumecs) is accepted for the purpose of clearance for the present, since the safety of the barrage is checked for this value. Detailed studies are, however, required to be completed before final designs are taken up, duly taking into account the comments of CWC of March, 1983.
- ii) While finalising the energy dissipation arrangements the retrogression as specified in I.S. codes may be taken into account at the time of detailed designs.
- the opening for intake into pump house shall be atleast in two tiers so that water containing lesser quantity of silt may find its way into the pump. A number of balancing reservoirs are considered necessary to keep the canal prunning in case of break down, stoppage of power etc. These suggestions may be kept in view at the time of detailed designs.
- The alignment of the canal may be finalised after detailed investigations. Since the alignment may pass through deep cut, it may be necessary to work out the alternative economics of providing a detour or a tunnel, as maintenance of deep cuts will pose recurring problem. While finalising the alignment, the need for the canal at the tail-end reach may be examined as in this reach, it is too close to the Manar-Godavari branch canal of an existing project and the area benefited by this reach appears to be small.

- v) Since the water rates proposed in the project do not cover annual cost of operation and maintenance, the State Government may consider charging differential rates for flow and lift irrigation.
- vi) In order to reduce the estimated cost and to increase and extend benefit to the larger area by increasing theintensity, the sugarcane area may be reduced.
- vii) The project report for the Command Area
 Development under the project has to be
 prepared and sent by the State Tovernment
 to the Ministry of Irrigation and Planning
 Commission as early as possible.
- viii) Introduction of warabandi will have to be given due consideration while implementing the project and warabandi system should be adopted immediately as the project starts giving benefits.
 - ix) Hydraulic model experiments may be got carried out by the State Government either at its own research station at Nasik or CWPRS, Pune in order to improve further the hydraulic design aspects of the project.

(Adction: CWC/Planning Commission,

(2) Mahan Irrigation Project (Stage I) (Madhya Pradesh) - Estimated cost Rs. 3900 lakhs.

The project was found acceptable subject to the following:-

D.

- i) The State Government will take into account the comments of the Department of Environment regarding environmental aspects of the project.
- ii) The gauge and discharge observations may be continued with additional gauging stations in order to have better rainfell-run off corelation in reassessing the yield from the catchment.
- iii) The hydrology of the project as well as the design flood shall be reviewed by the State on the basis of more data to be collected.
- iv) The displaced persons, who are tribals, from the reservoir area should be settled in the command area of the project.

- v) In order to improve the profitability of the project and reduce the cost, the intensity of irrigation may be reviewed by reducing the sugarcane area proposed under the project.
- vi) Provision of penstocks may be made during the stage of implementation for any future power development.
- vii) A project report for the CAD component will be prepared by the State and sent to the Ministry of Irrigation and clanning Commission.

(action: CwC/Planning Commission)

II Medium Irrigation Projects

3) Barari Pumped Cabal Scheme (Bihar) - Estimated cost Es.933.40 lakhs

After detailed discussions, the Committee decided that the project would be recast and put up to the advisory Committee again, after taking into account the following observations:

- 1) Since no pumping from the Ganga is envisaged beyond 31st December, no water is proposed to be supplied for potato crop. It needs to be examined whether the potato crop would need water after 31st becember. If so the cropping pattern may be suitably changed as considered necessary.
- ii) The alignment of the canal will have to be re-examined with a view to reducing its length, as the command covered after the midway distance appears to be very small compared to the length of the canal to be constructed. The pumping station is proposed on a bend of the river. It may be examined whether a more suitable and stable site can be selected a little upstream of the present site.

 gossibilities
- iii) The 4 of conjunctive use of ground water with canal water need to be explored in consultation with the Central Ground Water Board and the State Tubewell Organisation.
- iv) The command area should be made flood free by construction of flood control embankments and providing adequate drainage.

- v) Concurrence of the State Finance Department needs to be obtained and furnished. The operation cost of the scheme works out to Rs.215 per hectare which is considerably higher than the water rates currently being charged. This has to be reviewed and appropriate action taken to increase the water rates so as to cover the operation and maintenance charges fully.
- vi) The proposed cropping pattern and the crop water requirement has to be finalised in consultation with Water Management Division of the Ministry of Irrigation.

(Action: CWC)

4 Katri Reservoir Scheme (Bihar) - Estimated cost Rs. 713.34 lakhs

10

The project was considered acceptable subject to the following:

- i) The concurrence of the State Agriculture Department for cropping pattern and crop water requirement may be obtained and communicated.
- ii) The concurrence of the State Finance Department for taking up the project may be obtained and communicated.
- iii) Provision, as considered necessary, for drinking water supply to the rural areas may be made.
- iv) Suitable provision may be made for initial installation of penstocks etc. for exploitation of power potential in the future.
- ..v) Since the project is not included in the Sixth Plan of the State, it may be accepted for implementation in the Seventh Plan.

(Action: CWC/Planning Commission)

The CWC would obtain the concurrence of the State finance Department and convey it to the Planning Commission for processing the letter of acceptance.

(Action: CWC)

(5) Barnai Tank Project (Madhya Pradesh) - Astimated cost Rs. 426.15 lakhs.

The Project was considered acceptable.

(Action: Planning Commission)

General

The Chairman observed that the representative of the Department of Environment had not attended the meetings of the Advisory Committee for the past two meetings. As such advantage of his advice to the Committee was not available. ONC clarified that the copies of the project reports were being sent to Department of Environment for their Comments. Chairman also directed that Representative of the Department of Agriculture should be a member of the Advisory Committee. It was, however, noticed that the projects were pending clearance in the Planning Commission even after the schemes were accepted by the Advisory Committee for want of clearance from the Department of Environment from the environmental angle. The Committee desired that the Planning Commission may take up this question appropriately with the Secretary of that Department.

(Action: Planning Commission)

III. Flood Control Projects

(1) Revised estimate for revetment and slope protection works along the right bank of river Ganga between Digha and Deedarganj (Bihar) - Estimated cost Rs. 270.81 lakhs.

The revised estimate was found acceptable.

(Action: Planning Commission)

(2) Protection works for Kosi flood embankments (Bihar) - Estimated cost Rs. 349.48 lakhs.

It was observed from the GFCC note that the scheme provided partly for strengthening/repairs to the existing embankments and partly for new works. Joint Adviser(1&CAD), Planning Cokmission pointed out that an enrier estimate amounting to Rs.513.31 lakhs for protection works for Kosi flood embankments was pending claurance from Planning Commission for want of information from the TFCC regarding the break-up of cost of strengthening/repair works and new works.

The representative of the GTCC indicated the following break-up of cost of repair works and new works in respect of the present scheme:-

(Rs. lakhs)

(i)	New Works	Estimated cost
a)	Protection works of eastern flood embankment from 81 to 82.25 Kms. (revetment)	210.92
ъ)	Anti-erosion works of eastern flood embankment from 0 to 40 Kms.	49.10
-	rotal (i	260.02
(11)	Restoration/repair works of	
	eastern flood embankment from 0 to 40 Kms.	89.46

Since the cost of repair works is to be charged to "Maintenance " head, the Committee decided that the New Works estimated to cost Rs. 260.02 lakhs may be considered acceptable.

(Action: Planning Commission)

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List of Officers present in the 24th meeting of the advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 7.6.1983 in Arram Shakti Bhavan, New Delhi.

Shri M.G. Padhye, Becretary, Ministry of ..Chairman Irrigation.

Shri Pritam Singh, Chairman, CWC Shri N.K. Dikshit, Joint Adviser, 2. Planning Commission.

Member-Secretary

Also Present

Ministry of Irrigation, 3.5. Bhayan, New Delbi.

Shri K.R. Chandrasekharan, Jt. 3ecy. (GB) Shri B.P.C. Sinha, Chief Hydrogeologist, C.G.W.B. Shri R.S. Saksena, Jt. Commissioner (WM) 2.

З.

Shri A.R.S. Murthy, Dy. Secy. (PI)

Shri R.V. Suryanarayana, Dy. Secy. (P.II)

Shri Ram Saran, Dy. Commissioner(CAD)
Shri P.C. Jain, Dy. Secy. (Floods)
Shri H.P. Rao, Financial Adviser
Shri a.K. Ahir, Under Secretary
Shri Ramesh Chandra, Director (JRC)

Water Commission Sewa Bhayan R K 8. 9.

Central Water Commission, Sewa Bhavan, R.K. Puram, New Delhi.

Shri Gokhul Prasad, Member(P&P)

Shri R. Ramaswami, Member (D&R) 2.

Shri M.S. Rao, Director (TE.I) Shri B.B.Karajagi, Director(TE II)

Ganga Flood Control Commission, Patna

Shri G.R.Keskar, Director

Planning Commission

1. Shri S.Nath, Dy. Adviser

Shri A.S.Gupta, S.R.O

PLANNING COMMISSION (I&CAD DIVISION)

Subject: 24th meeting of the Advisory Committee on irrigation, flood Control and Multi-purpose Project held on 7.6.1983 in Shram Bhakti Bhavan, New Delhi.

The Summary Record of the 24th meeting of the Advisory Committle on Irrigation, Flood Control and Multi-purpose Projects held on 7.6.1983 in Shram Shakti Bhavan, New Delhi is circulated herewith.

> (N.K. Dikshit) Joint Adviser (I&CAD)& Member-Secretary

- 1. Shri M.G. Padhye, Secretary, Ministry of Irrigation S.S. Bhavan, New Delhi.
- 2. Shri Pritam Singh, Chairman, C.W.C., Sewa Bhavan, R.K. Puram, New Delhi.
- 3. Shri S.N. Roy, Chairman, C.E.A., Sewa Bhavan, R.K. Puram, New Dolhi.

- 4. Adviser (Energy), Planning Commission
 5. Joint Secretary, Plan Finance Division, Ministry of Finance North Block, New Delhi.
 6. Smt. Priya Prakesh, Financial Adviser, Ministry of Theorem

Irrigation S.S. Bhavan, New Dolhi.

2. Chairman, C.G.W.B., Ministry of Irrigation
3. Joint Secretary, Department of Power Ministry of Energy.

9. Joint Secretary, Department of Heavy Industry.

10. Joint Secretary, Department of Environment, Bikaner House, New Delhi.

Planning Commission Circular No.16(25)/24/83-I&CADdt.17.6.83.

Copy to:

1. Ministry of Irrigation, S.S. Bhavan, New Delhi.

1. Shri K. Ramanujam, Addi. Secretary

2. Shri K.R. Chandrasekharan, Jt. Secretary (GB)

3. Shri C.S. Hukmani, Jt. Secretary (Indus) 4. Shri R. Rangachari, Member (JRC)

- 5. Shri R.V. Suryanarayana, Deputy Secretary 6. Shri R.S. Saksena, Jt.Commissioner (WM)
- 7. Shri A.R.S. Murthy, Deputy Secretary
- 8. Under Socretary (Bat) 7. Shri Ramsch Chandra, Director (JRC)
- 10. Shri P.C. Jain, Dy. Secretary (F)

- 2. Central Water Commission, Sewa Bhavan, R.K. Puram, New Delhi.

 - 1. Member (D&R)
 2. Member (P&P)
 3. Member (Floods)
 4. Shri S.N. Chattopadhyay, Chief Engineer (TE)
 5. Director (TE) I /II
- 3. Department of eEnvironment (Bikanar House. Shahajshan Road, New Delhi.
 - Dr. Maudgil, Director
- 4. Ganga Flood Control Commission, Sinchai Bhavan, Patna Shri N. Sanyal, Chairman.

PLANNING COMMISSION (1&CAD DIVISION)

Summary record of the 24th meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 7.6.83 in the Committee Room, Shram Shakti Bhavan, New Delhi.

Names of Officers present at the meeting are given in the enclosed Annexure.

The following Projects were considered and the Committee's recommendations are as follows:

I. Major Irrigation Projects

2 (230) 33

(1) Lower Godavari (Vishnuouri) Project (Maharashtra) - Estimated cost Rs. 7893 lakhs.

The project was considered acceptable subject to the following observations:-

- i) A design flood value of 11.73 lakh cusecs (33220 cumecs) is accepted for the ourpose of clearance for the present, since the safety of the barrage is checked for this value. Detailed studies are, however, required to be completed before final designs are taken up, duly taking into account the comments of CWU of March, 1983.
- ii) While finalising the energy dissipation arrangements the retrogression as specified in I.S. codes may be taken into account at the time of detailed designs.
- iif) The opening for intake into pump house shall be atleast in two tiers so that water containing lesser quantity of silt may find its way into the pump. A number of balancing reservoirs are considered necessary to keep the canal prunning in case of break down, stoppage of power etc. These suggestions may be kept in view at the time of detailed designs.
- The alignment of the canal may be finalised after detailed investigations. Since the alignment may pass through deep cut, it may be necessary to work out the alternative economics of providing a detour or a tunnel, as maintenance of deep cuts will pose recurring problem. While finalising the alignment, the need for the canal at the tail-end reach may be examined as in this reach, it is too close to the Manar-Godavari branch canal of an existing project and the area benefited by this reach appears to be small.

A Company

- v) Since the water rates proposed in the project do not cover annual cost of operation and maintenance, the State Government may consider charging differential rates for flow and lift irrigation.
- vi) In order to reduce the estimated cost and to increase and extend benefit to the larger area by increasing the intensity, the sugarcane area may be reduced.
- vii) The project report for the Command Area
 Development under the project has to be
 prepared and sent by the State Tovernment
 to the Ministry of Irrigation and Planning
 Commission as early as possible.
- viii) Introduction of warabandi will have to be given due consideration while implementing the project and warabandi system should be adopted immediately as the project starts triving benefits.
 - ix) Hydraulic model experiments may be got carried out by the State Government either at its own research station at Nasik or CWPRS, Pune in order to improve further the hydraulic design aspects of the project.

(Adction: CWC/Planning Commission)

(2) Mahan Irrigation Project (Stage I) (Madhya Pradesh)-Estimated cost Rs. 3900 lakhs.

The project was found acceptable subject to the following:-

- i) The State Government will take into account the comments of the Department of Environment regarding environmental aspects of the project.
- ii) The gauge and discharge observations may be continued with additional gauging stations in order to have better rainfall-run off corelation in reassessing the yield from the catchment.
- iii) The hydrology of the project as well as the design flood shall be reviewed by the State on the basis of more data to be collected.
- iv) The displaced persons, who are tribals from the reservoir area should be settled in the command area of the project.

- v) In order to improve the profitability of the project and reduce the cost, the intensity of irrigation may be reviewed by reducing the sugarcane area proposed under the project.
- vi) Provision of penstocks may be made during the stage of implementation for any future power development.
- vii) A project report for the CAD component will be prepared by the State and sent to the Ministry of Irrigation and rlanning Commission.

(Action: CWC/Planning Commission)

II Medium Irrigation Projects

3) Barari Pumped Cabal Scheme (Bihar) - Estimated cost Rs. 933.40 lakhs

After detailed discussions, the Committee decided that the project would be recast and put up to the advisory Committee again, after taking into account the following observations:-

- i) Since no pumping from the Ganga is envisaged beyond 31st December, no water is proposed to be supplied for potato crop. It needs to be examined whether the potato crop would need water after 31st becember. If so the cropping pattern may be suitably changed as considered necessary.
- ii) The alignment of the canal will have to be re-examined with a view to reducing its length, as the command covered after the midway distance appears to be very small compared to the length of the canal to be constructed. The pumping station is proposed on a bend of the river. It may be examined whether a more suitable and stable site can be selected a little upstream of the present site.

 possibilities
- of conjunctive use of ground water with canal water need to be explored in consultation with the Central Ground Water Board and the State "ubewell Organisation.
- iv) The command area should be made flood free by construction of flood control embankments and providing adequate drainage.

- Concurrence of the State Finance Department needs to be obtained and furnished. The operation cost of the scheme works out to Rs. 215 per hectare which is considerably higher than the water rates currently being charged. This has to be reviewed and appropriate action taken to increase the water rates so as to cover the operation and maintenance charges fully.
- The proposed cropping pattern and the crop water requirement has to be finalised in vi} consultation with Water Management Division of the Ministry of Irrigation.

(Action: CWC).

Katri Reservoir Scheme (Bihar) - estimated cost Rs.718.34 lakhs

The project was considered acceptable subject to the following:-

- 1) The concurrence of the State Agriculture Department for cropping pattern and crop water requirement may be obtained and communicated.
- ii) The concurrence of the State Finance Department for taking up the project may be obtained and communicated.

 Provision, as considered necessary, for
- îii) drinking water supply to the rural areas may be made.
- Suitable provision may be made for initial installation of penstocks etc. for exploitation iv) of power potential in the future.
 - Since the project is not included in the Sixth Plan of the State, it may be accepted for implementation in the Seventh Plan.

(Action: CWC/Planning Commission)

The CWC would obtain the concurrence of the State Finance Department and convey it to the Planning Commission for processing the letter of acceptance.

(Action: CWC)

Barnai Tank Project (Madhya Pradesh) -Estimated cost Rs. 426.15 lakhs.

The Project was considered acceptable.

(Action: Planning Commission)

General

The Chairman observed that the representative of the Department of Environment had not attended the meetings of the Advisory Committee for the past two meetings. As such advantage of his advice to the Committee was not available. CMC clarified that the copies of the project reports were being sent to Department of Environment for their Comments. Chairman also directed that Representative of the Department of Agriculture should be a member of the Advisory Committee. It was, however, noticed that the projects were pending clearance in the Planning Commission oven after the schemes were accepted by the Advisory Committee for want of clearance from the Department of Environment from the environmental angle. The Committee desired that the Planning Commission may take up this question appropriately with the Recretary of that Department.

(Action: Planning Commission)

III. Flood Control Projects

12(10)(8) 1(1)

Revised estimate for revetment and slope protection works along the right bank of river Ganga between Digha and Deedarganj (Bihar) - Estimated cost %.270.81 lakhs.

The revised estimate was found acceptable.

(action: Planning Commission)

do-(2)

Protection works for Kosi flood embankments (Bihar) - Estimated cost Rs. 349.43 lakhs.

It was observed from the GFCC note that the scheme provided partly for strengthening/repairs to the existing embankments and partly for new works. Joint Adviser(I&CAD), Planning Cokmission pointed out that an earlier estimate amounting to Rs. 513.31 lakhs for protection works for Kosi flood embankments was pending clearance from Planning Commission for want of information from the TFCC regarding the break-up of cost of strengthening/repair works and new works.

The representative of the GPCC indicated the following break-up of cost of repair works and new works in respect of the present scheme:-

(Rs. lakhs)

(i)	New Works	Estimated cost
a)	Protection works of eastern flood embankment from 81 to 82.25 Kms. (revetment)	210.92
b)	Anti-erosion works of eastern flood embankment from 0 to 40 Kms.	49.10
	Total (i	260.02
(11)	Restoration/repair works of eastern flood embankment from 0 to 40 Kms.	89.46

Since the cost of repair works is to be charged to "Maintenance " head, the Committee decided that the New Works estimated to cost Rs. 260.02 lakks may be considered acceptable.

(Action: Planning Commission)

List of Officers present in the 24th meeting of the advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 7.6.1983 in shrem Shakti Bhavan, New Delhi.

Shri M.G. Padhye, Becretary, Ministry of 1. ..Chairman Irrigation.

Shri Pritam Singh, Chairman, CWC Shri N.K. Dikshit, Joint Adviser,

Planring Commission.

Member-Secretary

Also Present

Ministry of Irrigation, S.S. Bhavan, New Delhi.

Shri K.R. Chandrasekharan, Jt.Secy.(GB)

2. Shri B.P.C. Sinha, Chief Hydrogeologist, C.G.W.B. Shri R.S. Saksena, Jt. Commissioner (WM)

4.

Shri A.R.S. Murthy, Dy. Secy. (PI) Shri R.V. Suryanarayana, Dy. Secy. (P.II) 5.

Shri Ram Saran, Dy. Commissioner(CAD) Shri P.G. Jain, Dy. Secy. (Floods) Shri H.P. Rao, Financial Adviser Shri A.K. Ahir, Under Secretary 8.

9.

). Shri Ramesh Chandra, Director (JRC) Central Water Commission, Bewa Bhavan, R.K. Purem, New Delhi.

1. Shri Gokhul Prasad, Member(P&P)

2. Shri R. Ramaswami, Member (D&R)

3. Shri M.S. Rao, Director (TE.I) Shri B.B.Karajagi, Director(TE II)

Ganga Flood Control Commission, Patna

3hri G.R.Keskar, Director

Planning Commission

Shri S.Nath, Dy. Adviser

Shri A.S.Gupta, S.R.O

MOST IMMEDIATE

PLANNING COMMISSION (I&CAD DIVISION) ماز خ الدوايع يدوي

Subject: 25th meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Project held on 1.12.1983 in Shram Shakti Bhavan, New Delhi.

The Summary Record of the 25th meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 1.12.1983 in Shram Shakti Bhavan, New Delhi is circulated herewith.

> (N.K. Dikshit)
> Joint Adviser (I&CAD) & , Member-Secretary

- 1. Shri M.G. Padhye, Secretary, Ministry of Irrigation
- 2. Shri Pritam Singh, Chairman, Central Water Commission, Sewa Bhavan, R.K. Puram, New Delhi.
- 3. Chairman, Central Electricity Authority, Sewa Bhavan, R.K. Puram, New Delhi.
- 4. Adviser (Energy), Planning Commission
- 5. Shri C.G. Desai, Adviser (I&CAD), Planning Commission
- 6. Joint Secretary, Plan Finance Division, Ministry of Finance.
- 7. Smt. Priya Prakash, Jt. Secretary & Financial Adviser, Ministry of Irrigation, S.S. Bhavan, New Delhi
- 8. Joint Secretary, Deptt. of Power, Ministry of Energy.
- 9, Chairman, Central Ground Water Board, Ministry of Irrigation
- 10. Joint Secretary, Deptt. of Heavy Industry. 11. Joint Secretary, Department of Environment.

Planning Commission Circular No.16(25)/25/83-I&CAD dt.11.1.1984

Copy to:

Ministry of Irrigation, S.S. Bhavan, New Delhi.
1. Shri C.S. Hukmanl, Joint Secretary(1)
11. Shri K.R. Chandrasekharan, Jt. Secretary(GB)

2. Shri G.S. Jakhade, Adviser

- 3. Shri R. Rangachari, Member(JRC)
 4. Shri S.K. Aggarwala Commissioner, Indus Water
- 5. Shri R.S. Sakswna, Joint Commissioner (WM), Krishi Bhavan
- 6. Shri R.V. Suryanarayana, Deputy Secretary(P)
- 7. Shri P.C. Jain, Deputy Secretary.

Central Water Commission, Sewa Bhavan, R.K. Puram,

- 1. Shri Gokhul Prasad, Member(P&P)
 2. Shri R. Ramaswami, Member(D&R)
- 3. Member (Floods)
- 4, Shri J.R. Khanna, Chief Engineer
- 5. Shri S.N. Chattopadhyay, Chief Engineer (TE)
- 6. Director TE(I)/(II)
- 7. Director (P&P)

Department of Environment, Bikaner House, New Delhi.

1. Dr. S. Maudgal, Director

Ganga Flood Control Commission, Sinchai Bhavan, Patna (Bihar)

1. Shri SoJ. Thomas, Acting Chairman

Department of Fower

1. Shri H.C. Kachhwaha, Director.

(N.K. Dikshit Joint Advisor (I&CAD) & Member - Secretary

PLANNING COMMISSION (1&CAD DIVISION)

Summary Record of the 25th Meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 1.12.1983 in Committee Room of Shram Shakti Bhavan, New Delhi.

Names of officers present at the meeting are given in the enclosed Annexure.

Before taking up consideration of the projects, the Chairman made the following observations:

. -. 1 (2)

Representatives of the Department of Environment and the Plan Finance Division of the Ministry of Finance are not attending the meetings of the Advisory Committee regularly. The Planning Commission may impress upon the concerned Departments to ensure participation of their representatives in future.

(Action:Planning Commission)

2. Many of the projects already accepted by the Advisory Committee/being considered by the Committee/under examination in the Central Water Commission do not have the concurrence of the State Finance Departments. Some of these schemes are not even included in the Sixth Plan and even for those included, only a negligible provision is made by the States in their plan document. Rethinking and revision of the procedure for examination of the irrigation projects and subsequent approval of the Planning Commission is called for. The Chairman also mentioned that he had suggested in the meeting held in September, 1983 of the Steering Group on Agriculture, for formulation of the Seventh Five Year Plan, a two-stage approval for irrigation projects, the first being a techno-economic clearance and the second clearance from investment angle. He hoped that a view in this aspect would be taken before finalisation of the Seventh Plan by the Planning Commission. Pending decision on this issue, the Central Water Commission might give low priority for examination of new schemes which are not included in the Sixth Plan, considering the likely large spill over on continuing schames Into the Seventh Plan in many States and keep the States so informed.

(Action: Planning Commission/CWC)

In respect of the schemes involving inter-State aspects, the Chairman mentioned that clearance of the Ministry of Irrigation from inter-state angle may be obtained befor putting up the projects for consideration of the Advisory Committee. He observed that all inter-State aspects have to be resolved before the schemes are brought up before the Advisory Committee.

(Action: CWC/GFCC/Min. of Irrigation)

4. In the check list of projects attached by the Central Water Commission to the notes put up to the Advisory Committee on major irrigation projects, a separate item on water tightness of the reservoir periphery may be added and all relevant information furnished.

(Action: Central Water Commission)

to irrigation projects, sometimes indicates that the oustees should be provided fuel free of charge, the cost being charged to the project and that the expenditure on catchment area treatment should also be borne by the irrigation projects. Such provisions will increase the costs of irrigation projects and cut into their economic liability. The Ministry of Irrigation may take up the matter with the concerned Central Ministries as to how far such provisions are to be considered as legitimate charge on the irrigation project Govt. Will have to take a view on this aspect. The State Governments/U.T. Administrations may also be consulted before finalising revised guidelines.

(Action: Min. of Irrigation)

The following projects were considered and the Committee's recommendations are as follows:

I. Major Irrigation Projects

The project was considered acceptable subject to the following observations:

a) Specific concurrence of the State Finance Department may be obtained and communicated by the CWC to the Planning Commission.

-/-

- b) Clarifications regarding the modified estimate for Sindh River Phase I may be furnished by the State Government to the Contral Water Commission expeditiously so that the project may be cleared as soon as possible.
- c) The power component of the scheme shall be suitably modified taking into account the various comments of the C.E.A. already ferwarded. After suitably allocating the share cost of the common works to power, which at present is treated as a charge to the irrigation component, the power component shall be get cleared separately from the Central Electricity Authority and Central Water Commission.
- d) The outstanding comments of Central Water Commission on hydrology, flood control and drainage, cropping pattern and water requirements, environmental aspects, overall planning and cost estimates shall be kept in view before implementing the project.

(Action: CWC/Planning Commission)

11) Watrak Reservoir Project (Gujarat) Estimated cost Rs. 22 crores

The project was considered acceptable subject to the following observations:-

- a) It was observed from the Central Water Commission note that in the absence of any agreement with the Rajasthan Government, the project is planned with utilisation restricted to water availability from the catchment area within Gujarat, but a sizeable carry ever capacity of about 60 m.cu.m. has been provided to take advantage of flow from catchment area in Rajasthan, which will be available till full development in that State takes place. The extra storage thus provided is estimated to have increased the cost of the dam by about Rs. 2 crores. After some discussion, it was decided that the specific clearance of the Ministry of Irrigation on the intor-State aspect involved would be conveyed by the Ministry to the Planning Commission before the acceptance of the scheme.
- b) The run-off series have been tentatively accepted by Hydrology Directorate of Central Water Commission and would require revision when more observed data at Bhompoda gauging site is available.

- c) The sedimentation data also requires revision when more data at the proposed Dam site becomes available.
- d) Design flood may be reviewed on the basis of more representative floods and clearance obtained from Central Water Commission before proceeding with the design and subsequent implementation.
- e) Reservoir working tables on a monthly basis for a cycle of 28 years may be furnished by the State Government based on computarised data against biseasonal working tables presently furnished.

(Action: CWC/Ministry of Irrgn./ Planning Commission)

Subarnarekha Barrage Project (West Bongal) -Estimated cost Rs. 158, 55 crores.

It was observed that a flood embankment scheme has been proposed for protecting the area on the Left Bank of Subarnarckha Project which covers a part of the command area proposed to be irrigated. The Committee decided that the Central Water Commission should examine the adequacy of flood protection measures to safeguard the part of the command area which is prone to floods and put up the project again to the Advisory Committee for consideration.

(Action: Central Water Commission)

Medium Irrigation Projects

Modernisation of existing Kharicut Canal System (Gujarat)-Estimated cost Rs. 591.14 lakhs

The project was considered acceptable.

(Action: Planning Commission)

ii) Umaria Irrigation Scheme (Gujarat) -Estimated cost Rs. 282.319 lakhs

Although the benefit-cost ratio was 1,01, it is observed that the project benefits backward and drought prone areas. The project was, therefore, considered acceptable, subject to the following observations:

a) Koliari scheme proposed as one of the medium schemes in the upper portion of the catchment shall be dropped by the State Government to ensure that the upstream utilisation of 4.36 TMC provided for in the sanctioned Panam project of Gujarat is not encroached upon.

- b) The spillway capacity would be reviewed further to provide for the maximum probable flood based on unit hydrograph studies.
- c) The negative financial return of 0.039% on 5.5% simple interest indicates that the project does not cover even the working expenses and the interest charges on capital and would, therefore, require a continuous subsidy. The impact of the project on irrigation revenues and examination as to whether the water rates require upward revision may, therefore, be looked into by the State Government.

(Action: CWC/Planning Commission)

111)

Uben Irrigation Project (Gujarat) - Estimated cost Rs. 484,80 lakhs.

Since 87% of the estimated cost of the project had already been incurred upto June, 1983, the Committee decided that no useful purpose would be served in considering the schemes at this late stage. The observation of the Committee may be brought to the notice of the State Government to avoid recurrence of such cases.

(Action: CWC/Planning Commission)

tv) Titilagarh Irrigation Project(Orissa)
Estimated cost Rs. 407. 43 lakhs.

The Committee found the project acceptable subject to the following observations:-

- a) Since the project is not included in the Sixth Plan of Orissa, the State Government should furnish construction programme for the project, along with availability of funds, and proposed Annual Plan provisions during the life of the project.
- b) The barrage structure incorporates a design feature to receive the flows from the augmentation canal, as well as the flows from its own catchment. The hydraulic design aspects may be revised during detailed design.

(Action: CWC/Planning Commission)

Baghalati (Bahuda Stage, II) Irrigation Project, - Orissa Estimated cost Rs. 737, 44 lakhs.

The project was found acceptable subject to the following:

- (a) Since the project is not included in the Sixth Plan of Orissa, the State Government should furnish the construction programme of the project together with the position regarding availability of funds and break down of Annual Plan allocations as envisaged.
- (b) The water utilisation under the project would be structly confined to the inter-State agreement on sharing of waters of Bahuda river between Orissa and Andhra Pradesh States reached on 15,12,1978.
- c) The concurrence of the Finance Department is to be obtained from the State Government by Central Water Commission and conveyed to the Planning Commission.
- d) Geological report is to be obtained from the Geological Survey of India for the dam site to finalise the foundation treatment.

(Action: CWC/Planning Commission

Urmodi Irrigation Project(Maharashtra) - estimated cost Rs. 1884.68 lakhs

The project was considered acceptable.

(Action: Planning Commission)

vii) Sina(Nimgaon) Irrigation Project(Maharashtra)-

Although the B.C. ratio in respect of the project is 1.15, the Committee considered it acceptable, as it is located in the drought prone area.

(Action: Planning Commission)

Panchana Irrigation Project (Rajesthan) - Estimated cost Rs. 1745 lakhs.

The project was considered acceptable subject to the following:

- a) The suggestions made by the C.W.C. on the design flood, soil survey, instrumentation in the earth dam, scepage, yield series, synchronisation of distribution system with the dam construction, drainage in the command area, etc. should be reviewed by the Govt. of Rajasthan and the required information furnished to the C.W.C. about compliance of their suggestions. There-after the C.W.C. would convey their clearance on these aspects to the Planning Commission before issue of the acceptance letter.
- b) The financial return at 5.5% at the end of tenth year after completion works out to 0.164%. This shows that that the project will not be able to meet the operation and maintenance charges and would, therefore, require a continuous subsidy. The impact of the project on the irrigation revenues and whether the water rates require upward revision may, therefore, be looked into by the State Government.

(Action: Planning Commission/CWC)

Salayia Reservoir Schome (Bihar)
Estimated cost Rs.595.24 lakhs.

Kesho Reservoir Scheme (Bihar) - Estimated cost Rs.608.24 lakhs

These projects were considered acceptable subject to the following observations:-

- a) The concurrence of the Finance Department for taking up the projects has to be communicated by the State Government. The Central Water Commission would obtain the same and communicate to the Planning Commission.
- b) Since the projects are not included in the Sixth Plan, the same would be considered for implementation in the Seventh Plan subject to the availability of resources after the Seventh Five Year Plan of Bihar is finalised.

(Action: CWC/Planning Commission)

xi) Ramrekha Reservoir Scheme (Bihar) - Estimated cost Rs.876,14 lakhs.

xii) Phansinghtoli Reservoir Scheme (Bihar) -- Estimated cost Ns.637.99 lakhs

These projects were considered acceptable subject to the concurrence of the State Finance Department being obtained and conveyed to the Planning Commission by the C.W.C.

(Action: CWC/Planning Commission)

xiii) Satpotka Reservoir Scheme(Bihar) Estimated cost Rs.66.60 lakhs

The project was found acceptable subject to the following observations:-

- a) The concurrence of the Finance Department may be obtained from the State Government and convoyed to the Planning Commiss on by the Central Water Commission.
- b) The concurrence of the State Agriculture Department for the cropping pattern, Water requirement and rates of crop yields and their prices may be obtained and furnished to the Planning Commission.
- c) To enable exploitation of power potential at a future date, suitable provision may be made for the installation of penstocks etc.
- d) Provision, as necessary, for providing water supply to rural areas may be made.
- e) Since the scheme is not included in the Sixth Plan of Bihar, it would be considered for implementation in the VII Plan subject to availability of resources after finalisation of Bihar's Seventh Plan.

(Action: CWC/Planning Commission)

Next Meeting of the Committee

The Chairman mentioned that if sufficient number of schemes are ready for consideration of the Advisory Committee, the next meeting could be held some time in January, 1984.

List of Officers present in the 25th moeting of the Advisory Committee on Irrigation, Flood Control and Multapurpose Projects held on 1,12,1983 un Shram Shakti Bhavan, New Dolhi.

PRESEMT

- 1. Shri M.G. Padhye, Secretary, Min. of Irrgn. ...Chairman
- 2. Shri Pritam Singh, Chairman, C.W.C.
- 3. Smt. Priya Prakash, Jt. Secretary & Financial Adviser, Min. of Irrigation
- 4. Shri C.G. Dosai, Adviser, Planning Commission 5. Shri N.K. Dikshit, Jt. Adviser, Planning
- Commission. ... Member-Secy.

Also present

Ministry of Irrigation

- 1. Shri K. Ramanujam, Additional Secretary
- 2. Shri K.R. Chandrasekharan, Jt. Secretary(GB)
- 3. Shri R. Rangachari, Member(J.R.C.)
 4. Shri R.S. Saksona, Chief Engineer(MI) and Joint Commissioner (WM)

Department of Power

1. Shri H.C. Kachhwaha, Director

Contral Electricity Authority

1. Shri C.V. Verma, Director (H.P.A.)

Central Water Commission

- 1. Shri Gokhul Prasad, Momber (P&P) 2. Shri R. Ramacwami, Momber (D&R)
- 3. Shri J.R. Khanna, Chief Engineer
 4. Shri S.N. Chattopadhyay, Chief Engineer (TE)
 5. Shri Kishan Chand, Director (TE(I)
- 6. Shri B.B. Karajagi, Director, (TE II)
- 7. Shri L.K. Khanna, Dy. Director(FA.II) 8. Shri M.C. Dhawan, Dy. Director(TE I)

- 9. Shri B.B. Vats, Dy. Director (TE I)
 10. Shri R.S. Mathur, Dy. Director (TE.II)
 11. Shri Krishan Dev. Chaudhury, Dy. Director (TE.II)
- 12. Shrt D.K. Bablani, Dy. Director (TE)
- 13. Shri G.P.Keshari, Asstt. Director (TE)
 14. Shri D.N. Dahiya, E.4. D. (TE)

Central Ground Water Board

1. Shri B.P.C. Sinha, Chief Hydrologist.

Planning Commission

1. Shri J.N. Nanda, Senior Research Officer

PLANNING COMMISSION (1&CAD DIVISION)

Subject: 26th meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Project held on 22.3.1984 in Shram Shakti Bhavan, New Delhi.

The Summary Record of the 26th meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 22.3.1984 in Shram Shakti Bhavan, New Delhi is circulated herewith.

> (N.K. Dikshit) Joint Adviser (I&CAD)& Member-Secretary.

- Shri M.G. Padhye, Secretary, Ministry of Irrigation
- Shri Pritam Singh, Chairman, Central Water Commission, Sewa Bhavan, R.K. Puram, New Delhi. Chairman, Central Electricity Authority, Sewa Bhavan, 2.
- 3. R.K. Pturam, New Delhi.
- Adviser (Energy), Planning Commission. Shri C.G. Desai, Adviser (I&CAD), Planning Commission Joint Secretary, Plan Finance Division, Ministry of
- Finance.
- Smt. Priya Prakash, Jt. Secretary & Financial Advisor, Ministry of Irrigation, S.S. Bhavan, New Delhi. Joint Secretary, Deptt. of Power, Ministry of Energy.
- 8.
- 9. Chairman, Central Ground Water Board, Ministry of Irrigation
- 10.
- Joint Secretary, Deptt. of Heavy Industry. Joint Secretary, Department of Environment.

Planning Commission Circular No.16(25)/26/84-1&CAD dt.25.4.84.

Copy to:

Ministry of Irrigation, S.S. Bhavan, New Delhi.

- Shri C.S. Hukmani, Joint Secretary(I)
- Joint Secretary (GB) 2.
- Shri G.S. Jakhado, Adviser
- Shri R. Rangachari, Member (JRC)
- **6.** Shri R.S. Saksena, Joint Commissioner (WM), Krishi Bhavan Shri R.V. Suryanarayana, Deputy Secretary(P) Shri P.C. Jain, Deputy Secretary.

- * Shri Bhavani Shankar, Chief Engineer(Narmada Cell) Lok Nakyak Bhavan, New Delhi.

Central Water Commission, Sewa Bhavan, R.K. Puram, New Delhi.

- Shri Gokhul Prasad, Member (P&P)

Shri R. Ramaswami, Member (D&R)
Member (Floods)
Shri M.S. Rao, Chief Engineer (TE)
Director (TE) (I)/(II)
Director (P&P)

Department of Environment, Bikaner House, New Delhi.

Dr. S. Maudgal, Director

Narmada Control Authority

- Shri K.V. Ramarao, Chairman
- Shri H.P.S. Murthy, Member
- Shri R.S. Nagaraja, Secretary

(N.K. Dikshit) Joint Adviser(I&CAD) & Member-Secretary.

PLANNING COMMISSION (1&CAD DIVISION)

Summary record of the 26th meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 22.3.1984 in Shram Shakti Bhavan, New Delhi.

Names of the officers present in the meeting are given in the enclosed Annexure.

Before taking up consideration of the projects, the following general observations were made:

The representatives of the Department of Environment and of the Ministry of Agriculture are not attending the meetings of the Advisory Committee regularly. Advisor(I&CAD) clarified that Planning Commission had earlier written to the Department of Environment in the matter and no reply had been received. The Chairman suggested that the Planning Commission may take up the matter again with the concerned Ministries so as to ensure participation of their representatives in future.

(Action: Planning Commission)

2) Member (P&P), CWC suggested that in view of the fact that a large number of CWC officers with detailed documents for discussion have to generally attend the meetings, it would be preferable to hold such meetings in Sawa Bhavan, CWC. The Chairman stated that this would be considered at the time of arranging the next meeting of the Committee.

(Action: Min. of Frrigation/ Planning Commission)

It has been observed that a large number of schemes cleared by the Advisory Committee are pending in the Planning Commission for want of concurrence of the Finance Departments of the State Governments for nearly 3 to 4 years in some cases, which might necessitate further revision of the cost of the projects before their acceptance. It was, therefore, decided that GWC should in future put up projects for consideration of the Committee only after obtaining the concurrence of the concerned State Finance Departments. Planning Commission may specifically bring this to notice of States.

(Action CWC/Planning Commission)

It has been noticed that the Department of Environment while giving clearance for some of the projects, has stipulated that suitable financial provision should be made in the project estimates for afforestation to be undertaken on a large scale in the catchment area. Inclusion of such costs in the project estimate would affect the viability of irrigation projects. It will therefore be necessary for Government to take a policy decision in this regard. This question has already been referred by Planning Commission to the Ministry of Irrigation/CWC in the case of Mahan project (M.P.) and North-Koel Project (Bihar). The Chairman suggested that the CWC should examine this question and prepare a paper for consideration of the Ministry of Irrigation in consultation with the other concerned Ministries.

(Action: CWC)

5) While discussing the schemes benefiting tribal areas, it was clarified that there is at present no relaxation in the B.C. Ratio for irrigation schemes benefiting tribal areas. The Chairman asked the Planning Commission to look into this question.

(Action: CWC)

6) Members felt that very little time was available to study the CWC agenda notes on the projects for consideration of the Committee, as these were circulated very late. It was decided that CWC should send the agenda notes to the Planning Commission for circulation atleast two weeks before the date fixed for the meeting.

(Action: CWC)

The following projects were considered and the Committee's recommendations are as follows:

Multipurpose Projects

1) Narmadasagar Project (M.P.) - Estimated cost Rs. 1392.85 crores

The Chairman of the Committee mentioned that large projects of the size of Narmadasagar, Sardar Sarovar, etc. might be reviewed by the Advisory Committee every five years in order to take note of the subsequent important changes in planning and implementation of such projects even if the revised estimate was not due according to the prescribed procedure.

Chairman, CWC suggested that the need for setting up of an irrigation system review panel on the lines of dam review panel may be examined by the State Government.

Adviser (I&CAD) raised the question whether GCA, CCA was based on survey of command area. The representatives of CWC clarified that the area was determined on the basis of village maps. Adviser(I&CAD) also observed that irrigation intensity of 142% provided in the project is on very high side looking to the past practice. The Chairman clarified that 142% intensity is not that could not be achieved and hence may be accepted.

Joint Adviser (I&CAD) suggested that the Committee might consider giving clearance to the project in phases, in view of its large size and also due to the fact that the question of accommodating the entire project in the Seventh Five Year Plan of the State would pose a problem in the light of the heavy commitments on externally aided projects and other ongoing major irrigation projects. Since 83.54% of the cost of Unit I pertains to the Power sector, he mentioned that the clearance of Central Electricity Authority and recommendation of the Department of Power would be required before Planning Commission could issue investment clearance in respect of the Power component of the project.

The Chairman, Central Ground Water Board suggested detailed studies of the ground water levels in the command area with a view to exploit ground water in conjunction with the surface-water.

On an inquiry about the cost of relocation of the railway track amounting to Rs. 62 crores assumed in the CWC note, the CWC representative clarified that the Ministry of Railways has been consulted in arriving at the estimate.

After detailed discussion, the project was considered acceptable subject to the following observations:-

i) Clearance of the Central Electricity Authority and the recommendation of Department of Power in respect of power component of the project would be conveyed to the Planning Commission for considering giving investment clearance.

- ii) The project should be implemented on the basis of designs finalised in consultation with the Central Water Commission.
- iii) The hydrology of the project is to be further reviewed by the State Government in consultation with CWC as and when more data becomes available.
 - iv) The concurrence of the _State Finance Department for the updated cost of Rs.1392.85 crores will be obtained and communicated by the CWC to the Planning Commission.
 - v) Since the project is yet to be cleared by the Department of Environment, the clearance from environmental angle would have to be obtained.
- vi) The specific concurrence of the Government of Gujarat in respect of sharing of the cost of Narmadasagar project would be obtained and conveyed to the Planning Commission.
- vii) In view of the large magnitude of the project and its effect on Sardar Sarovar project lower down, all important subsequent changes in the project planning, estimates of cost, etc. will be placed before the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects every five years.

(Action: CWC/Min. of Irrigation/CEA/Dept. of Power/Narmada Control Authority/Planning Commission)

II. <u>Majer Irrigation Projects</u>

Man Irrigation Project (M.P.) - Estimated cost Rs.4410 lakhs.

It was observed from the CWC notes that while giving clearance, the Department of Environment has made a stipulation that suitable financial provision for afforestation to be undertaken on large scale in the catchment area, along with the canals and on the periphery of reservoir, should be made in the project estimates. Before considering acceptance of the project, a view has to be taken on this question as it would affect the economic viability of the project. After some discussion, the Committee decided as follows:

i) The CWC may examine the question of charging the cost of afforestation to the irrigation project cost and its effect on the viability of the project and prepare a note for consideration of the Ministry of Irrigation in consultation with the concerned Ministries.

ii) In the meantime, the GWC may take up the outstanding comments mentioned in the notes with the State Government for compliance.

After examination on the above lines, the project would be referred to the Chairman of the Committee for advice regarding acceptance of the scheme.

(Action: Ministry of Irrigation/CWC)

2) Modernisation of Kangsabati Reservoir Project(W.B.) Estimated cost Rs. 232.84 crores.

It was mentioned in the CWC note on the project that further investigations were required to be done in respect of location of the spillway, permeability and comprehensive strength of bed rock, detailed planning for tubewells etc. The Committee decided that the project may be put up again at a subsequent meeting after the minimum necessary investigations are carried out and the project estimates updated.

(Action: CWC)

Konar Irrigation Project (Bihar) - Estimated cost Rs. 9361.46 lakhs

It was mentioned in the CWC note that the concurrence of the DVC to the share cost of Konar dam payable by Bihar was yet to be obtained. The concurrence of the State Finance Department in respect of the scheme and that of the State Agriculture Department in respect of proposed cropping pattern are still to be obtained. After some discussion, the Committee decided that the Ministry of Irrigation may have to convey their specific clearance from inter-State angle. The scheme may, thereafter be referred to the Chairman of the Committee for advice regarding its acceptance.

(Action: CWC/Min. of Irrigation)

4) Subernarekha Barrage Project (West Bengal) - Estimated cost Rs. 15855 lakhs

It was stated in the CWC note that the Railways had objected to the construction of embankment prior to construction of Chandil Dam in Bihar, as it would adversely affect the railway bridge at Rajghat. Therefore, the Government of West Bengal has proposed that pending construction of the flood embankment, the right side embankment of Distributary No.4 would be strengthened to act as flood embankment in order to protect the command area from floods. It was observed that with the raising of the right side embankment of Distribuary No.4, part of the command may still be affected from floods and the effect of this embankment on the railway bridge down stream would need

to be examined in consultation with the Railways. The Committee, therefore, decided that the concurrence of Railways may be obtained to the modified proposal of the State Government and the project put up to the Committee for reconsideration.

(Action: GwG)

III. Medium Projects

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1) Wagan Irrigation Project (Rajasthan) - Estimated cost Rs. 982 lakhs

This project is in the pipeline for assistance from USAID. It was considered acceptable subject to the following observations:-

- i) The concurrence of the State Finance Department may be obtained by the CWC and conveyed to the Planning Commission.
- ii) The State Government may install USBR type peizometer in the river gorge portion and other suitable location of the earth dam in consultation with the Design Directorate of the State and CWC to keep a watch on the behaviour of the earthen embankment. The seepage through the earth dam would need to be channelised on both the flanks for safe disposal after measuring it periodically and keeping a watch.
- iii) The reservoir water may be got analysed for chemical properties and corrective measures, if any, adopted in consultation with the State Agriculture Department.

(Action: CWC/Planning Commission)

2) Khairi Irrigation Project (Maharashtra) - Estimated cost Rs.496.77 Lakhs.

This project is in the pipeline for assistance from USAID. It was considered acceptable subject to the following:

i) The concurrence of the State Finance Department to the revised cost of Rs.496.77 lakhs may be obtained by the CWC and conveyed to the Planning Commission.

ii) Since the financial return is in the negative, the State Government may examine the water rates with a view to revising it upwardly so that the revenue would atleast meet the operation and maintenance expenditure under the project.

(Action: CWC/Planning Commission)

3) Panchkhero Reservoir Scheme (Bihar) Estimated cost Rs. 740.44 lakhs

It was observed that the cost per hectare of Rs.33656/- in respect of the project was too high. Although the CWC note gave specific reasons for high incidence of cost, the Committee considered that the State Government should examine the possibilities of reducing the cost by restricting the command area and thereby reducing the length of the canal system. Subject to the above, the project was considered acceptable. The concurrence of the State Finance Department would be obtained by CWC and conveyed to Planning Commission.

(Action: CWC/Planning Commission)

Although the scheme is included in the Sixth Plan no expenditure has so far been incurred on it. The Chairman suggested that besides concurrence of the Finance Department, the project should also have the concurrence of the State Planning Department with regard to the funding arrangement for the project so that the programme of construction envisaged should have the backing of the requisite availability of funds. It was decided that Planning Commission might issue a circular letter to the States making it obligatory for the Irrigation Departments to get the concurrence of the State Planning and Finance Departments before forwarding the project reports to the Central agencies for examination and clearance.

(Action: Planning Commission)

4) Revised estimate of Rajoura Lift Irrigation Scheme (J&K) - Estimated cost Rs. 703 lakhs.

The revised estimate was considered acceptable subject to the following:-

i) The clearance of the Ministry of Irrigation (Indus Wing) to the scheme would be conveyed to the Planning Commission.

- ii) The concurrence of the State Finance
 Department to the revised estimate would be obtained by GWC and conveyed to Planning Commission.
- iii) Since the financial return is negative, the State Government should examine the possibility of increasing the water rates so that the revenue from water rates would atleast meet the operation and maintenance expenses.

(Action: Ministry of Irrigation/CWC/ Planning Commission)

Bhairwa Reservoir Scheme (Bihar) - Estimated cost Rs. 848.10 lakhs

The project was considered acceptable subject to the following:-

- i) The concurrence of the State Finance
 Department would be obtained by CWC and
 conveyed to Planning Commission.
- ii) Although the scheme is included in the Sixth Plan of the State, no expenditure has been incurred on it so far. In view of the large commitment on ongoing irrigation projects, there is no possibility of the scheme being taken up for implementation in the last year of the Sixth Plan. The question of accepting the scheme would be considered after the Seventh Plan of the State is finalised and the position regarding availability of funds for implementation of this project is clearly known.

(Action: CWC/Planning Commission)

Baski Reservoir-cum-Water Supply Scheme(Bihar) - Estimated cost Rs. 1302 lakhs.

The scheme was considered acceptable subject to the following:-

- i) The Heavy Engineering Corporation should bear the part cost of the project on the basis of the water supply to be made for industrial use from this project.
- ii) Concurrence of the State Finance Department for taking up the project would be obtained by CWC and conveyed to Planning Commission.

iii) Since the scheme is not included in the Sixth Plan of the State, the question of clearance of the scheme would be considered after the Seventh Plan of the State is finalised and the position regarding availability of funds for its implementation would be clearly known.

(Action: CWC/Planning Commission)

7) Panzan (Nagya-Sakya) Project (Maharashtra) Estimated cost Rs. 541.53 lakhs.

The project is in the pipeline for assistance from USAID. It was considered acceptable subject to the following:-

- The concurrence of the State Finance Department would be obtained by CWC and conveyed to the Planning Commission.
- IIO It was mentioned in the CWC note that theutilisation of various projects accepted by Planning Commission so far is 2.44 MAF, including Panzan project, as against the upstream reservation of 6 MAF above Ukai dam in Gujarat for both Maharashtra and Madhya Pradesh. The CWC would examine the utilisation of projects sanctioned so far in Madhya Pradesh and Maharashtra up stream of Ukai and furnish the break-up of utilisation between Maharashtra and Madhya Pradesh to the Planning Commission before processing the acceptance of the scheme.

(Action: CWC/Planning Commission)

8) Shahanoor Irrigation Project (Maharashtra) Estimated cost Rs. 1523.81 lakhs.

The project is in the pipeline for assistance from the USAID. It was considered acceptable subject to the following:-

- i) The concurrence of the State Finance Department would be obtained by CWC and conveyed to Planning Commission
- ii) Provision as considered necessary may be made for supply of drinking water to the rural areas at the time of execution of the project.

- iii) The possibility of hydel generation may be explored and provision made for initial installation like penstocks, etc. to enable exploitation of the power potential at a later date.
- iv) It was mentioned in the CWC note that the total utilisation of various projects accepted by Planning Commission so far is 2.44 MAF, including this project, as against the upstream reservation of 6 MAF above Ukai dam in Gujarat for both Maharashtra and Madhya Pradesh. The CWC would examine the utilisation of projects sanctioned so far in Madhya Pradesh and Maharashtra upstream of Ukai and furnish the break-up of utilisation between Maharashtra and Madhya Pradesh to the Planning Commission before processing the acceptance of the scheme.

(Action: CWC/Planning Commission)

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ANNEXURE

List of Officers present in the 26th meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 22.3.1984 in Shram Shakti Bhavan, New Delhi.

PRESENT

- Shri M.G. Padhye, Secretary, Ministry of Irrigation . Chairman Shri Pritam Singh, Chairman, C.W.C. Member Smt. Priya Prakash, Jt. Secretary & Financial Adviser, Ministry of Irrigation. Member

Shri C.G. Desai, Adviser, Planning Commission Member Shri N.K. Dikshit, Joint Adviser, Planning Commission, Member-Secy.

Also Present

Ministry of Irrigation

Shri K.R. Chandrasekharan, Joint Secretary Shri B.S. Bhawani Shankar, Chief Engineer (Narmada Cell) Shri R.S. Saksena, Joint Commissioner (WU) Shri R.V. Suryanarayana, Deputy Secretary(Projects I) Shri Ram Saran, Deputy Commissioner (CAD)

3.

Ministry of Finance, Plan Finance Division

Shri V. Swaminathan, Joint Director

Central Electricity Authority

Shri V.V.R.K. Rao, Director HEP

Central Ground Water Board

Dr. B.D. Pathak, Chairman.

Narmada Control Authority

Shri K.V. Rama Rao, Chairman Shri H.P.S. Murthy, Member (Power) 2.

Shri R.S. Nagaraja, Secretary Shri Y.V. Dharma Rao, Specialist.

Central Water Commission

1. Shri Gokul Prasad, Member (P&P)
2. Shri R. Ramaswamy, Member (D&R)
3. Shri M.S. Rao, Chief Engineer (TE)
4. Shri B.B. Karajagi, Director (TE)
5. Shri Kishan Chand, Director (TEI)
6. Shri M.J. Ajwani, Director (FAII)
7. Shri P.L. Diwan, Deputy Director (FAII)
8. Shri P.R. Chopra, Deputy Director (FAII)
9. Shri M.C. Dhawan, Deputy Director (TEI)
10. Shri R.S. Mathur, Deputy Director (TE)
11. Shri V.K. Rajendra Das, Asstt. Director (11. Shri V.K. Rajendra Das, Asstt. Director (TE)
12. Shri S.L. Kewalramani, EAD (TE)
13. Shri Rate Bhan, EAD (TE)

Planning Commission

- Shri O.P. Sehgal, Deputy Adviser (I&CAD) Shri K.L. Sharma, Deputy Adviser (Power)
- 3. Shri J.N. Nanda, S.R.O. (I&CAD)

PLANNING COMMISSION T&CADD IVISION) 3636-36-36-36

Subject: 27th meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Project held on 3.9.1984 in Shram Shakti Bhavan, Now Delhi.

The Summary Record of the 27th meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose - Projects held on 3.9.1984 in Shram Shakti Bhavan, New Dolhi is circulated herewith.

> (N.K. Dikshit) Joint Advisor (I&CAD) & Momber-Secrotary

Shri M.G. Padhye, Socretary, Ministry of Irrigation
 Shri Pritam Singh, Chairman, Contral Water Commission, Sowa Bhavang, R.K. Furam, New Delhi

3. Sori A.N. Singh, Chairman, Control Electricyt Authority, Eowa Bhavan, R.K. Furam, Now Dolhi.
4. Shri S.L. Khoshla, Advisor (Energy) Flanning Commission 5. Shri C.G. Dosai, Advisor (Eccap), Planning Commission 6. Joint Secretary, Plan Finance Division, Ministry of

Finance.

7. Smt. Priya Prakash, Jt. Socrotary & Financial Advisor, Ministry of Irrigation, S.S. Bhavan, Now Dolhi.

8. Joint Secretary, Department of Power, Ministry of Energy. 9. Dr. B.D. Pathak, Chairman, Central Ground Water Board, Ministry of Irrigation, Krishi Bhavan, New Dolhi.

10. Joint Secretary, Deptt. of Heavy Industry, Udhyog Bhavan 11. Joint Secretary, Department of Environment, Bikaner

House, New Dolhi.

12. Agriculture Commissioner, Ministry of Agriculture, Krishi Bhavan, New Dolhi.

Flanning Commission circular No.16(25)/27/84-I&CAD dt.27.9.1984

Copy to:

Ministry of Irrigation, S.S. Bhavan, New Delhi

1. Shri C.S. Hukmani,

1. Shri D.W. Tolang, Addl. Secretary
2. Shri C.S. Hukurni, Joint Secretary(I)
3. Shri M.A. Chitale, Joint Secretary (GB)
4. Shri G.S. Jakhado, Advisor

5. Shri R. Rangachari, Member (JRC)

- 6. Shri T.S. Murthy, Jt. Commissioner(JRC)
 7. Joint Commissioner(WM), Krishi Bhavan, New Delhi
- 8. Shri R.V. Suryanarayana, Deputy Secretary(P)
 9. Shri P.C. Jain, Doputy Secretary

- 10. Shri S.N. Ialo, Chief Engineer (CAD), Krishi Bhavan 11. Shri Ram Saran, Dy. Commissioner (CAD)

- 12. Shri Y.D. Sharma, Dy. Commissioner (CAD)
 13. Shri K.K. Saksena, Specialist (Irrigation)
 14. Shri M.R. Single, Under Secretary (Budget)

Contral Water Commission. Sowa Bhavan, R.K. Puram, Now Dolhi.

- 1. Shri Gokhul Pracad, Member (P&P)
 2. Member (D&R)

3. Momber (Floods)

- 4. Shri M.S. Rao, Chief Engineer (TE)/ Shri N. Sachidanand, Chiof Engineer (RM & RM)
- 5. Director (TE)(I)/II 6. Director (P&P)I/(P&P)II

7. Director F.A.I/FAII/FA.III

8. Director /PP Coll II/PP Coll III

Department of Environment, Bikanor House, New Dolhi.

1. Dr. S. Maudgal, Director

Ganga Flood Control Commission, Sinchai Patna

Shri S.J. Thomas, Acting Chairman

(N.K. Dikshit)

Joint Advisor (I&CAD) &

Mombor-Socrotary

PLANNING COMMISSION (1&CAD DIVISION)

Summary Record of the 27th meeting of the Advisory Committee on Irrigation, Flood Control and Multi-Purpose Projects held on 3.9.1984 in Shram Shakti Bhavan, New Delhi.

Names of the Officers Present in the meeting are given in the enclosed annexure.

The following projects were considered and the Committee's recommendations are as follows:

1. Multi-purpose Projects

(i) Singur Storage Project (Irrigation and Water Supply)
Andhra Pradesh-Estimated cost Rs.4230 lakhs:

Chairman C.W.C. suggested that the design flood assumed needed review on the basis of more data collected. It was decided that the project authorities may be requested to supply more details to the C.W.C. and thereafter the C.W.C. would convey their recommendation to the Planning Commission re garding spillway capacity.

The Department of Environment has amade the following observations while giving clearance to the Project.

- 1) A green belt should be created along the periphery of the reservoir to arrest excessive siltation;
- ii) necessary steps should be taken by the project Authorities, in collaboration with Archeological Department to preserve the important archeological sites and sculpture coming under submergence;
- iii) Rehabilitation Master Plan should be detailed avoiding the location of new settlements on reservoir periphery; and
 - iv) land use in the catchment should be converted to forestry, to the extent possible.

The Central Water Commission were requested to obtain the clarification from the Department of Environment/ State Government as to which Dopartment, of the State would bear the cost of re-location of archeological sites and that of green belt. It was also agreed that the C.W.C. would get the information regarding proparation of Master-Plan for rehabilitation as suggested by the Department of Environment and convey the present position to the Planning Commission, on a point raised by Adviser (I&CAD). Regarding the condition of avoiding the location of new settlements on reservoir periphery, it was felt that this may be difficult to realise in practice. On the otherhand, from the point of water supply to resettled villages and for facilities of fishing. a location close to reservoir is often It was decided to take up this issue separately with the Department of Environment. Before taking it with the State, as no representative from Deptt. of Environment was present in this meeting.

(Action: CWC)

Advisor (I&CAD) enquired whether the project envisaged any forest submergence to which the representatives from C.W.C. replied in the negative.

After detailed discussion, the project was considered acceptable subject to the above observations and also the following points to be attended to by the State Govt. before final designs & execution of the Project.

- i) Since the existing Nigamsagar Dam lower down is stated to have a spillway capacity of only 5.6 lakh cusees with no flood lift, it is advisable to provide a suitable flood lift at Singur in consultation with the Govt. of Karnataka.
- ii) The possibilities of hydel development may be explored. If they exist, the provision may be made in the project for initial installations like penstocks, etc., to enable exploitation of the hydel power at a later stage.

(Action: CWC/Planning Commission)

Medium Projects

1. Hatwane Medium Irrigation Project(Maharashtra) - Estimated cost Rs. 2452.17 lakhs:

The Project is proposed to be posed to USAID for credit assistance. Advisor (I&CAD) stated that the cost of the project was based on schedule of rates of 1981-82 of Irrigation Department of Maharashtra. He further stated that: cost to be accepted by Planning Commission may not include the price escalation and higher percentage of contingencies assumed for externally aided projects. The Financial Advisor, Ministry of Irrigation intimated that since the project is based on 1981-82 prices the present cost of the scheme may be substantially higher. The Chairman suggested that the C.W.C. may update the cost and the benefits and work out the modified B.C. Ratio. As a general rule the C.W.C. may have the cost estimate of projects updated before putting up to the Committee.

(Action: C.W.C.)

On a point raised by the Chairman, C.W.C. regarding inclusion of interest charges on capital in the B.C. Ratio calculation, Chairman of the Committee suggested that C.W.C. may work out examples for some projects based on discounted cash flow method, internal rate of return etc.

(Action: CWC)

The Advisor (I&CAD), Planning Commission and the Chairman, of the Committee suggested that mention should be made regarding submergence of forest, if any, in the agenda notes on projects to be considered by the Advisory Committee. The representative from C.W.C. Stated that no forest submergence is involved in this project.

(Action: C.W.C.)

After discussion, the project was considered acceptable subject to the following observations:

- 1) The C.W.C. would update the cost, work out the revised B.C. Ratio and convey the same to the Planning Commission before processing of the acceptance letter.
- 2) A minimum free board of 3 m may be provided for the earth dam by constructing a parapot of 0.5 m height.

- 3) Suitable provisions may be made in the project estimate for the rehabilitation of the oustees as per the guidelines circulated by the Ministry of Irrigation
- 4) Provision as considered necessary may be made for supply of drinking water to the rural areas.
- 5) Possibilities for hydel generation may be explored and if they exist, suitable provision may be made for initial installations like penstocks etc., to enable their exploitation at a later date.
- 6) The C.W.C. Would obtain the concurrence of the State Planning & Finance Department to the upadated cost and convoy the same to the Planning Commission.

4

(Action: CWC/Planning Commission)

2. Goj Project (Madhya Pradesh) - Estimated cost Rs.879.51 lakhs.

The project has been included in the World Bank line of credit for medium irrigation projects in Madhya Pradesh (CR 1108-IN) and is also to be concurrently financed by IFAD (Lean No.81-IN). The estimated cost of the project includes distribution not work down to 2 ha. farm gate.

Joint Advisor (I&CAD) Planning Commission stated that according to the October, 1979 Circular issued by the Planning Commission to all States, the project cost should include construction of water courses upto 5 to 8 ha. block and within the 5 to 8 ha, block construction of the field channels should be the responsibility of beneficiaries. If this is relaxed in the case of externally aided projects it will be a precedent for other projects also unless such cost is recovered from the beneficiaries. The Advisor (I&CAD) observed that the forest clearance should be obtained before work is actually taken up.

After some discussion, the project was considered acceptable subject to the following observations:

- i) Suitable hydrological not work may be set up for collection of roliable data so that reservoir operation rules can be finalised in due course of time after ascertaining water availability and design flood on a more realistic basis.
- ii) Possibilities of generation of hydel power may be explored and if found feasible, appropriate provision for installation of penstocks etc. may be made.

- iii) Need of water for rural water supply schemes may be assessed and appropriate prevision made in proposals for utilisation of water from the project.
 - iv) Specific concurrence of the State Finance Deptt. for the estimated cost may be obtained by CWC and convoyed to the Planning Commission.
 - v) The State Govt. should consider the question of recovering the cost of field channels constructed within 5 to 8 ha. block from the beneficiaries.

(Action: CWC/Planning Commission)

3. Jobat Irrigation Project(M.P.) -Estimated cost Rs. 3075 lakhs.

The project is to be posed for World Bank assistance: It was considered acceptable subject to the following:-

- i) The water availability studies have to be firmed up after collection of actual discharge data of the river Hatni observed at the Dam site.
- ii) The design flood studies would require further refinment on the basis of actual observed short interval hydrological data. Two or three self recording raingauge stations at appropriate representative points need to be established.
- iii) The sodiment studies may be firmed up on the basis of actual observed sediment data of river Hatni at the project site.
 - iv) Central Ground Water Board has indicated the possibility of ground water development through dug-holes or dug-cum-bore holes in 2000 ha. of the command area. This will facilitate conjunctive use of ground and surface waters for optimisation of benefits.
 - v) Concurrence of the State Finance Department to the modified cost of Rs.3075 lakhs has to be obtained by CWC and communicated to the Planning Commission.

- vi) As per Geologists'Ropert, the left flank between Ch. 0-6 (where earth dam is proposed) needed detailed investigations by means of drill heles, permeability test, mechanical properties tests of rock material to delineate structural and stratigraphical features existing there. It is reported that these investigations have since been carried out and the results obtained will be taken into account during the detailed design of the dam.
- vii) Provision as considered necessary, may be made for supply of drinking water to the rural areas.

(Action: CWC/Planning Commission).

4. Mun Medium Frigation Project (Maharashtra) - Estimated cost Rs. 1387,41 lakhs.

The project was approved by the Flanning Commission in 1981 at an estimated cost of Rs.534.77 lakhs. Subsequently. Govt. of Maharashtra have posed this project to USAID for credit assistance under Maharashtra IT&M Project and hence the project cost has been modified to Rs.1387.41 lakhs. The project involves submergence of forest areas of 125 ha. It was found acceptable subject to the following:-

- 1) The State Government would obtain forest clearance from the Appropriate Authority and convey it to CMC and Planning Commission before the scheme is processed for acceptance.
- ii) The C.W.C. would convoy the break-up of 6 TMC reservation for upstream utilisation above Ukai Dam between Maharashtra and M.P. and the committed use so far against their share in Maharashtra to the Planning Commission for processing the acceptance latter.
- 11i) The concurrence of the State Finance Department for the modified cost of the project would be conveyed to C.W.C. and Planning Commission.
 - iv) Provision as considered necessary may be made for supply of drinking water to the rural areas.
 - v) Possibilities for hydel generation may be explored and if they exist, suitable provision may be made for initial installations like ponstocks etc., to

onable their exploitation at a later date. (An outlet for hydro-power has been proposed in the non-everflow pertion of the dam).

- vi) Suitable anti-alkalinity measures have to be executed in the patches where the PH value is more than 9.
- vii) As the water t-able is reported to be within 3 m from the ground level in the command, simultaneous execution of a suitable drainage scheme is necessary to avoid water logging in the command.

(Action: CWC/Planning Commission).

6. Tombhapuri Medium Irrigation Project(Maharashtra) - Estimated cost Rs. 591.24 lakhs.

The Project was considered acceptable subject to the following observations:-

- 1) The estimated cost of the project was shown as Rs.677 lakhs at the time of 1984-85 Plan discussion. The C.W.C. may obtain the clarification regarding the latest cost and convey it to the Flanning Commission.
- 2) The commitment of the State Finance Department to the latest cost and not that of Internal Financial Advisor may be obtained and conveyed to the Planning Commission.
- 3) After sufficient data on hydrological observations at the project site and hydrometerological observations for the catchment becomes available, the hydrology of the project may be firmed up.
- 4) Possibilities of hydel power development may be explored and if they exist, provision for initial installations of etc., may be made to enable their exploration at later stage.
 - 5) Provision as considered necessary may be made for supply of drinking water to the rural areas.
 - 6) It needs to be confirmed that the provision for the rohabilitation of the oustees from the submergence areas has been made on the lines indicated in the Mahareshtra Resettlement of Project Displaced persons, Act 1976.
 - 7) To facilitate integrated operation, the possibility of interlinking the Tomphapuri Reservoir with other Reservoir like Kham in the neighbourhood may be explored.

6. Bor, Dahogaon Modium Irrigation Project (Maharashtra) - Estimated cost Rs. 428.71 lakhs.

The Committee decided that the dependable yield from the catchment assumed in the project needs to be reviewed and the project put up to the Committee again.

(Action: CWC)

Sakoi Modium Irrigation Project(Maharashtra) - Estimated cost Rs. 301.406 lakhs.

The Project was found acceptable subject to the following observations:-

- 1) The inter-state aspect needs further examination by the C.W.C. to take into account the committed minor irrigation, industrial and domostic uses. The C.W.C. would convey the details to the Planning Commission for processing the issue of acceptance letter.
- 2) After sufficient data on hydrological observations at the project site and hydrometrological observations for the catchment become available, the hydrology of the project may be firmed up.
- 3) Possibilities of hydel power development may be explored and if they exist, provision for initial installations like pen stock etc., may be made to enable their exploitations at later stage.
- 4) Provision as considered necessary may be made for supply of drinking water to the rural areas.
- 5) It needs to be confirmed that the provisions for the rehabilitation of the oustees from the submergence areas has been made on the lines indicated in the Maharashtra Resettlement of Project Displaced Persons Act 1976.
- 6) Against the minimum requirement of 3 M for the free board for an earth dam, only free board of 2 M 's provided. This may be increased to 3 M by constant tion of a parapet wall.
- 7) Specific concurrence of the State Finance Deptt. (not of Internal Financial Advisor), may be obtained by CWC and conveyed to Planning Commission.

(Action: CWC/Planning Commission)

8. Raigaon Medium Irrigation Project (Maharashtra) - Estimated cost Rs. 317.988 lakhs.

The Project was considered acceptable subject to the following observations:-

- 1) The inter-state aspect needs further examination by the C.W.C. to take into account the committed minor irrigation, industrial and domestic uses. The CWC would convey the details to the Planning Commission for processing the issue of acceptance letter.
- 2) The specific concurrence of State Finance Deptt. may please be obtained and conveyed to the Planning Commission.
- 3) After sufficient data on hydrological observations at the project site and hydro-metrological observations for the catchment becomes available, the hydrology of the project may be firmed up.
- 4) Possibilities of hydel power development may be explored and if they exist, provision for initial installations like penstock etc., may be made to enable their exploitations at a later stage.
- 5) Provision as considered necessary may be made for supply of drinking water to the rural areas.
- 6) It needs to be confirmed that the provision for the rehabilitation of the oustees from the submergence areas has been made on the lines indicated in the Maharashtra Resettlement of Project Displaced Persons Act 1976.
- 7) For the earth dam, a minimum free-board of 3 m has to be kept. The free-board provided is only 2 m. A parapet wall of 1 m height may also be constructed.

(Action: CWC/Planning Commission)

9. Buggavanka Reservoir Scheme (Andhra Pradesh) - Estimated cost Rs.782.70 lakhs.

The Project was considered acceptable subject to the following:

- 1) The concurrence of the Forest Department for the submergence of forest land may be obtained and furnished to the Planning Commission.
- 2) Since no provision was recommended by the Working Group for this Project in the State Plan 1984-85, the State may be asked to indicate as to how the project would be financed.
- 3) Design flood to be reviewed by Unit Hydrograph Method after requisite data is available.
- 4) Cropping pattern under Somasila Project Stage II will be so adopted so as to limit the utilisation of waters after considering the upstream abstraction for this project as per assurance given by the State Government.
- 5) Transmission lossos of 25% adopted in planning would be reviewed by actual verification when canals would be in operation.
- 6) Provision as considered necessary may be made for supply of drinking water to the rural areas.
- 7) Possibilities of hydel power development may be explored. If they exist suitable provision may be made for initial installations like penstocks etc., to enable their exploitation at a later date.
- 8) Provision may be made for the rehabilitation of the oustees from the project areas on the lines indicated by the Ministry of Irrigation/Ministry of Home Affairs.

(Action: CWC/Planning Commission)

10. Bandi Sendra Medium Irrigation Project(Rajasthan) - Estimated cost Rs. 415.26 lakhs.

Joint Adviser (I&CAD) pointed out that the project is not included in the Sixth Plan of the Rajasthan State. After some discussion, the Committee decided that the dependable yield and design flood may be reviewed by C.W.C. in consultation with the State Govt. and project put up to the Committee again. The concurrence of State Planning and Finance Departments may also be obtained before the project is reconsidered by the Committee.

(Action: CWC)

11. Modernisation of Gembhiri Canal System(Rajasthan) - Estimated cost Rs.1176.26 lakhs)

The project is in pipeline under credit assistance programme of USAID for Rajasthan Medium Irrigation Projects. The gress utilisation of 74 MCUM proposed under the scheme envisaged utilisation of flow from part of the Madhya Pradesh Catchment and there was no formal Agreement with Govt. of Madhya Pradesh. The Chairman observed that the Ministry of Irrigation would consult Govt. of M.P. and intimate the clearance in respect of inter-state aspect to Planning Commission.

The Chairman observed that the cost of Rs. 540 lakhs for providing additional spillway capacity to correspond to the maximum possible flood should be included in the project cost and the revised B.C. Ratio worked out for the increased cost.

The project was considered acceptable subject to the above and also to take into account the following:-

- 1) Suitable additional spillway capacity to handle the revised design flood of 8779 cumees may be provided.
- 2) Free board may be increased to a minimum of 4 m. by raising dam/provision of a suitable parapet.
- 3) Provision as considered necessary may be made for supply of drinking water to the rural areas.
- 4) Concurrence of the State Planning and Finance Departments to the updated cost of the project may be obtained and communicated to the Planning Commission.

(Action: Ministry of Irrigation/CWC/ Planning Commission)

- 12. Major Project
- 12. Second revised estimate of Western Kosi Canal Freject

Second rovised estimate of Wastern Kosi Canal Project (Works in Nepal territory and works in India) - Estimated to cost Rs. 222.26 crores).

It was observed from the CWC Note on the Project that the revised estimate included the updated cost of Rs.60.46 erores for works in Nepal territory while the estimated cost for works in India had not been updated. Member (P&P) CWC stated that the alignment of various distributaries and channels in the Bihar territory was yet to be finalised which might take another one or two years for updating the cost of works in Bihar.

Since the Central assistance to the State in respect of Nepal works was to be released on the basis of revised estimate, the Committee considered the cost of Rs. 60.46 crores in respect of Nepal works acceptable. The Committee, however, decided that the CWC should get the revised estimate of works in Bihar State also updated as early as possible so that the modified B.C. Ratio could be worked out for the entire project and the combined project put up to the Committee again.

(Action: CWC/Planning Commission)

Flood Control Schemes

13. Revised estimate of Badlaghat-Nagarpara Embankment Scheme (Bihar) - Estimated cost Rs. 530.96 lakhs.

The revised estimate of the scheme was considered acceptable subject to the observation that the GFCC should review the proposed alignment of the embankment so that the same is quite away from the river bank as it it appeared very close to the bank in some reaches.

(Action: GFCC/P.C.)

24. Estimato for Anti-erosion works and Rotired Embankments from 0.35 km. in riprasi-Pipraghat Reach on Right Bank of Gandak (Bihar)-Estimated cost Rs.659.02. lakhs

The scheme was considered acceptable. The Advisor (1&CAD) raised a point that the anti-crosion works are required to be taken up and completed before the floods of 1984 as has been mentioned by the CFCC in their note. The Chairman stated that the work should be started on the scheme immediately and the Ministry may take the matter with the State Government immediately.

(Action: Min. of Irrigation/P.C.)

The consideration of the remaining projects included in t Agenda were postponed to the next meeting.

(Action: Planning Commission)

Annexure

List of Officers present in the 27th meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 3.9.1984 in Shram Shakti Bhavan, Now Dolhi.

PRESENT

- 1. Shri M.G. Padhyo, Secretary, Min. of Irrgn.
- 2. Shri Pritam Singh, Chairman, CWC
- 3. Shri C.G. Dosai, Advisor(I&CAD), P.C.
- 4. Smt. Priya Prakash, Jt. Secretary & Fin. Advisor, Min. of Irrigation
- 5. Dr. B.D. Pathak, Chairman, C.G.W.B.
- 6. Shri N.K. Dikshit, Jt. Advisor (T&CAD), P.C.
- ... Chairman
- Member
- Member
- . Momber
- .. Mombor . Member-
 - Secretary

Also Present

Ministry of Irrigation

- 1. Shri D.W. Telang, Addl. Secretary
- 2. Shri M.A. Chitalo, Commissioner (River Basins) and Joint Secretary (GB)
- 3. Shri T.S. Murthy, Jt. Commissioner (JRC)
- 4. Shri R.V. Suryanarayana, Doputy Socretary
- 5. Shri Ram Saran, Dy. Commissioner(CAD)

- 6. Shri Y.D. Sharma, Dy. Commissioner (CAD)
 7. Shri K.K. Saksona, Specialist (Irrigation)
 8. Shri M.R. Singlo, Under Secretary (Budget)

Ganga Flood Control Commission

1. Shri S.J. Thomas, Acting Chairman

Central Graund Water Broad

1. Shri B.P.C. Sinha, Chiof Hydrogoologist

Contral Water Commission

- 1. Shri Gokul Prasad, Mombor (P&P)
- 2. Shri M.S. Rac, Chief Engineer (TE)
- 3. Shri N. Sachidanand, Chief Engineer (RM & RM)
- 4. Shri M.G. Ajwani, Diroctor, FA.II
- 5. Shri P.L. Gianchandani, Director, F.A.III 6. Shri B.B. Karajagi, Director TE.II
- 7. Shri K.N. Singh, Director, PFC II
- 8. Shri S.T. Chandhuri, Director, PPC.III
- 9. Shri C.M. Pandit, Dy. Director 10. Shri R.S. Mathur, Dy. Director (TEII)
- 11. Shri M.C. Dhawan, Dy. Director (TH.I)

- 12. Shri M.V. Chandrasekhar, Dy. Director 13. Shri C.D. Khoche, Dy. Director (TE.II)
 14. Shri H.L. Kansal, Dy, Director (FA III)
 15. Shri S.K. Vaish, Dy. Director FA.III)
 16. Shri P.R. Chopra, Dy. Director (FA.II) 17. Shri K.S. Jacob, Asstt. Director 18. Shri S.N. Sharma, Asstt. Director
- 19. Shri V.K. Rajendra Das, Asstt. Director 20. Shri S.R. Tajwani, Asstt. Director (TE.II) 21. Shri Naresh Mohan, Asstt. Director 22. Shri Rati Bhan, EAD

- 23. Shri M.S. Haquo, E.A.D.
- 24. Shri S.L. Kowal Ramani

PLANNING COMMISSION

- 1. Shri A.S. Gupta, Dy. . Advisor(I&CAD)
 2. Shri J.N. Nanda, S.R.O.(I&CAD)

PLANNING COMMISSION (1&CAD Division)

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Summary Record of the 28th meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 24.9.1984 in Shram Shakti Bhavan, New Delhi.

Names of the Officers present in the meeting are given in the enclosed annexure.

The following projects were considered and the Committee's recommendations are as follows:

Major Projects:

1. Modernisation of Sone Canals Project (Bihar) - estimated cost Rs. 119472 lakhs.

The CWC Note on the Project envisaged implementation of this Project in three phases as per details given below:-

Phase-II (1984-85 to 1988-89) Phase-III (1989-90 to 1993-94) Phase-III (1994-95 to 1998-99)

: Rs. 40344 lakhs.

: Rs. 38158 lakhs. : Rs. 34457 lakhs.

Total

Rs. 112959 lakhs.

Bihar's share cost for Bansagar Dame

: Rs. 6513 lakhs.

TOTAL

Rs. 119472 lakhs.

There was detailed discussion on the scope of the project which is to be included in Phase-I. In view of the huge cost involved, the Committee decided that the project may be accepted in principle and detailed estimated cost of Phase-I Project should be worked out by the State Government in consultation with the CWC within three ments to include mainly the pilot project for modernisation to cover an area of 30,000 ha. of CCA together with the remodelling and improvement of the canal system to serve the pilot project. Essential republic to the existing system and improvement of communication system should also be included in phase-I. Further phases of the project would be considered by the Committee on the basis of experience gained in implementation of the Pilot Project under Phase-I. The acceptance of Phase-I of the Project does not entitle the Government of Bihar for any additional rights over Sone waters beyond the scope of the Inter-State Agreement on Bansagar Project of

September, 1973. The acceptance of Phase-I of the project is also subject to the following observations:-

- (1) The dotailed estimate of these-I Project may be worked out by the State Government in consultation with the CWC and the cost intimated to the Planning Commission for processing of the issue of acceptance letter.
- (ii) Specific concurrence of the State Planning Department for implementation of the schome and its funding from the State Sector during 7th Plan may be obtained and communicated.
- (iii) Specific concurrence of the State Electricity Department for the assured supply of electricity required for the operation of 4600 Tubewells has to be furnished.
- (iv) Project authorities have Tagreed to CWC's suggestion for adopting Warabandi/Rotation system on Branch Canals and Distributory System.
- (v) The Sone Canal System is more than 100 years old and the drawings of structures could not be made available by the project authorities. It is necessary to carry out complete redesign of all the proposed structures after collecting the required data & their unsafety estabilished before under taking new work and other relevant details before the remodelling repair works of such structures is taken up. These structures will have be decided in consultation with CWT prior to implementation.
- (vi) The tentative projected plan with the available data has been accepted for the present assessment. More hydrological data needs to be collected as the new Trrigation & Thermal projects are being added upstream of the Sene barrage. The flow pattern thus calculated shall have to be foviewed in consultation with the Sene River Commission/Central Water Commission. After finalisation of those hydrological aspects, the revised 30-daily barrage operation tables for a sequence of good, bad and normal years have to be prepared and furnished.
- (vii) The detailed soil survey of the entire command area would be taken up immediately and completed.
- (viii) Since the Project requires continuous subsidy from the State revenues as the financial return is in the negative, the State Government should consider upward revision of water rates under this project.

- (ix) The technoeconomic viability of the 'Navigation' and 'Hydel' component may be got finalised in consultation with the Ministry of Transport and Shipping and Contral Electricity Authorities respectively.
- (x) Necessary soil conservation measures should be taken during the construction of reads.
- (xi) Steps should be taken to remove the scars of construction by levelling and lend scaping. Digging of borrow pits should be avoided as far as possible.
- (xii) Afforestation should be undertaken on a large scale and green belt be created along both the banks of Canals.
- A reservoir with gress storage of about 4 to 4.5 MAF on Sono (Kadhwan dam site U/s of Indrapuri Barrage) was recommended by the Team of Experts of Sone River Commission in Jan., 1982. The scheme is being investigated by the Trigation Department. The extent of benefit likely to be drived from the proposed Kachwan Project can be estimated only after the completion of study with integrated operation of U/S schemes along with Kadhwan. As stated earlier, this study is yet to be completed and will take time.
- (xiv) The alignment and design of parallel canals together with its structures shall be got vetted from Canal Directorate of CWC before construction is taken up by the State Authorities.
- (xv) The Head Regulator capacity of eastern canal system may be restricted to 4850 cusees against 5615 cusees provided.

(Action: CWC/Planning Commission)

2. Revised Estimatos for Ravi Canal Project (Jammu & Kashmir) - estimated cost Rs. 6208 lakhs (excluding share of cost of Shahpur Kandi Barrage Project payable by J&K).

The revised estimate was found acceptable subject to the following:-

- (i) The CWC should examine and advise Planning Commission about the annual irrigated area which can be developed without the Shahpur Kandi Barrago.
- (ii) The distribution system should be provided only to cater for the water available without hahpur Kandi Barrage.
- (111) The CWC would convey the inter-state concurrence for the share cost of Shahpur Kandi Barrage chargeable to this po ject to the Planning Commission.

- (iv) The modified B.C. Ratio to take into account the agreed share cost would be conveyed by CWC to the Flanning Commission.
- (v) As agreed to by the Chief Engineer of the Project, the F.S.L. of the link canal should be provided same as that of d/s of head regulator of Shahpur Kandi Barrage.
- (vi) It has been indicated in the project report that in view of the limited power requirements for the lift station which will be about 10 MW shall have to be supplemented by the Central Government as a special case by 1987. This needs concurrence of the Central Government which is to be furnished by the State Government.
- (vii) SNos. pumps provided at Basantpur are just sufficient to lift 480 cumes of water required for the irrigation. One extra pump as stand-by may be installed.
- (viii) Necessary protection work and river training works in case of Basantpur Lift Irrigation Schome may be planned.
- (ix) Concurrence of the State Finance and Planning Departments to the revised estimate is to be obtained and furnished.
- (x) Nocd for suitable drainage measures in the command Area be integrated and appropriate provision made in the estimate.

(Action: CWC/Planning Commission)

- 3. Sutlej-Yamuna Link Canal Project Part I (Punjab)
 - 4. Sutlej-Yamuna Link Canal Project Part-III (Punjab) estimated cost 8,5420 lakhs.

It was noted that the estimated cost of Part-II for generation of hydro-electric power was still to be prepared. The Charman mentioned that the SYL Project is to be examined as a whole and its B.C. Ratio worked but after the sharing of cost and inter-state aspect resolved between various beneficiaries. He added that the cost of modernisation of Sirhind Canal which is chargeable to this project needs to be taken into account for B.C. Ratio calculations. The need for thicker Canal lining needed to be examined in consultation with the Central Water Commission. The concurrence of the Haryana and Rajastham for tapping of Nangal Hydel Channel would need to be obtained. The Committee, therefore, decided that a comprehensive project report should be put up again for reconsideration.

5. Upper Sakari Reservoir Project (Bihar)
<u>Estimated Cost Rs. 12382 lakhs</u>

It was observed that the specific clearance of the Ministry of Irrigation from international angle has not been obtained. The Chairman observed that e such a clearance is a must for any project in Ganga and Indus basing before any project is placed before the Advisory Committee. After some discussion the project was considered acceptable subject to the following observations:

- (i) The project construction may be phased in such a way that the benefits to new areas should be given equal priority with areas under the existing command.
- (ii) Specific clearance of the Ministry of Irrigation for the project from international angle may be intimated to the Planning Commission.
- (iii) A suggestion was made in 1981 for continued observations of gauge and discharge to firm up the hydrology of the project. But it has been learnt from the project engineers duting discussions that these observations have been discontinued. It is again stressed that these observations may be continued to collect adequate data to firm up the hydrology of the project before actual designs and execution.
- (iv) Dosign flood of 2,74,000 cuses for Baksoti weir has been calculated by adding the flood calculated for intermediate catchment between dam and weir and the flood routed from the dam, Subsequently the flood routing computations for dam have been revised in viewef reduction of flood lift. The design flood for Baksoti weir will correspondingly increase. This may be computed for design of weir.
- (v) Concurrence of the State Finance Department and Planning Department for taking up the project may be obtained and communicated to the Planning Commission by the Central Water Commission.
- (#1) Concurrence of the State Agricultural Department for the crop water requirement may be obtained and furnished.
- (vii) Possibilities of hydel power generation may be explored. If they exist, suitable provisions may be made for initial installations like ponstocks etc.

- (viii) Provision as considered necessary may be made for supply of drinking water to rural areas.
- (ix) Provision may be made for the sottlement and rehabilitation of the custoos on the lines indicated by the Ministry of Irrigation and Ministry of Home Affairs.
- (x) The project has to be cleared by the Department of Environment, The suggestions made by them have to be taken into account at the time of execution of the project.
- (xi) Firancial return is appearing as negative because the operation and maintenance charges at Rs.75/Ha. (Rs.30/Ac.) are significantly higher compared to water rates. The State Government should consider on revision of water rates.
- (xii) Observations and suggestions made by C.W.C. on the aspect of design of dam and communicated vide U.O.No.13/147/83-TE 5492 dated 31.8.84 should be incorporated in the design, suitable provisions should be made in estimates and these should be kept in view at the time of execution.
- (xiii) Since there is no provision for this project in the Annual Plan 1984-65, the State Government would be asked to indicate as to how the project would be finalised from the State Plan.

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(Action: CWC/Min. of Irrigation/Planning Commission)

6. Mahi Project (Madhya Pradosh) - estimated cost Rs. 6152.56 lakhs.

storage capacity under the project new proposed was 199 MCUM as against 192 MCUM proposed in the Project considered by the Advisory Committee in June, 1983. Although the live storage new proposed is less by 6 MCUM than that earlier proposed, the capacity at minimum draw down level has been increased in the present project as compared to the earlier project. The Chief Engineer (TE) CWC clarified that as discussed with the World Bank Mission during its appraisal, the sill level of the off-take is proposed to be provided at minimum draw down level to provide the required driving a head for entry of water into the canals. After some discussion, the project was considered acceptable even with the B.C. Ratio of 1.24 as the project serves drought prone area.

(Action: CWC/Planning Commission)

II. MEDIUM PROJECTS:

- 1. Sapua & Bodjoše Integrated Irrgn. Project(Orissa) estimated cost Rs.893.54 lakhs.
- The project was considered acceptable subject to the following:
- (1) Since the project is not included in the Sixth Plan, the State Government should be requested to intimate as to how the scheme would be financed from the State Plan during 1984-85 and 7th Five Year Plan periods and the priority that would be attached to the scheme by the State Governmentwis-a-vis other schemes included in the Eixth Plan.
- (ii) The water requirement for early paddy assumed in the Project appears to be too low and would need to be reviewed. The concurrence of the State Agriculture Department for the water requirement of crops in the Project and the yield data adopted for calculating B.C. Ratio should be furnished by the State Government.
- (iii) Concurrence of Union Ministry of Agriculture for submorgence of forest land has to be obtained and conveyed to the Flanning Commission.
- (iv) Geological Report which is stated to be available shortly shall be obtained from Geological Survey of India for the dam site and foundations treatment finalised in the light of the Report.
- (v) Possibility of hydel power generation may be explored and if it exists suitable provision for initial installation like penestock etc., may be made.
- (vi) Provisions as considered necessary may be made for supply of drinking water to the rural areas.

(Action: CWC/Planning Commission)

2. Kusei Project (Orissa) -cstimatod cost Rs. 2703.46 lakhs)

It was observed that the water requirement for later Paddy assumed was too lew which needs to be reviewed. Also the spillway capacity provided would need further examination and flood cushion of at least 1 metre may have to be provided for safety of the Dam. After further examination of the Project by the C.W.C., it would be put up for reconsideration of the Committee.

List of Officers present in the 28th Meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purposo Projects hold on 24.9,1984 in the 4th Floor Committee Room, Shram Shakti Bhavan, New Dolhi.

PRESENT

- 1. Shri M.G. Padhyo, Secretary, Min. of Irrigation .. Chairman
- 2. Shri Pritam Singh, Chairman, C.W.C.
- 3. Smt. Priya Prakash, Jt. Secy & Financial Advisor, Min, of Irrigation
- 4. Dr. B.D. Pathak, Chairman, C.G.W.B.
- 5. Shri N.K. Dikshit, Jt. Adviser (I&CAD), Planning Commission

. Member

- .. Member
- . Member
- .Member-Secy.

ALSO PRESENT

Ministry of Irrigation

- 1. Shri R. Rangachari, Member (JRC).
- 2. Shri S.M. Lelo, Chief Engincoring (CAD).
- 3. Shri P.C. Jain, Deputy Secretary (Floods)
- 4. Shri M.R. Single, Under Secretary (B&I)

Department of Environment

1. Dr. (Mrs.) Nalini Bhat, Environmental Officer

Ganga Flood Control Commission

1. Shri S.J. Thomas, Acking Chairman.

Contral Electricity Authority

1. Shri V.V.R.K. Rao, Director (HEF).

Control Water Commission

- 1. Shri Gokul Prasad, Momber (P&P).
- 2. Shri K. Madhavan, Member (D&R). 3. Shri M.S. Rao, Chiof Engineer (TE).
- 4. Shri B.B. Karajagi, Director (TE).
- 5. Shri S.T. Chaudhari, Director (PP.III).
- 6. Shri P.L. Gianchandani, Director (F.A.III). 7. Shri M.G. Ajwani, Director (F.A.II).

- 8. Shri C.D. Khocho, Deputy Director (TE). 9. Shri H.L. Kansal, Deputy Director (FA II).
- 10. Shri S.K. Vaish, Doputy Director (FA.II)
- 11. Shri P.R. Chopra, Deputy Director (FA.II).
- 12. Shri K.D. Chaudhary, Deputy Director (TE).
- 13. Shri M.C. Dhawan, Doputy Director (TE.I).

14. Shri M.V. Chandrasekhar, Doputy Director (PPC.III)
15. Shri R.S. Mathur, Deputy Director (TE.II)
16. Shri C.M. Pandit, Deputy Director (TE.I)
17. Shri S.R. Jagwani, Asstt. Director (TE)II
18. Shri Kanwal Singh, Asstt. Director (FA.II).
19. Shri V.K. Rajendra Das, Asstt. Director (TE.I).
20. Shri S.N. Sharma, Asstt. Director (PPC).
21. Shri K.S. Jacob, Asstt. Director (PPC).
22. Shri Rati Bhan, E.A.D(TE).
23. Shri D.N. Dahiya, EAD(TE.II).
24. Shri N.R.C. Rao, EAD (TE)
Planning Commission

2. Shri J.N. Nanda, S.R.O. (I&CAD).

^{1.} Shri A.S. Gupta, Doputy Advisor (I&CAD).

1. 3. Kharmuza Lift Irrigation Scheme (Assam) -ostimated cost Rs. 986.15 lakhs.

The Project has not been proposed by the State for inclusion in the Sixth Plan. The possibilities of ground water development by means of cluster of tubewell points instead of a single point river lift irrigation as proposed in the Project may be examined. The flood prone-ness of the command area of the command area of the command area of the committee, therefore, decided that the Project would be put up again for reconsideration after examination of the points mentioned above.

(Action: C.W.C.)

4. Revised estimate of Palar-Porandalar Reservoir Project(Tamil Nadu)-estimated cost Rs. 565.00 lakhs.

Since the project is almost completed, the Committee decided that no useful purpose would be served in considering the project at this late stage. The Committee also decided that the State Government should be advised to have the Projects cleared in good time before actual implemention.

(Action: Planning Commis on)

5. Kundghat Reservoir Schome (Bihar) - estimated cost Rs. 560.04 lakhs.

The Committee decided that the C.W.C. should oxamine the spillway flood assumed in the Project and the free-board provided and put up the Project again for roconsideration.

(Action: GW.C.)

(Action: 6. C.)

6. Shivna Takli Project (Maharashtra) - estimated cost
Rs. 1318,78 lakhs.

-Tho Committee decided that the yield from the catchment assumed in the Project should be examined in rolation to the yield assumed in neighbouring projects of the State and put up the project again for reconsideration.

(Action: C.W.C.)

7. Gopad Lift Irrigation Schome (M.P.) - estimated cost Rs. 342.76 labbs.

It was noted that the Lift Irrigation Scheme was transferred to the Irrigation Department, after winding up of the Lift Irrigation Corporation, and the project is targetted to be completed by June, 1985. In view of the advance stage of construction on this project, the Committee decided that no useful purpose would be served in considering the project at this late stage. The State Government would be informed accordingly.

(Action: Plomning Commission)

8. Mahuar Irrigation Project(M.P.) -estimated cost Rs. 1867.01

The project was considered acceptable subject to the following:

- i) Suitable hydrological net-work may be set up in the project area for firming up water availability and design flood for proparation of suitable reservoir operation schedule.
- ii) Possibilities of generation of hydel power may be explored and if found feasible, appropriate provision for installation of penstocks etc., may be made.
- iii) Need of water for rural water supply schemes may be assessed and appropriate provision made in proposals for utilisation of surplus water from the project.
 - iv) Specific concurrence of the State Finance and Planning Doper ments, to the revised estimated cost may be obtained.
 - v). A minimum from board of 3 m. may be provided for the earth dam.

(Action: C.M.C./P.C.)

9. North-Mand Medium Irrigation Project (Maharashtra) - ostimated cost Rs. 670.59 lakhs.

It was observed that the design flood was worked out on the basis of emperical Inglis Formula. The Committee decided that the C.M.C. should check up the design flood on the basis of the Unit hydrograph method, with the hydrological data available from the catchment of any neighbouring irrigation project.

(Action: G.W.G.)

10. Tarali Medium Irrigation Project (Maharashtra) estimated cost Rs. 1407.44 lakhs)

The project was considered acceptable subject to the following observations:

- (i) After sufficient data on hydrological observations at the project site and hydrometreological observations for the catchment becomes available, the hydrology of the project may be firmed up.
- (ii) Possibilities of hydel power development may be explored. However, a provision of Rs. 40 lakes has been made in the project estimate for initial installations. This may be reviewed.
- (111) Since all the available yield is not proposed to be utilised, the provision as considered necessary may be made for supply of drinking water to the rural areas.
 - (1v) Though the provision of Rs.41.80 lakhs has been made in the project estimate for rehabilitation, it needs to be confirmed that this provision for the oustees from the submergence area has been made on the basis indicated with Maharashtra Resettlement of Project isplaced Persons Act, 1976.
 - (v) The concurrence of the State Finance and Planning Department for taking up the project may be obtained and communicated to the Planning Commission by t C.W.C.
- (vi) For the earth dam, a minimum freeboard of 3 m may be provided.
- (vii) The question of issue of acceptance later would is considered after the Seventh Plan I finalised as the scheme is proposed as a new scheme of Seventh Plan.

(Action: CWC./P.C.)

11. Donali Modium Trrigation Project (Maharashtra) - estimated cost Rs. 982.75 lakhs.

The project was originally approved by the Planning Commission in 1981 with a B.C. Ratio of 3.16. Due to cost escalation and change in scope of the Project, the B.C. Racio has been roduced to 1.15 under the present revised estimate. The Committee decided that the State Government should be asked to give special justification for accepting the revised estimate with B.C. Ratio less than 1.5. Thereafter the project would be recommended by the Committee.

Commidue

(Action: C.W.C.)

III. FLOOD CONTROL

1. Protection works for Kosi Flood Embankment (Bihar) - estimated cost Rs. 591. 50 lakhs.

It was observed from the G.F.C.C. note on the project that the estimated cost of fepairs, restoration and strengthening works was Rs. 472 lakhs and the belance for new anti-crosion works. Acting Chairman, G.F.C.C. Explained that strengthening works were in the nature of special repairs and large scale restoration and therefore may be appropriately charged to Plan funds. To a querry by Joint Advisor (I&CAD) regarding clearance of the scheme by the State T.A.C. Acting Chairman G.F.C.C. stated that flood control schemes as formulated on the basis of recommendation of High Lovel Committee are taken up immediately in view of the urgent nature. It was, however, decided by the Committee that the schemes may be formally processed through the State TAC as a arly as possible, as the Ministry of Transport & Railways are represented on the State T.A.C. Subject to the above, the project was considered acceptable.

(Action: GFCC/Planning Commission).

Fron 29th to 47th Meeting

MOST IMMEDIATE

PLANNING COMMISSION (I&CAD DIVISION)

Subject: - 29th meeting of the Advisory Committee on Irrigation. Flood Control and Multipurpose Project held on 26.2.85 in Shram Shakti Bhayan, New Delhi.

The Summary Record of the 29th meeting of the Advisory Committee on Irrigation, Flood Control and m Multipurpose Projects held on 26.2.1985 in Shram Shakti Bhavan, New Delhi is circulated herewith.

> (N.K. Dikshit) Joint Adviser (I&CAD) and Member-Secretary

Shri M.G. Padhye, Secretary, Ministry of Irrigation

2. Shri Gokul Prasad, Chairman, Central Water Commission, Sewa. Bhavan, R.K. Puram, New Delhi.

3. Shri A.N. Singh, Chairman, Central Electricity Authority, Sewa Bhavan, R.K. Puram, New Delhi.

Shri S.L. Khoshla, Adviser (Energy), Planning Commission

Shri C.G. Desai, Adviser (I&CAD), Planning Commission

Joint Secretary, Plan Finance Division, Ministry of Finance.

7. Smt. Priya Prakash, Joint Secretary & Financial Adviser, Ministry of Irrigation, S.S. Bhavan, New Delhi.

8. Shra Ko Padmanabaich, Jt. Secretary, Deptt. of Power, Ministry of Energy.

9. Dr. B.D. Pathak, Chairman, Central Ground Water Board, Ministry of Irrigation, Krishi Bhavan, New Delhi.

Joint Secretary, Department of Heavy Industry, Udyog Bhavan, New Delhi. 10. 11. Joint Secretary, Department of Environment, Bikaner House, New Delhi.

Agriculture Commissioner, Ministry of Agriculture, Krishi Bhavan, New Delhi.

Planning Commission Cir. No.16(25)/29/85-I&CAD dated 20.3.1985

Copy to:-

Ministry of Irrigation, S.S. Bhavan, New Delhi,

Shri D.W. Telang, Addl. Secretary Joint Secretary (I) 1.

3. Shri M.A. Chitale, Joint Secretary (GB)

4. Shri G.S. Jakhade, Adviser

5. Member (JRC)

6. Shri T.S. Murthy, Jt. Commissioner (JRC)

- Joint Commissioner (WM), Krishi Bhavan, New Delhi.
- 8. Shri R.V. Suryanarayana, Deputy Secretary (P)
- 9.
- Shri A.U. Tirthani, Deputy Secretary Shri S.N. Lele, Chief Engineer (CAD), Krishi Bhavan, New Delhi. Shri Ram Saran, Deputy Commissioner (CAD) 10.
- 11.
- 12. Shri Y.D. Sharma, Deputy Commissioner (CAD)
- 13. Shri K.K. Saksona, Specialist (Irrigation)
- 14. Shri M.R. Single, Under Secre tary (Budget)

Central Water Commission, Sewa Bhavan, R.K. Puram, New Delhi.

- 1. Member (P&P)
- Member (D&R)
- Member (Floods)
- Shri N. Sachidanand, Chief Engineer (TE)/
 Director (TE)(I)/II/FCD-II
 Director (P&P) I/(Dec)
- Director (P&P) I/(P&P) II
- 8, Director F.A.I./F.II/FA.III
- Director P.P. Cell I/PP Cell II/PP Cell III

Department of Environment Bikenar House. New Delhi

Dr. S. Maudgal, Director

Central Electricity Authority, Sewa Bhavan, R.K. Puram,

- 1. Member (HE)
- Shri H.C. Kachhwaha, Chief Engineer.

(N.K. Dikshit) Joint Adviser (I&CAD) and

Member-Secretary

PLANNING COMMISSION (ISCAD DIVISION)

Summary Record of the 29th meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose projects held on 28.2.1985 at 3.00 P.M. in Shram Shakti Bhavan, New Dolhi.

The list of the participants is given in the enclosed Annexure.

The following projects were considered and the Committee's recommendations are given below:-

1. Revised estimate of Tehri Dam Project (U.P.) - estimated cost Rs. 160586 lakhs.

It was noted from the CWC's note on the project that the environmental clearance was awaited from the Department of Environment even though Member (PC) in a meeting held on 21.1.1984 had decided that this should be done before 30.6.1984 and also the benefit cost of the project including the irrigation component was yet to be worked out. The concurrence of the State Finance and Planning Departments to the revised estimates was also to be obtained and communicated to the CWC. After detailed discussion, the Committee decided that the following points may have to be attended to by the Government of Uttar Pradech and the revised estimates including the irrigation component should be put up to the Committee again for reconsideration within three months

- (1) Till the regulating dam came up the Power Station will have be so operated as not to disturb the existing irrigation requirements downstream;
- (ii) Since forest submergence was involved, the revised estimate would need to be modified taking into account the comments of the Deptt. of Environment for compensatory afforestation;
- (iii) The project estimate for the irrigation component of the multipurpose project would need to be prepared by the State Government and submitted to CWC for examination. The cost of the Dam allocable to irrigation was tentatively estimated as 20%, the balance being chargeable to power. This may be accepted for the present. This would need to be reviewed after preparing the estimate for the irrigation component and working out the benefit cost ratio;

- (iv) The concurrence of the State Finance and Planning Departments to the revised estimate including the irrigation component would need to be obtained and communicated;
- (v) The spillway design flood assumed in the project which is accepted by CWC after necessary hydrological studies carriedout in 1972 may be reviewed in the light of fresh data available, if any;
- (vi) In the original project accepted by the Planning Cormission, it was proposed to supply 300 cusecs of water from the river Ganga to river Yamuna (excluding 200 cuseds contemplated under Ram-Ganga Project) to meet the domestic water supply requirements of the Union Territory of Delhi. In the present revised estimate, it is proposed to reserve 500 cuseds of Tehri water for meeting the domestic and industrial requirement in towns in the Ganga Yamuna Valley in U.P. The State Government would, therefore, have to agree to the reservation of 300 cuseds for Delhi and negotiate with the Delhi Administration for an agreement to be reached for sharing the cost of Tehri Dam by Delhi.

The Department of
Power wanted the
dam to be cleared
as the project
was to be posed
to some financing
agency for
credit assistance

(vii)

The clearance of the Department of Environment may be got expedited, as the Committee set up for the purpose was yet to give a report, although the report was to be submitted by June, 1984. There was some discussion on this aspect. It was felt that in any case the project may have to be taken up if the dam got cleared from environmental angle. It was therefore felt that subject to environmental clearance, the dam & Fower house component may be cleared on the basis of the dam estimate arguming that the share of the power in the dam would be at 80%. The irrigation component viz the canal Portion would need to be put up to Advisory Committee again.

As the project cost has gone high because of inadequate foundation investigation the CWC should ensure that they are satisfied about the investigation done on the this project. The CWC clarified that this has been done by them. Adviser (Irrigation) further desired to know about sorting out issues regarding Siesmic problems in the Dam area. Secretary (Irrigation) clarified that in so far as the opinion of CWC as well as Indian expertise in this matter was concerned, they did not appear to feel that therewould be any problem about design of the dam and other structure due to seismicity. However only the apprehension of Environmental Committee who have still to give their report, will have to v be sortedout.

(Action: CWC)

2. Anti-erosion Scheme for Protection of Palashari and Gumi (Kandalpara) area from the erosion of River Brahmaputra (Assam) - Estimated cost No. 1027.634 lakhs.

It was noted from the CVC note that the anti-erosion measures mainly envisaged construction of spurs and no bank revetment was proposed. There was detailed discussion on the proposed anti-erosion measures and the possible damages that would be caused if the embankment breached and if the Brahmaputra would avulse into Kulsi river. The possible effects of construction of spurs on the up-stream and down-stream were also discussed. The Committee felt that if this work was undertaken, it would be in the nature of a prototype experiment to tackle the bank erosion of the mighty Brahmaputra river. In regard to the Prototype experiment to be carried out, Adviser (Irrigation) Planning Commission expressed that such Prototype experiments have been carried cut on Missi-sipi Missourie on the basis of model tests carried out at Experimental Research Station Viksburg. Such preliminary model tests provide some basis for location, size etc. of the Structure to be actually constructed in the river for experiment. It was also pointed out that detailed Research type observations will have to be carried out by the executing agency to have scientific assessment of observations & behaviour of works. Special staff will have to be entrusted with this job otherwise the work if carried cut by usual executive routine staff, no useful data may be available for future projections. After detailed discussion, the Committee considered the project acceptable subject to the following:-

- (i) The construction of the spurs should be done closely under the Technical direction of and menitored by a Committee involving representation of the Brahmaputra Board, the Department of Irrigation, the Representatives of CMTRS, Pune and CWC and the representatives of the State.
- (ii) In addition to construction of spurs the bank would need to be protected by suitable revetment wherever necessary. It was assessed that the cost of the revetment would be about 18.5.0 crores. The CWC would however work out the cost of revetment in the bays between spurs and intimate the same to the Tlanning Commission for processing the letter of acceptance of the scheme;
- (iii) The Menitoring Committee under the Brahmaputra Board would also examine the question of construction of the new read/roads for bringing stones from the distant quarries for the work.

(Action: CWC and P.C.)

3. Consideration of the remaining projects circulated for the meeting was postponed to the next meeting of the Committee.

(Action: Planning Commission)

Member-Secretary

List of Officers present in the 29th meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose projects held on 26.2.85 in the Committee room, Shram Shakti Bhavan, New Delhi.

PRESENT

≖ .		
1.	Shri M.G. Padhya, Secretary, Department of Irrigation	Chairman
2.	Shri Gokul Prasad, Chairman, C.W.C.	Member
3.	Dr. B.D. Pathak, Chairman, C.G.W.B.	${\tt Momber}$
4 ,	Shri C.G. Desai, Adviser (I&CAD), Planning Commission	Mamber
5.	Shori K. Padmannbaiah, Jt. Secretary, Doptt. of Power	Member

Also Present

Ministry of Irrigation

- 1. Shri D.W. Telang, Addl. Secretary
- 2. Shri M.A. Chitale, Communr. River Basins & Jt. Secretary
- 3. Shri R.V. Survanarayana, Dy. Secretary

6. Shri N.K. Dikshit, Jt. Adviser (I&CAD), P.C.

4. Shri M.R. Shingle, Under Secretary (Budget & Toch.)

Department of Heavy Industries

1. Shri N.G. Mallik

Central Electricity Authority

1. Shri H.C. Kachhwaha, Chief Engr.

Ganga Flood Centrel Commission, Patna

1. Shri V. Srinivasan, Director (P)

Contral Water Commission

- 1. Shri R. Rangachari, Member (Flood)
- 2. Shri M.S. Rao, Chief Engmeer (TE)
- 3. Shri B.B. Karajagi, Director (TE)
- 4. Shri M.G. Ajwani, Director (FA-II)
- 5. Shri 7.L. Gianchandani, Director (FA-III)
- 6. Shri M.S. Bisaria, Director (FCD-II)
- 7. Shri C.D. Kheche, Dy. Director (TE)
- 8. Shri S.K. Vaish, Dy. Director (FA-III)

- 9. Shri H.L. Kansal, Deputy Director
- 10. Shri C.M. Pandit, Deputy Director
- 11. Shri M.C. Dhawan, Deputy Director (TE-I)
- 12. Shri P.R. Chopra, Deputy Director
- 13, Shri K.D. Chaudhary, Deputy Director
- 14. Shri S.R. Jagwani, A.D.
- 15. Shri S.T. Hagnani, A.D.
- 16. Shri B.N. Thavani, A.D.
- 177 Shri Rate Bhan, E.A.D.
- 18. Shri T.R. Chibber, E.A.D.
- 19. Shri D.N. Dahiya, E.A.D.
- 20. Shri S.L. Kewalramani, E.A.D.
- 21. Shri Jai Parkash, E.A.D.

Planning Commission

- 1. Shri O.P. Sehgal, Deputy Adviser
- 2. Shri J.N. Nanda, S.R.O.

PLANNING COMMISSION (18CAD Division)

....

Subject: 29th meeting of the Advisory Committee on Irrigation, Flood Control and Fultipurpose Project held on 26.2.1985 in Shram Shakti Bhavan, New Delhi.

CORRIGENDUM

In the summary record of the above meeting circulated with Planning Commission circular of even no. dated 20.3.1985. Sub Para (vii) under Tehri Dam Project may be read as follows:-

"The clearance of the Department of Environment may be got expedited, as the Committee set up for the purpose was yet to give a report, although the report was to be submitted by June, 1984. There was some discussion on this aspect. It was felt that in any case the project may have to be taken up if the dam got cleared from environmental angle. The Department of Power wanted the dam to be cleared as the project was to be posed to some financing agency for credit assistance. Therefore, subject to environmental clearance, the dam & power house component should be cleared on the basis of the dam estimate assuming that the share of the power in the dam would be at 80%."

The Irrigation component viz the canal portion would need to be put up to Advisory Committee:"

(N.K. Dikshit)
Joint Adviser (I&CAD) and
Member-Secretary

To.

1. Shri M.G. Padhye, Secretary, Ministry of Irrigation & Power (Deptt. of Irrgn.)

2. Shri Gokhul: Prasad, Chairman, Gentral Water Commission, Sewa Bhavan, R.K. Puram, New Delhi.

3. Shri A.N. Singh, Chairman, Central Electricity Authority, Sewa Bhavan, R.K. Puram, New Delhi.

4. Shri S.L. Khoshla, Adviser (Energy), Planning Commission

5, Shri C.G. Desai, Adviser (I&CAD), Planning Commission

6. Joint Secretary, Plan Finance Division, Ministry of Finance.

7. Smt. Priya Frakash, Joint Secretary & Financial Adviser, Ministry of Jrrigation & Power (Deptt. of Irrigation, S.S. Bhavan, New Dolhi.

8. Shri K. Padmanabaiah, Jt. Secretary, Deptt. of Power, Ministry of Energy.

9. Dr. B.D. Pathak, Chairman, Central Ground Water Board, Ministry of Irrigation & Power (Depth. of Irrigation, Krishi Bhavan, New Delhi. 10. Joint Secretary, Department of Heavy Industry, Udyog Bhavan, New Delhi.

11. Joint Secretary, Department of Environment, Bikaner House, New Dolhi.

12. Agriculture Commissioner, Ministry of Agriculture, Krishi Bhavan, New Delhi.

Planning Cormission Cir. No.16(25)29/85-I&CAD dated 26.3.1985.

Copy to:

Ministry of Irrigation & Power (Deptt. of Irrigation), S.S. Bhavan, New Delhi.

- 1. Shri D.W. Telang, Addl. Secretary
- 2. Joint Secretary (I)
- 3. Shri M.A. Chitale, Joint Secretary (GB)
- 4. Shri G.S. Jakhade, Adviser
- 5. Number (JRC)
- 6. Shri T.S. Furthy, Jt. Cormissioner (JRC)
- 7. Joint Commissioner (WM), Krishi Bhavan, New Delhi.
- 8. Shri R.V. Suryanarayana, Deputy Secretary(P)
- 9. Shri A.U. Tir hani, Doputy Secretary
- 10. Shri S.N. Lele, Chief Engineer (CAD), Krishi Bhavan, New Delhi.
- 11. Shri Ram Saran, Deputy Commissioner (CAD)
- 12. Shri Y.D. Sharma, Deputy Commissioner (CAD)
- 13. Shri K.K. Saksona, Specialist (Trrigation)
- 14. Shri M.R. Single, Under Secretary (Budget)

Central Water Commission, Sewa Bhavan, R.K. Puram, New Delhi.

- 1. Member (P&P)
- 2. Member (DER)
- 3. Member (Floods)
- 4. Shri M.S. Rao, Chief Engineer (TE)/
- 5. Shri N. Sachidanand, Chief Engineer (RM & RM)
- 6. Director (TE) (I)/II/FCD-II
- 7. Director (P&P) I/P&P-II
- 8. Director F.A.I./F.II/FA.III
- 9. Director P.P. Cell I/PP Cell II/PP Cell III

Department of Environment Bikenar House, New Delhi.

1. Dr. S. Maudgal, Director

Central Electricity Authority, Sewa Bhavan, R.K. Purar, New Delhi.

- 1. Member (BE)
- 2. Shri H.C. Kachhwaha, Chief Engineer.

(N.K. Dikshit)
Joint Advisor (ISCAD) and
Member-Secretary

PLANING COMISSION (2004)

Sub: 29th meeting of the Advicory Committee on Irrigation, Flood Commul and Multipurpose Project hald on 25, 3, 1985 in Marks Sakth Dhaven, New Ballid.

WICKED ISSOO

In further modification to the circulars of even number dt. 20.3.85 and 26.3.85 the para 4(1) - Revised estimate of Tehri Den Project (U.P.) - Estimated cost Rs. 160586 lakheris smmended as follows:-

"It was noted from the CVC's note on the project that the environmental electrones was evalued from the Deptt, of Environment evan though Member (10) in a meeting hald on 21.1.1984 had decided that this should be done before 30.6.1984 and also the benefit cost of the project including the irrigation component was yet to be worked out. The concurrence of the State Finance and Planning Departments to the revised estimates was also to be obtained and communicated to the CWC. After Gatailed discussion, the Committee decided that the following points may have to be extended to by the Covernment of Uttar Prodesh and the revised estimates should be put up to the Committee again for reconsideration within three months.

- (i) Till the regulating dam came up the Power Station will have to be so operated as not to disturb the existing irrigation requirements downstream;
- (ii) Since forest somergence was involved, the revised estimate would need to be medified taking into account the exmeents of the Papta, of Environment for compensatory afforestation;
- (iii) The project estimate for the irrigation component of the multipurpose project would need to be prepared by the State Government and submitted to CVC for examination. The share cost of the project (excluding cost of irrigation distribution system) be chargeable to irrigation sector at 20% and to power sector at 80%. This may be accepted for the present. This would need to be reviewed after preparing the estimate for the irrigation component and working out the binefit cost ratio;
- (iv) The concurrence of the State Finance and Planning Departments to the revised estimate would need to be obtained and communicated:
- (v) The spillway design flood assumed in the project which is accepted by GWC after meassary hydrological studies carried out in 1972 may be reviewed in the light of fresh data available, if any,
- (vi) In the original project accepted by the Planning Commission, it was proposed to supply 300 cases of water from the river Ganga to river Yemuno (excluding 300 cases contemplated under Row-Ganga Project) to meet the demonstic water supply requirements of the Union Territory of Willia. In the present revised estimate, it is proposed to reserve 500 cases of

Takri water for meeting the domestic and industrial requirement in towns in the Ganga Yearna Valley in U.P. The State Govt. would, therefore, have to agree to the reservation of 300 cuses for Delhi and negotiate with the Delhi Administration for an agreement to be reached for sharing the cost of Tehri Dom by Delhi.

(vii) The clearance of the Department of Environment may be got expedited, as the Committee set up for the purpose was yet to give a report, although the report was to be submitted by June, 1984. There was some discussion on this aspect. It was falt that in any case the project may have to be taken up if the dam got cleared from environmental angle. The Department of Power wanted the dam to be cleared as the project was to be posed to some financing agency for credit assistance. Therefore, subject to environmental clearance, the dam & power house emponent should be cleated on the basis of the project satimate (excluding irrigation distribution cost) assuming that the cost allocable to power sector at 80% and to irrigation sector at 20%.

The project for irrigation distribution system is required to be brought before the Advisory Committee.

As the project cost has gone high because of inedequate foundation investigation who GWC should ensure that they are satisfied about the investigation done on the project. The GWC clarified that this has been done by them. Advisor (Immigation) further desired to know about sorting out issues regarding Satarda problems in the Demarea. Secretary (Immigation) clarified that in so far as the opinion of GWC as well as Indian expertise in this matter was concerned, they did not appear to feel that there would be any problem about design of the dam and other structure due to scienicity. However only the apprehension of Environmental Committee who have still to give their report will have to be sorted out."

(N.K. mikshit) Joint Adviser (MECAD) and Mamber Secretary

To :-

1. Shri M. G. Padhye, Secretary, Ministry of Irrigation & Power (Daptt. of Irrigation).

2. Shri Cokhul Prasad, Chairman, Central Water Commission, Sawa Bhavan, R.K. Puram, New Dalhi.

3. Shri A.N. Singh, Chairman, Central Electricity Authority, Sewa Bhavan, R.K. Pures, New Delhi.

4. Shri & L. Khoshla, Adviser (Energy), Planning Commission.

5. Shri C. G. Dosei, Adviser (I&CAD). Plenning Commission.

- Joint Secretary, Ilan Finance Mivision, Ministry of Finance.
- Sat. Trive Trakesh, Joint Secretary & Winencial Advisor, Ministry of Irrigation & Rower (Popth, of Iraga,), & & Bhaven, New Bilth.
- Shri K. Fat anabeich, Jt. Secretary, Papit. of Fower, Ministry of
- Dr. B.D. Fathak, Chairman, Gentral Ground Water Board, Ministry of Isrga, & Power (Depth. of Irrga.) Krishi Bheven, New Dellia.
- 10. Joint Secretary, Depth, of Heavy Industry, Udyog Bhaven, New Delhi. 11. Joint Secretary, Depth. of Environment, Pikaner House, New Delhi.
- 12. Agriculture Commissioner, Ministry of Agriculture, Krishi Bhavan, New Dallid.

Planning Commission Cir. No. 16(25) 29/85-I&CAD Dt. 20.4.1985

Copy to:

Ministry of Irran, & Rower (Deptt. of Irran), S.S. Bhevon, New Delhi

- Shri N W. Telang, Addl. Secretary Joint Secretary (I) 1.
- Shri M. A. Chitalo, Joint Secretary (GB) 3.
- Shri G.S Jekhudo, Advisor
- Monley (JRG)
- Shrd R. S. Murthy, Jt, Commissioner (JRC)
- Joint Commissioner (M), Krishi Bhavan, New Dolhi.
- Savi R. V. Suryawayana, Reputy Storetary (3)
- Shri . U. Tirtheni, Inputy Socretary
- 10. Shri IN. Lole, Chief Engineer (Cal), Krishi Bhavan, New Dolhi.

Central Water Commission, Sewa Bhaven, R.K. Rurga, New Delhi

- Member (381)

- Member (Ref) Member (Floods) Shri M. S. Rac, Chief Engineer (TE)
- 5, Director (TE) (I)/II/FCD-II
- 8. Director (T&I) I/I&I-II
- T_{\bullet} Director R. A.I. /F. II/FA. III
- Director P.F. Cell I/TF Cell II/TF Cell III

Department of Environment Bikaner House, New Delhi

Dr. & Maudgal, Director

Contral Electricity Authority, Sewa Bhavan, R.K. Furam, New Delhi

- 1. Member (AE)
- Shri H. C. Kachhwaha, Chief Engineer.

(N.K. DIK SHIT) Joint Adviser (IRCAI) and Member-Secretary

MOST IMPEDIATE

PLANNING COMMISSION (I&CAD DIVISION)

Subject: - 30th meeting of the Advisory Committee on Irrigation, Flood cont-ol and Multipurpose Project held on 19.7.85 in Shram Shakti Bhavan, New Dolbi.

The Summary Record of the 30th meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects beld on 19.7.1985 in Shram Shakti Bhavan. New Delhi is circulated herewith.

> (N.K. Dikshit) Joint Advisor (I&CAD) and Mcmber_Secretary

1, Shri Ramaswamy R. Iyer, Secretary, Minist v of Irrigation

٤. Shri N.K. Sarma, Chairman, Central Water Commission, Sewa Bhavan, R.K. Puram, New Dolhi.

Z . Shri M.K. Samba Murthy, Chairman, Central Electricity Authority, Sewa Bhavan, R.K. Puram, New Delhi.

4. , Shri S.L. Khoshla, Advisor (Energy), Planning Commission Shri C.G. Dosai, Advisor (1&CAD), Planning Commission

5,

6, Joint Secretary, Plan Finance Division, Ministry of Finance.

Smt. Priya Prakash, Joint Secretary & Financial Adviser, Ministry of 7, Irrigation, S.S. Bhavan, New Delhi.

8, Shri K. Padmanabaiah, Joint Secretary, Deptt, of Power, Ministry of Energy

Dr. B.D. Pathak, Chairman, Central Ground Water Board, Ministry of Irrigation, Krishi Bhavan, New Delbi.

10. Joint Secretary, Department of Heavy Industry, Udyog Bhavan, New Delhi 11. Joint Secretary, Department of Environment, Bikaner House, New Delhi.

Agriculture Commissioner, Ministry of Agriculture, Krishi Bhavan, 12. Mew Delhi.

Planning Commission Cir. No.16(25)/30/85_I&CAD dated 31.7.1985.

Copy to:-

Ministry of Irrigation, S.S. Bhavan, New Delbi.

Siri D.W. Telong, Addl. Secretary 1.

Joint Secretary (I) 2.

3 , Shri M.A. Chitale, Joint Secretary (CB)

Shri G.S. Jakhade, Advisor

Monte of (JRC)

- Shri R.V. Survanarayana, Deputy Secretary (P)
 Shri A.U. Tirthani, Deputy Secretary
 Shri S.N. Lele, Chief Engineer (CAD), Krishi Bhavan, New Delhi
 Shri H.P. Rao, Deputy Financial Advisor
- 10,
- 11. Seri G.V. Rao, Dv. Secretary

Central Water Commission. Sewa Bhayan, R.K. Puram. New Delhi.

- Member (F&P) Member (D&R) 2,
- 3, Member (Floods)
- Shri M.S. Rao, Chief Engineer (TE) Director (TE)(I)/II
- Director (P&P)I(P&P) II
- 7. Director F.A. I/F.II/FA.III
- 8. Director P.P. Call I/PP Call II/PP Call III

Department of Environment Bikernar House, New Delbi.

Dr. S. Maudgal, Director

(N.K. Dikshit)

Joint Adviser (I&CAD) and Member-Secretary,

Summary Record of the 30th meeting of the Advisors Committee on Traination, Flood Control and Multi-purpose Projects held on 19.7.1985 in Shram Shakti Bhavan, New Delhi.

Names of officers present in the meeting are given in the enclosed annexure.

Opening the discussions, Secretar (Irrication) and Chairman of the Cormittee stated that before taking up discussion on the agenda items, some general issues concerning clarance of the projects could be discussed. He mentioned that the consideration of the following issues by the Committee may have to be viewed in the context of the Approach Document for the 7th Plan.

- 1) Clearance of new projects
- 2) Clearance of revised estimates in respect of on-going projects.
- 3) Unapproved projects taken up by the State Govern ents without formal clearance.
- 4) New Approach to project formulation as discussed in the Committee of Secretaries recently taking into account the integrated development of catchment and commend areas along with the engineering project.
- 5) Review of the procedure and time limit for examination of the schemes by the C.W.C. and other agencies.
- 2. Additional Secretary(Irrigation) mentioned that in the recent meeting of the Committee of Secretaries on the integrated approach to the project formation, it was decided that Planning Commission would set up a special committee to implement the decisions taken by the Secretaries Committee.
- Adviser (RECAD), Planning Commission, stated that after receint of the minutes of the Committee of Secretaries, the Secretary (Emwironment) has also written to the Planning Commission about the formulation of the special committee mentioned above. The case was being examined in the Planning Commission. It was felt in the Planning Commission that since the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects included all the departments concerned including the Environmental Department, the purpose of the special committee mentioned at the meeting of the Committee of Secretaries could be served by the Advisory Committee itself. It was proposed to address a circular letter to all the States conveying the decision of the Committee of Secretaries for integrated approach to project planning and formulation.

The draft letter was proposed to be shown to the Department of Irrigation and other Central Ministries concerned before issue.

- 4. Aft or detailed discussion on various issues raised by the Chairman, the following decisions were taken.
 - i) New projects for the 7th Plan should be examined by the C.W.C. only if adequate provision for them has been made by the States concerned in the 7th Plan. Schemes for which the provision in the State Plan was nominal or meagre should be put up by the C.W.C. to the Advisory Committee for a decision as to whether a detailed examination should be undertaken.

(Action: C.W.C.)

ii) Projects should be bosed to external agencies for financing only after clearance by the Advisory Committee and acceptance by the Planning Commission.

(Action: Deptt. of Irrigation)

It was necessary to conside the prompt submission of revised project cost actimates by the State Covernments. It was difficult to impose this discipline under the system of release of Central Assistance as block grants or loans, but with the proposed changeover to the carmarking of assistance this may become more fracible. As the fact that project costs were likely to be revised upwards would become known during the Annual Plan discussions, the CWC should circulate a list of such schemes to the States soon after the Plan discussion, with copies to the Department of Irrigation and the Planning Commission, so that the submission of the revised cost estimates could be watched.

(Action: C.W.C.)

(iv) It might not be feasible or desirable to insist On the submission of revised cost estimates for every protect repeatedly year after year. It was necessary to Limit the magnitude of this task by (a) a review of the existing tolerance limit within which the State Governments were authorised to exected the sanctioned cost estimate without any clearance or approval at the Central Covernment level, and a suitable enhancement of that limit so as to obviate the need for an examination of minor revisions; and (b) asking for the submission of the revised cost estimates not oftener than once or twice during a Plan period, subject to the condition that the actual release of Central assistance (once earmarking is adopted) should not be allowed to exceed the original sanctioned cost significantly without approval to the revised rost estimate. (Such a discipline was already being sought to be enforced on the releases of funds from the Budget for purely Central (particularly industrial) projects.).

Where unapproved projects have been taken up for implementation by the States and substantial expenditures have been incomed or commitments made on such projects, or where the original sanctioned cost of an approved project has been substantially exceeded without approved, and the cases came before the Advisory Committee at a very late stage when no real examination is possible and what is sought is merely the formality of an expost facto approval, the Committee need not accord such an approval but could leave the irregularity un-regularised, and might request the Planning Commission to convey the irregularity to the States.

(Action: P.C.)

(vi)It was also necessary to expedite the processes of scrutiny and clearance at the Central level, as delays in this regard were the subject of complaints by the State Covernments. Protracted delays in the processes of clearance would have the effect of rendering the cost estimates out of date so that by the time theproject reached the Advisory Committee it might already be in need of revision. This had to be avoided. A clear tire-limit should be set for the scruting of the propert by the diverse agencies concerned and the project should go before the Advisory Committee within a specified time from the date of receipt in the Central Government. Efforts should be made to ensure that scruting by the different agencies concerned was simultaneous and not sequential, and that all of them were associated with the Advisory Committee so as to ensure a toint rather than a piecemeal clearance. Such arrangements were introduced in recard to the processing of Industrial Licence applications with the establishment of the Secretariat for Industrial Approval: similarly, the arrangements for investment decisions in the public sector at the Centre (i.e., the Public Investment Board procedures halso provided for the simultaneous examination of projects by diverse agencies, a joint appraisal at meetings convened by the Financial Adviser and a joint clearance by the Public Investment Board. It should be experimed whether similar procedures for the simultaneous eva ination and joint clearance with timelimits prescribed for each stage could not be introduced in respect of irrigation and flood control projects. In order to streamline the existing procedures for the examination of such projects by the various agencies

it was decided that a sub-Group consisting of the following officers should go into this matter and submit its recommendations within a month:-

a) JS(GB), Department of Irrigation.
b) Advisor (PP), Department of Irrigation
c) Chief Engineer (TE), CWC
d) Chief Engineer (CAD), Department of Irrigation
c) Director, Department of Environment.
f) Jt. Advisor (T&CAD), Planning Commission - Convener.

(Action: CWC, P.C.)

List Of Officers present in the "Oth meeting of the Advisory Committee on Tyrigation, Flood Control and Multipurpose pro ects held on 19.7.85 in the Committee room, Shram Shakti Bhavan, New Delbi.

PRESENT

- Shri Ramaswamv R. Iyer, Secretary, Department of Irrigation .. Chairman 1,
- 2. Member
- ላ •

Shri N.K. Sarma, Chairman, C.W.C. Shri C.G. Desai, Adviser (I&CAD), Planning Commission Shri N.K. Dikshit, Jt. Adviser (I&CAD), Planning Commission 4. Member-Secretary

Also Present

Ministry of Irrigation

- 1. Shri D.W. Telang, Addl. Secretary
- 2, Shri M.A. Chitale, Commur. River Basins & Jt. Secretary
- 3. Shri G.S. Jakhade, Adviser (PP)
- Shri S.N. Lele, Chief Engineer(CAD)
- 5, Shri G.V. Rao, Deputy Secre ary (Projects-II)
- Shri R.V. Suryanarayana, Dy. Secretary
- Shri H.P. Rao, Dy. F.A.

Central Ground Water Board

1. Shri B.P.C. Sinha, Chief Hydrogologist

Ganga Flood Control Commission, Patna

1.Sh. J. Bahadur, Chairman 2.Shri V. Srinivasan, Director (P)

Central Water Commission

- 1., Shri S.N. Sothi, Member (P&P)
- 2. Shri R. Rangachari, Member (Flood) Shri E.S. Rao, Chief Engineer (IE)
- Shri A.S. Khurana, Director
- Shri S.S. Iyer, Director (TE)
- 6, Shri M.G. Miwani, Director (FA-II)
- ₹. Shri Stephen Koshy, Director (PP Cell)
- Э. Shri S.T. Chaudhury, Director FP_C_III
- 9. Shri C.D. Khoche, Dy. Director (TE)
- 10, Shri S.K. Vaish, Dy. Director (FA_III)
- 11, Shri P.S. Angal, Dy. Director
- 12. Shri B.B. Vats, Dy. Director (TE_I)
- Shri Kenwal Singh, A.D. 13,
- 14. Shri K.S. Jacob, A.D.
- 15, Shri B.W. Thawani, A.D.
- 16. Shri S.L. Kewalramani, A.D.
- 17. Shri Jai Parkash, A.D.

Planning Commission

- Shri O.P. Chopra, Dv. Adviser 1,
- Siri G.P. S heal, Denuty Arriser 2.
- Shri J.M. Nanda, S.R.O.

PLANNING COMMISSION (16CAD DIVISION)

Subject: - 31st meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Project held on 25.7.85 in Shram Shakti Bhavan, New Delbi.

The Summary Record of the Fist meeting of the Advisory Committee on Invication, Flood Control and Fultipurpose Projects held on 25.7.1985 in Shram Shakti Bhavan. New Delhi is circulated herewith.

> whit (N.K. Dikshit) Joint Adviser (MCAD) and Momber-Secretary

- 1. Shri Ramaswamy R. Iyer, Secretary, Ministry of Irrigation
 2. Shri N.K. Sarma, Chairman, Central Water Commission, Sowa Bhavan, R.K. Puran, New Delhi.
- Shri M.K. Samha Murthy, Chairman, Contral Electricity Authority, Sewa Bhavan, R.K. Duran, New Delbi.
- Shri S.L. Khosla, Adviser (Energy), Planning Commission
- Shri C.G. Desai, Adviser (ISCAD), Planning Commission
- Joint Secretary, Plan Finance Division, Ministry of Finance.
- Smt. Priya Prakash, Joint Secretary & Financial Adviser, Ministry of Irrigation, S.S. Bhavan, New Delhi.
- 8. Joint Secretary, Deptt. of Power, Ministry of Energy.
- Chairman, Central Ground Water Roard, Ministry of Irrication, Krishi Bhavan, New Dolhi.
- 10. Joint Secretary, Department of Heavy Industry, Udwog Bhavan, New Delhi.
- 11. Joint Secretary, Department of Environment, Bikaner House, New Delhi.
- 12. Agriculture Commissioner, Ministry of Agriculture, Krishi Bhavan, New Delhi.
- 13. Inspector General of Forest, Department of Forest, Krishi Bhaven, New Delhi

Planning Commission Cir. No. 16(25)/31/85_ISCAD dated 18.91985.

Copy to:-

Ministry of Irrigation, S.S. Bhavan, New Dolhi

- Shri D.W. Telang, Addl. Secretary
 Joint Secretary (I)
 Shri M.A. Chitale, Joint Secretary (GB)

- 4. Shri G.S. Jakhade, Adviser
- 5. Member (JRC)

- Shri R.V. Suryanaravana, Deputy Secretary (P)
- Shri A.U. Tirthani, Deputy Secretary
- Shri S.W. Lole, Chief Engineer (CAD), Krishi Bhayan, New Delhi Shri H.P. Rao, Deputy Financial Adviser Shri G.W. Rao, Dy. Secretary
- 10.
- 11.

Central Water Commission, Seva Bhevan, R. K. Puram, New Delhi

- 1: Member (P&P)
- Member (D&R) 2,
- Momber (Floods)
- Shri M.S. Rao, Chief Engineer (TE) Director (TE)(I)/II Director (PSP:I (PSP II
- 6.
- Director F.A. I/F.II/FA.III Director P.P. Cell I/PP Cell II/PP Cell III

Department of Environment Bikernar House, New Delhi

Dr. S. Maudgal, Director

Central Ground Water Board

Shri B.P.C. Sinha, Chief Hydrogoologist

Ganga Flood Control Commission, Patna

1. Shri J. Bahadur, Chairman

(N.K. Dikshit) Joint Adviser (ISCAD) and Member-Secretary

PLANMING COMMISSION (MEGAD DIVISION)

Surmary record of the 131st meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 25.7.1985 at 3.00 P.M. in Shram Shakti Bhavan, New Delhi.

The list of participants is given in the enclosed Annexure.

2. The following projects were considered and the Committee's recommendations are given below.

(2.1) Flood Control Schemes

(2.1.1.) Lower Damodar Drainage Scheme. West Bengal - (Estimated cost No. 1440 Jakha).

There was considerable discussion regarding different aspects of the project. Inter-alia, Secretary (I) enquired whether different possible options for solving the drainage problem had been considered before putting forward the proposed solution. Chairman, GPCC, gave a brief explanation to the background of the proposal under consideration. During the course of discussion Member (Floods) mentioned that the dredging of the river Roomarayan in the same area had been attempted earlier to relieve the out-fall channel from silting because of tidal action, but this was found to be uneconomical. After further discussion the Committee decided that the project should be brought up for reconsideration after taking into account the above points and after taking action on the following points:-

- i) The phasing of expenditure and the implementation schedule should be given together with an indication of the availability of funds in the State Plan (Five Year Plan and Annual Plan) for its implementation;
- ii) The clearance of the State Flood Control Board should be obtained.

(Action: GFCC)

It was also decided that the State Covernment should be requested to take up an evaluation study of the costs and benefits of the drainage schemes already implemented, as also to expedite the Master Plan for drainage for the Damodar River Basin so that the merits of individual schemes could be better appreciated.

(A ctions CFCC)

(2.1.2) <u>Karatia Nagartala Basin Drainage Schare</u> (Estimated cost & 656 lakhs)

The Committee decided that the GFCC should put up the project for reconsideration after taking action on the following:

- (i) The project report together with the groundwater data should be supplied to the CGWB for their examination and their comments duly considered by GFCC.
- (ii) The outlay available for the scheme in the approved VII Plan and Annual Plan 1985-86 of West Bengal should be ascertained.
- (iii) The approval of State Flood control Board should be obtained

(Actiona GFCC/CG/B)

- (2.2) Major Irrigation Projects Sri Ram Sagar Revised Stage I Irrigation Project (Andhra Prodesh) - Estimated cost Rs.87002 lekhs.
- (2.2.1) Member (PAP), CWC, explained the salient features of the Project.
 - (2.2.2) In respect of the water availability, Chairman, CWC mentioned that there was some difference of epinion between the State Government and the CWC on the water utilisation under the Stage-II Project earlier submitted by Andhra Fradesh. According to Government of Andhra Fradesh 200 TMC would be available at 75% dependability after meeting the commitment of the upstream riparian State, while according to C.W.C. utilisation should be restricted to 150 TMC. Ultimately the State Government decided to restrict the scope of the project within the water availability of 150 TMC; there was thus no inter-State aspect involved in clearing the project.
 - (2.2.3) In reply to the query raised by Advisor (I&CAD), it was clarified by the Chief Engineer (TE) that upstream water use of minor irrigation schemes etc. had been taken into account in the water balance studies.
 - (2.2.4) With reference to Adviser (I&CAD)'s query regarding the observation made in the CWC note about the need for a review of the design flood discharge based on probable maximum flood criteria, the Chairman, CWC clarified that the observation merely referred to the need for a review of the design flood from time to time on updated hydrological data in a general sense and did not imply any doubts regarding the design requiring any review at this stage.

(2.2.5) JA(ISCAD) enquired if the project had been sent to the Department of Environment (DOE) for clearance from the environmental angle. Chief Engineer (TE) explained that the dam had been completed years ago when there was no such procedure. The Cammittee, however, felt that since the revised project was now being considered (including the cost of the dam) for approval, the DOE should be consulted regarding the environmental aspects. The CWC was requested to send the report to the DOE for getting their clearance.

(2.2.6) On the question of Forest clearance, the representative of CWC clarified that there was no forest land involved. Chairman, however, suggested that this should be got confirmed from the Forest Department.

(2.2.7) Joint Advisor (IECAD) pointed out that in the recent 7th Flan discussions with the State, the estimated cost of the project had been indicated as No.1007 crores while as per the CWC's note the cost was No.870 crores. The Chief Engineer (IE), CWC clarified that the cost indicated in the 7th Flan document of the State was approximate and that the cost of No.870 crores might be accepted at this stage, as it was based on the scope of the project as finally accepted by the CWC. Regarding oscalation in the copt of the Project as estimated by the World Benk, the Chairman said that this gould be considered after the World Bank had completed its appraisal.

(2.2.8) Advisor (IEGAD) referred to the intensity of irrigation proposed in the project which was low as compared to the higher intensity now envisaged in the various irrigation projects in the country. The CWC representative clarified that advisory Committee had eleared in the past projects with a low intensity; the original Sri Ram Sagar Project cleared had a 65% intensity. Since the uncject would serve chronically scarcity—affected areas, it was planned to extend the benefits to as large an area as possible by having a lower intensity. He also clarified that State. Agriculture Department had accepted the crop pattern and intensity of irrigation after the required soil survey. On the point raised about the high yield of paddy in working out the B.C. ratio, the CWC representative clarified that such high yields were being obtained in the State. The Chief Engineer (CAD) also supported the figure of yield of 4.8 tennes of rice per hectare.

(2.2.9) The Chief Engineer (TE) C.W.C. confirmed in reply to a queryfrom Advisor (ISCAD) that canal estimates were based on the detailed classification of strata for recks etc. after carrying out necessary investigations.

(2.2.10)After some discussions, the Committee decided that the project should be resubmitted after action on the following points.

- i) The environmental and forest clearance of the project to be obtained from the Union Dopartments concerned.
- iil) The conjunctive use of surface and ground water in the Command Area should be examined in consultation with CGWB and suitably incorporated in the project.
- iii) The Chairman also desired that a note should be separately prepared by the CWC on the general question of intensity in various irrigation projects.

(Action: CWC/CGWB)

ANNEXIBE

Hist of Officers present in the 31st meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose projects held on 25.7.1985 in the Committee room, Shram Shakti Bhavan, New Delhi,

PRESENT

- Shri Ramaswamy R. Iyer, Secretary, Department of Irrigation .. Chairman 1 . Member
- Shri N.K. Sarma, Chairman, C.W.C.

3, Smt. Priya Prakesh, It. Secretary & Financial Advisor, Department of Irrigation

Member

4.

Shri C. & Dessi. Adviser (I&CAD), Planning Commission Member Shri R. K. Dikshit, Jt. Adviser (I&CAD), Planning Commission Member-Secretary 5.

Also Fresent

Ministry of Irrigation

- Shri M.A. Chitale, Commer. River Basins & Jt. Secretary
- 2, Shri S.N. Lele, Chief Engineer (CAD)
- Shri R.V. Survenarayana, Deputy Secretary
- Sbri R.K. Kaushal, Jt. Commr. (CAD)

Central Ground Water Board

Shri B.P.C. Sinba, Chief Hydrogologist

Ganga Flood Control Cormission, Fatna

Shri J. Bahadur, Chairman

Central Electricity Authority

(選) Shri T.C. Agrawal, Member

Central Water Commission

- Shri S.N. Sothi, Member (P&F) 1,
- Shri R. Rangachari, Momber (Flood)
- Shri S.M. Abbas Raza, Chiof Engineer
- 4 p Shri M.S. Rao, Chief Engineer (TE)
- Sbri A.S. Khurana, Director (TE)
- 6, Shri S.S. Iyer, Director (理)
- 7. Shri M.G. Aiwani, Director (FA-JI)
- 8, Shri S.T. Chaudhury, Director (PP_C_JII)
- 9. Shri P.L. Gian Chandani, Director (FA)
- 10, Shri Ş.K. Vaish, Dy. Directo: (FA-III)
- P.S. Shri Angal, Dy. Director Shri K.S. Jacoh, A.D. 11,
 - 12,
 - 13, Shri B.N. Thaugni, A.D.
 - Shri S.L. Kowalramani, A.D. 14,
 - Shri Jai Parkash, A.D.

Flanning Corplanion

- Shri O.P. Sobgal, Deputy Adviser
- Shri J.N. Handa, S.R.O. 2.

TIANNING COMMISSION (I&CAD DIVISION)

Subject: 52nd meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Project held on 28.11,1985 in Shram Shakti Bhavan, Now Dolhi.

The Summary Record of the 32nd meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 28:11.1985 at 3.00 p.m. in Shram Shakti Bhavan, New Delhi is circulated herewith.

(N.K. Dikshit) Joint Adviser(I&CAD) and Momber - Secretary

- 1. Shri Ramaswamy R. Iyer, Secretary, Ministry of Water Resources, S. S. Bhavan, New Delhi,
- 2. Shri M.A. Chitale, Chairman, Central Mater Gormission, Sowa Bhavan, R.K.Puram, New Delhi.
- 3. Shri M.K. Samba Murthy, Chairman, Central Electricity Authority, Sewa Bhavan, R.K.Turam, New Delhi.
- 4. Shri S.L. Khosla, Adviser (Energy), Flanning Commission, New Dolbi
- 5. Shri C.G. Desai, Advisor (I&CAD), Planning Commission, New Delhi
- 6. Joint Secretary, Plan Finance Division, Ministry of Finance
- 7. Smt. Friya Prakash, Joint Socretary and Financial Adviser, Ministry of Water Resources, New Dolhi.
- 8. Shri K. Padmanabiah, Joint Secretary, Department of Tower, S.S.Bhavan, New Delhi.
- 9. Chairman, Central Ground Water Board, Ministry of Water Resources, Krishi Bhavan, New Delhi.
- 10. Joint Secretary, Deptt, of Heavy Industry, Udyog Bhavan, New Delhi
- 11. Joint Secretary, Department of Environment, Bikemer House, New Delhi.
- 12. Agriculture Commissioner, Ministry of Agriculture and Goope, Krishi Bhavan, New Delhi.
- 23. Inspector Congral of Forgst, Mir. Porest & Bowlson, Mrishi Bhavan, M.Dolhi Tlonning Commission Cir. No.16(25)/32/85_18-0.1D dt. 98.2.1986

Comy to:

Ministry of Irrigation, S.S. Bhavan, New Dolla

- 1. Shri D.W. Telang, Additional Secretary
- 2. Joint Socretary (I)
- 3. Shri S.J. Thomas, funder (Jan.)
- 4. Shri G.S. Jakhade, Adviser
- 5. Member (JRG)
- .6. Shri k. 7. Suryanarayana, Deputy Secretary (P)
- 7. Shri A.U. Tirthani, Deputy Secretary
- 3. Shri S.N. Lele, Chief Engineer (CAD), Krishi Bhavan, New Delhi.
- 8. Sht. Shobna Naraya na Deputy Finningial Adviser
- 9. Shri G.W. Kao, Deputy Socropary

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Ceptual Witer Commission, Sowa Bhoven, R.K. Turem, New Delbi-

- l. Hember (PåF)
- 2. Momber (DAR)
- 5. Momber (Flords)
- 4. Shri M.S. Rao, Chief Engineer(TE)
 5. Limector (TE)(I)/II
 6. Director (REP) I/II
 7. Director F.A°I/II/III

- 8. Director P.P. Cell I/II/III

Department of Phvironment Bikaner House, New Delli

1. Dr. S. Maudgal, Director

Department of Arriculture (Krishi shovan,

1. Shri S.S. Chauhan, Additional Commissioner

Contral Ground Mater Board, Jam Magar House, New Dollie.

1. Shri B.T.C. Sinha, Chief Hydrogeologist

Ganga Flood Control Cornission, Sinchei Bhaven, Reduc (Bi

1. Shri J. Bahadur, Chairman

(N.K. Dikshit)

Joint Advisor (Jalab) and Member-Searchary.

PLANNING COMMISSION (18CAD DIVISION)

Subjects Summery Record of the 32nd meeting of the Advisory Committee on Errigation, Flood Control and Multipurpose Projects held on 28,11,1985 at 5.00 F.M. in Shram Shakti Bhayan, New Delhi.

The Est of participants is enclosed.

- I. General Issues
- 1. Report of the Sub-Group to consider the time limit for examination of projects in the Contral agenciest

The Chairman of the Advisory Committee ataled that the report was under this study, and would be placed before the Committee in thus course.

(Action: Member-Secretary of the Committee)

2. Application of integrated approach to the projects under consideration

The Chairman mentioned that a separate meeting would need to be convened to consider fully the implications of the application of the integrated approach before adopting the procedure for clearance of the multi-purpose and irrigation projects already under appraisal. However, in the case of projects which were put up to the Committee at the 32nd meeting, it was decided to consider them as such, pending a decision on the integrated approach. Also, the need for early clearance of these projects was uppreciated because some of them were only revised estimates of the earlier approved medium projects and all the medium projects were in the pipeline for external assistance either from the World Bank or USATD.

(Action: Joint Advisor(I&CAD), Planning Commission)

3. Undating the estimates of projects

Joint Adviser (I&CAD), Planning Commission and Member-Secretary of the Corvittee observed that the estimates of the projects put up for consideration of the Advisory Committee should be updated to the current level of prices. Chairman, Central Water Commission, Shri M.A. Chitale, stated that updating of the cost estimates alone would not be appropriate, unless the benefits are also up-valued correspondingly. The revision of the schedule of rates and the re-valuation of the agricultural benefits take considerable time in the States, at times even more than two years. Hence, it would not serve much purpose if we ask the States to revise the cost within 2 years. While agreeing with this the Chairman of the Advisory Committee said that where the estimates were several years old it might

not be appropriate for the Committee to consider them without some updating. He pointed out that a quick updating on the basis of certain relevent indices had been found possible in the case of some large industrial projects in the centext of submission to the PRB. Some analogous procedure right be possible in the case of irrigation and multispurpose projects.

(Action: Central Water Corrission)

4. Examination of the enopping pattern and crop water requirements etc. of projects by Ministry of Arrivature

It was noted that the Additional Commissioner, Crops Division Ministry of Agriculture and Cooperation was present in the meeting.

The Chairman stated that the proposed cropping pattern and crop water requirements should be examined by the erop Division of the Ministry of Agriculture and Cooperation (in consultation with the ICAR) and also the Mater Management Division of the Ministry of Water Resources before the projects are sponsored for consideration of the Advisory Committee.

(Action: Central Mater Complianion)

5. Concurrence of the State Finance and Planning Departments

The Chairman desired that the C.W.C. should itsist on the concurrence of the State Finance and Tlanning Departments for taking up the projects even at the initial stage of examination as this would evoid protracted correspondence after clearance of the project by the Advisory; Committee by which time the cost estimate might become outdated.

However, if there was a provision for a project in the Seventh Plan and Annual Plan of the State, it could be construed that the concurrence of the State Finance and Planning Departments is available.

(Action: Central Hater Commission)

6. Further points to be considered during the Approxisal of projects

Adverting to the present procedure for the formulation and epprecisal of irrigation projects, the Chairman suggested that before getting into the details of a given project, there should be a broad consideration of the rationale of the project. The examination should start with some basic questions such as whether the given area was suitable for agriculture; if so, whether it should be an area of dryland forming, or rain-fed farming, or irrigated agriculture; and if it was to be brigated

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agriculture, whether the project proposed was the best solution for the problems of the area; and what would be the most appropriate irrigation technique for the given area (flow irrigation, drip or sprintler irrigation, etc.). For this purpose, the Chairman suggested that the proforma/check list and guidelines sent to the States for formulating project reports should be suitably revised.

(Action: Central Water Commission,
Ministry of Mater Resources and
Tlanning Commission)

II. Major Projects

Sublej-Yamuna Link Canal (Tunjah) - Jart-Is (Estimated cost 8:27200 lakhs)

Member (P&P). CWC stated that the present programme of implementation of the project was based upon the Punjab Memorandum of Settlement in which it was envisaged that the Canal should be completed by 15.8,1986. He for ther stated that the increased cost of the project was based on the tendered rates of October, 1985 and high land compensation. No B.C. ratio was indicated in the CVC's note for the entire project including the canal network in Haryana; however, the representative of the CVC stated the ratio had been worked out as 1.8: 1. It was montioned in the CWC note that the Turjab Government had been requested to obtain the concurrence of the States of Haryana and Rajasthan for topping of the Nangal Hydel channel which was still awaited. But this link does not have a significant effect on the planning or construction of Sutlej-Yoruna link canal/project and they have already cleared the estimates of the project. The Chairman of the Committee also observed that the canal had to be completed within the time stipulated in the Punjab Accord. It was, therefore, decided that the clearance of the project need not be held up only for getting the concurrence of Rajasthan. He said that a copy of the acceptance letter could be forwarded to Rajasthan besides the participating States of Haryana and Tunjab. The Chairman further stated that in this background the so-called BC ratio for the entire project would be only of academic interest.

After detailed discussion, the project was considered technically feasible.

(Action: Planning Cormission)

III. Medium Trojects

1. Shivna Takli Medium Irrigation Project, Maharashtva - (Estimated Cost: 8,1299,69 Lakhs)

It was stated by Member(P&P) that the project had been posed for USAID assistance under the Maharashtra Medium pipeline of credit. It was also clarified that the basic estimated cost of the project was \$6.1299.69 lakks whereas the appraised cost for the USAID including the provisions for cost escalation and higher percentage of contigencies was \$6.15 cropes.

The State Government had provided As. 200 lakks in the Vilth Flon and Rs.9 lakks in the Annual Plan for 1985-86 for this project.

The project was considered technically feasible.

(Action: Ilanning Cormission)

Zaryana is a partner in the Sutlej-Yamuna link Conal

Barcharaala Irrigation Project(MT) (Estumated costs Ma.754 lakha)

The project earlier found acceptable by the Advisory Committee in March, 1983 was updated as per the criteria of the World Bank. The State Government provided Rs.598 lakks in VII th Time and Rs.137.4 lakks in the Annual Tian for 1985-86.

The project was considered technical feasble subject to the condition that the concurrence of the Ferest Department of the Ministry of Environment, Forests and Vild Life for the submergence of the forest land may be obtained by the State Covernment and communicated to the Planning Commission.

Also, the suggestions contained in the C.W.C.'s note for provisions for initial installations like penstocks to enable exploitation of hydel power at a later date, establishment of hydrological network, rural drinking water and minimum free-board of 3 m. for the earth dam, be kept in view by the State Government at the time of detailed designs and execution of the project.

(Action: Covt. of Madhya Fradesh and Flamming Commission)

3. <u>Kenhargaon Thuk Irrigation Project(M.P.)</u> (Estimated cost Rs.864.67 lakhs)

The project earlier approved in March, 1982 was updated as per the criteria of the World Bank. The State Government had provided Rs.901 lakhs in the VII th Plan and Rs. 150 lakhs in the Annual Plan for 1985-86.

The project was considered technically feasible .

The State Government should keep in viou, at the time of detailed designs and execution of the project, the suggestions mentioned in the Control Water Commission's note for provisions for initial installations like penstocks, to enable exploitation of hydel power at a later date, rural drinking water supply, establishment of suitable hydrological betweek and minimum free-board of 3 m. for the earth dam.

(Action: Govt, of Madhya Tradesh and Plauning Commission)

Revised Estimate of Debali Irrigation Project (Maharashtua) (Estimated cost Rs. 982.75 lakhs)

The B.C. ratio of the project was 1.15:1; however, the State Covernment had justified taking up the project on the ground that it would benefit the tribal area. Joint Adviser (I&GAD), Planning Commission clarified that there was at present no specific relaxation in the B.C. ratio

for projects benefitting the tribal areas. In response, the representative of the C.M.C. stated that the project satisfied the norms prescribed by the USAID and also the Internal Economic Rate of Return worked out to 11.6%. The Advisor (I&CAD) pointed out that this criteria for acceptance was not in accordance with the normal procedure prescribed by the Planning Commission. The Chairman of the Committee said that while early action might be taken on Matin Desai Committee Report on criteria for economic appraisal of projects, the Revised Estimate of Dehali Irrigation Irrigation was feasible on the basis of the Internal Economic Rate of Return which was a better basis for evaluation than the traditional benefit—cost ratio.

The project earlier approved by the Planning Commission in 1981 was revised as per the USAID cruteria. The State Government provided Rs.200 lakks in the VII th Plan and Rs. 25 lakks in the Annual Plan for 1985-86,

After detailed discussions the revised estimate was considered technically feasible.

The State Covernment should keep in view the suggestions mentioned in the C.W.C.'s note for prevision for rural drinking water supply, initial installation like penstocks, etc. to enable exploitation of hydel power at a later data minimum free-board of 3 m. for the earth dam and drainage facilities, at the time of detailed designs and execution of the project.

(Actions Covt. of Maharashtra and Planning Commission)

5. Santh Terigation Project (Maharashora)
Estimated costs Rs. 717,24 laths)

The project earlier approved by the Planning Commission in May, 1980 has been modified on the USALD Criteria. The State Government has made a provision of Rs. 1017 lakhs in the VII Plan and Rs. 75 lakhs in the Annual Plan for 1985-86.

The Statimate of the project was based on 1981-32 prices. It was decided that the estimate be updated and the B.C. ratio worked out again.

The project was considered technically feasible subject to the condition that the cost estimate would be updated and the B.C. ratio computed again. On receipt of these details, the Flunning Commission would process acceptance of this project.

The State Government should keep in view at the time of detailed designs and execution of the project, the suggestions given in the C.E.G. and note for provisions for rural drinking water supply, increase of the flage. board up to 3 n. by providing a parapet wall of suitable height and adoquate drainage arrangements along with special management for salinity control)

(Action: Government of Maharashtra, C.V.C. and Planning Commission) 6. 1

Somed Irrication Project (Maharashtra) (Estimated cost Rs.682.87 lakks)

Joint Advisor (ISCAD) stated that the utilisation under this project was checked against a combined upstream reservation of 6 MAP of Tapi water reserved for existing and proposed schemes in MA and Manarashtra and the distribution between the two States had not yet been decided. The representative of C.M.C. clarified that pending Statewise distribution, it was assumed that both was available for utilisation by each State. The Committee felt that there was need for early decision by the concerned States on the sharing of the 6 MAF of water so that the total utilisation in either State would not exceed the agreed share. Then the Advisor (ISCAD) pointed out that full account of water use for minor irrigation, water supply and such other uses should also be considered, the representative of the C.W.C. confirmed that this was being done. Also, the proposed water utilisation of 0.018 MAF in this project is well within 3 MAF reckoned as available for Maharashtra.

The project earlier approved by the Planning Commission in 1981 was modified suitably as per the USAND criteria. The State Govt, provided for this project Rs.400 labbs in the VII th Than and Rs. 70 labbs in the Annual Flan for 1985-86.

After discussions, the project was found technically feasible.

The suggestions mentioned in the C.W.C.'s note for previsions for rural drinking water supply, initial installations like pensions etc. for exploitation of power potential at a later date and winimum free-board of 3 m. for the earth dam should be kept in view by the State Government at the time of detailed designs and execution.

(Action: Govt. of Maharashtra and Thunning Commission.)

7. Revised estimates of Meja Modernisation and Meja Feeder - Rajasthan) (Estimated cost Rs.4221.70 lakhs)

The Morking Group of Planning Commission had provided for this project Rs.684 lakhs in the VII th Flan and Rs.170 lakhs in the Innual Flan for 1985-86.

The revised estimates were considered feasible.

(Action: Govt. of Rajasthan, C.4.8. and Planning Courission) IV. PICCO CONTROL

10

Jaumeur Town Protection Horks (Uthar Fradesh) (estimated cost Rs. 2008 Jakhs)

It was observed that the B.C. ratio of the scheme was less than one. It was one of the recommendations made in the G.F.C.C. note that model studies would be conducted and suitable suggestions made before implementation of the scheme. The Committee felt that the economic viability of the scheme might be adversely affected, if on account of model experiments the cost of the project gots increased. It was, therefore, decided that the cost and benefits from the scheme should be reviewed by the G.F.C.C. on the basis of model experiments and the project put up again for consideration of the Advisory Committee.

(Action: Govt. of Uttar Iradesh and G.F.G.C.)

List of officers present in the 32nd meeting of the Mulsory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 28,11,1985 in the Committee room, Sharm Shakti Bhavan, New De Bal.

PRESERVE

*.	Shri Ramaswamy R. Iyer, Secretary, Ministry of Water	5 2 8	Chairman
	Resources.		
2.	Shai M.A. Chitalo, Chairman, C.M.C.	220	Member
	Smt. Triya Frakash, Joint Secretary and Financial		
	Adviser, Ministry of Mater Resources	590	Member
4.	Shri C.G. Desai, Advisor(T&CAD), Planning Commission	0000	ໂຕກ່ວວນ
	Shri N.K. Dikshit, Joint Adviser (T&CAD),		•
	Flanning Commission	4000	Member-Secry±

Also Present

Ministry of Water Resources

1. Shri S.N. Lele, Chief Engineer(CAD)
2. Shri R.K Bhatia, Deputy Secretary(Indus)

Denartment of Agriculture

1. Shri S.S. Chauhan, Additional Commission

Ganga Flood Control Commission, Patna

1. Shri J. Bahadur, Chairman

Control Electricity Authority

1. Shri H.C. Kachhawaha, Chief Engineer

Control Mater Commission

- 1. Shri R. Rangachari, Momber(Floods)
- 2. Shri K. Madhavan, Momber (DER)
- 3. Shri S.N.Sothi, Member (T&T)
- 4. Shri M.S. Rao, Chief Engineer(TE)
- 5. Shri A.S. Khurana, Director (TE I)
- 6. Shri S.S. Iyer, Director(EgII)
- 7. Shri M.C. Ajwani, Director (F.A.Il)
- 8.Shri H.T.S. Tyem, Director (Mon.III)
- 9. Sh. P. L. G. Gianchandani, Director (FA.III)
- 10. Shri S.K. Vaish, Deputy Director (FA.III) 11. Shri F.S. Angal, Deputy Director (FFC.III)
- 12. Shri F.R. Chopra, Deputy Director (FA.I)
 13. Shri F.R. Chopra, Deputy Director (FA.I)
 14. Shri K.S. Jacob, A.D. (FC.III)
 15. Shri B.N. Thawani, A.D. (F.A.III)

- 1°. Shri S.L. Kewalramari, A.D. (F.A.II)

Flanning Commission

1. Shri R. Nagaraj, Deputy Adviser

2. Shri J.N. Nanda, S.R.O.

PLANNING COMMISSION (I&CAD DIVISION)

Subject: Special meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Project held on 18.4.86 in Shram Shakti Bhavan, New Delhi.

The Summary Record of the Special meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose projects held on 18.4.86 in Shram Shakti Bhavan, New Delhi is circulated herewith.

.(N.K. Dikshit)
Joint Adviser(I&CAD) and
Member-Secretary

- 1. Shri Ramaswamy R. Iyer, Socretary, Ministry of Water Resources, S.S. Bhavan, New Delhi.
- 2. Shri M. A. Chitale, Chairman, Central Vater Commission, Sewa Bhavan, R.K. Puram, New Delhi.
- 3. Shri M. K. Samba Murthy, Chairman, Central Electricity Authority, Sewa Bhavan, R. K. Puram, New Delhi.
- 4. Shri S.I. Khosaa, Adviser(Energy), Planning Commission, New Delhi.
- 5. Shri C.G. Desai, Adviser (I&CAD), Planning Commission, New Delhi.
- 6. Joint Secretary, Plan Finance Division, Ministry of Finance.
- 7. Smt. Priya Prakash, Joint Secretary and Financial Adviser, Ministry of Water Resources, New Delhi.
- 8. Shri K. Padmanabiah, Joint Secretary, Department of Fower, S.S. Bhavan, New Delhi.
- 9. Chairman, Central Ground Water Board, Ministry of Water Resources, Krishi Bhavan, New Delhi.
- 10. Joint Secretary, Deptt. of Heavy Industry, Udyog Bhavan, New Delhi.
- 11. Joint Secretary, Department of Environment, Bikaner House, New Delhi.
- 12. Agriculture Commissioner, Ministry of Agriculture and Coop, Krishi Bhavan, New Delhi.
- 13. Inspector General of Forest, Ministry of Forest and Environment, Krishi Bhavan, New Delhi.

Planning Commission Cir.No.16(25)/32/85-I&CAD dt. 29.4.1986

Copy to:

Ministry of Irrigation, S.S.Bhavan, New Delhi.

1-Shri D.W. Telang, Additional Secretary

2. Joint Secretary(I)

3. Shri S.J. Thomas, Member (JRC)

4.Shri G.S.Jakhade, Adviser

5.Shri A. Krishna Char, Commissioner(R.B.) 6.Shri R.V.Suryanarayana, Deputy Secretary(F) 7.Shri A.U. Tirthani, Deputy Secretary

8. Shri S.N. Iele, Chief Engineer (CAD), Krishi Bhavan, New Delhi.

9. Shri G. V. Rao, Deputy Secretary

Central Water Commission, Sewa Bhavan, R.K. Furam, New Delhi.

1 Member (P&P) 2 Member (D&R)

3.Member(Floods)

4. Shri M.S.Rao, Chief Engineer(TE)
5. Director (TE)(I)/(II)
6. Director (P&P)I/II
7. Director F.A.I/II/III

8. Director P.P. Cell. I/II/III.

Department of Environment, Bikaner House, New Delhi

1. Dr. S. Maurigal, Director

Department of Agriculture and Cooperation, Krishi Bhavan, New Delhi.

1. Shri S.S. Chauhan, Additional Commissioner

Central Ground Water Board, Jam Nagar House, New Delhi

1. Shri B. 7. C. Sinha, Chief Hydrogeologist

Planning Commission

shri V.K.Bhatia, S.R.O., P&E Division.

(N.K. Dikshit) Joint Adviser(T&CAD) and Member-Secretary

Summary record of the discussions held at the Special meeting of the Advisory Committee on Irrigation, Flood

Control and multi-purpose projects on 18.4.86

The list of officers present is enclosed.

The Committee considered the notes on the following Projects prepared by the Central Water Commission and the decisions taken are given in the following paragraphs.

Ravi Project Unit I (Thein Dam Project) with UBDC Hydel Project
Stage II (Revised Estimate) - Punjab - Estimated cost Rs.81600 lakhs

In the CWC note on the Project, the revised estimated cost was indicated as R. 75148 lakhs which was based on the price level upto December, 1983. The representative of CWC stated that this cost had since been quickly updated to bring it to the level of 84-85 price level by applying some indices, and this came to Ms. 81600 lakhs. There was detailed discussion on the reasons for increase in the revised estimate, since the project was last accepted in 1982. In so far as the cost of power generation was concerned, the representative of the CEA stated that this was acceptable. The Chairman desired that the CWC should prepare a <u>critical</u> analysis of increase in cost by various factors such as price increase, change in scope, inadequate provision originally made etc.,, in order to justify the increase in the revised estimate which was originally based on 1977 price level. The analysis should also cover the reasons for decrease in the B.C. Ratio in respect of the irrigation component. The representative of the CWC also mentioned that environmental clearance was given at the time of approval of the original estimate and the forest clearance under the Forest Conservation Act is still to be obtained by the State Government. After some further discussion, the Committee found the Project techno-economically viable subject to the following observations:-

- (i) Forest clearance under the Forest Conservation Act 1980 hasto be obtained and conveyed to Flanming Commission.
- (ii) The acceptance of the Project did not imply the acceptance of any assumed allocations of waters among the States concerned as this would be decided by the Ravi Beas Waters Tribunal.

The Committee further noted that at the time of detailed designs, the design flood should be reviewed after collecting hydro-meteorological data on a scientific basis before the execution of the project.

(Action:CVC/CEA/Plan.Com.

-Power & Energy Division).

Indira Gandhi Nahar Troject (Stage II) (Rajasthan) = estimated cost Rs. 94324 lakhs

At the last meeting of the Committee held on 21.3.86, it had been decided that the CWC would prepare a supplementary note in the light of their didcussions with the State government, for the consideration of the Committee. The representative of the CWC mentioned that the project profile on the new project concept given by the State had been examined and a number of meetings had been held with the State representatives, but clarifications were still awaited on some aspects. The Commission was therefore not in a position to take a final view about the new project concept. However, in view of the fact that the State Government had been pressing the Central Government to take a view on the project so that the implementation of the project might not be delayed, the Committee reconsidered the revised estimate for Stage II amounting to Rs. 943 crores as examined by the CWC in 1985. CE(TE), CWC stated that the revised Stage II estimate as examined in 1985 should be considered techno-economically viable, if further revisions as proposed by the State could be ignored. It was, however, observed that in the revised estimate of 1985, five lift schemes upto a lift of 60 metres were proposed but the availability of power had not been confirmed by the State Electricity Board. After detailed discussion, the Committee considered the revised Stage II estimate amounting to Rs. 943.24 crures techno-economically viable subject to the following observations:-

- (1) The State Government will implement the Project under flow areas in such a manner that the expenditure would not become infructuous if the further changes in scope envisaged by them to extend irrigation for pasture development were adopted.
- (ii) The lift irrigation (restricted to 60 metres) envisaged in the Project will be executed only after obtaining confirmation about power availability from the State Electricity Boards. This should not be construed as approval for higher lifts.
- (iii) CWC would prepare a <u>critical</u> enalysis of increase in cost by various factors such as price increase, change in scope, inadequate provision originally etc., in order to justify the increase in the revised estimate.
- (iv) The concurrence of the State Agriculture Department in the cropping pattern, crop water requirements, and yield inputs etc., used in the B.C. Ratio calculations should be furnished.

The following points should be kept in view at the time of detailed design and project execution:

- (i) The suggestion given by the CWC for irrigation planning should be kept in view.
- (ii) An ad-hoc provision of about Rs.12 crores has been made in the project for conjunctive use of the ground water as suggested by the CGWB.

 Hydro-geological investigations of the area are in progress and based

on these the plan for development of ground water will be prepared expeditiously and submitted to CCWB.

- (iii) Detailed soil survey of the command area should be completed at the earliest and if necessary, the CCA, cropping pattern etc. should be modified in the light of the same in consultation with the WMD and CWC.
- (iv) Construction of water courses and field channels should be taken up so as to synchronise with the completion of distributories and minors to enable the utilisation of the potential created early.
- (v) Possibilities of hydro power generation may be examined and if they exist, provision for suitable structures for the same may be made.
- (vi) The free board in the lined canals shall be provided as/IS:10430-1982.
- (vii) It is advisable to provide sprinklet irrigation in lift areas where power is likely to be available after establishing the feasibility through experimentation.

(Action: CWC/Plan.Com./State Covt.)

List of officers present in the Special meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 18.4.86 in the Committee room, Sharm Shakti Bhavan, New Delhi.

PRESENT

1. Shri Ramaswamy, R. Iyer, Secretary, Ministry of Water Resources.

2. Smt. Friya Prakashk Joint Secretary and Financial

Adviser, Ministry of Water Resources. 3. Shri N.K. Dikshit, Joint Adviser (I&CAD),

Planning Commission.

Chairman

Member

Member-Secretary

Also present

Ministry of Water Resources

1. Shri S.J. Thomas, Member(JRC)

2. Shri R. K. Bhatia, Dy. Secretary

3. Shri F.Rajendran, Mxec.Asstt. to Secretary

Central Electricity Authority

1. Shri H.C. Kachhwaha, Chief Engineer

Central Water Commission

- 1. Shri N.K.Sarma, Member(WR)
- 2. Shri K. Madhavan, Member (D&R)
- 3. Shri SeN.Sethi, Member(P&P)
- 4.Shri M.S. Rao, Chief Engineer (TE)
- 5. Shri B.K.Sinha, EAD TE
- 6. Shri F.R. Malhetra, Dy.Director
- 7. Shri M.C. Dhawan, Dy.Director
- 8. Shri B.B. Vata, Dy.Director(TE)

Flanning Commission

- 1. Shri A.S. Gupta, Senior Research Officer(I&CAD)
- 2. Shri V.K. Bhatia, Senior Research Officer(Power)

PLANNING COMMISSION (I&CAD Division)

Subject: 33rd meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Project held on 21.3.1986 in Shram Shakti Bhavan, New Delhi.

The Summary Record of the 33rd meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 21. 3. 1986 at 3.00 P.M. in Shram Shakti Bhavan, New Delhi is circulated herewith.

> (N.K. Dikshit) Joint Adviser (I&CAD) and Member - Secretary

- 1. Shri Ramaswarry R. Iyer, Secretary, Ministry of Water Resources, S.S. Bhavan, New Delhi.
- 2. Shri M. A. Chitale, Chairman, Central Water Commission, Sewa Bhavan, R. K. Puram, New Delhi,
- 3. Shri M. K. Samba Murthy, Chairman, Central Electricity Authority, Sewa Bhavan, R. K. Puram, New Del hi.
- 4. Shri S.L. Khosla, Adviser (Energy), Planning Commission, New Delhi
- 5. Simi C.G. Desai, Adviser (I&CAD), Planning Commission, New Delhi
- 6. Joint Secretary, Plan Finance Division, Ministry of Finance
- 7. Smt. Priya Prakash, It. Secy. and Financial Adviser, Ministry of Water Resources, New Delhi
- 8. Shri K. Padmanabiah, Joint Secretary, Department of Power, S.S. Bhavan, New Delhi.
- 9. Chairman, Central Ground Water Board, Ministry of Water Resources, Krishi Bhavan, New Delhi
- 10. Joint Secretary, Deptt of Heavy Industry, Udyog Bhavan, New Delhi 11. Joint Secretary, Department of Environment, Bikaner House, New Balli
- 12. Agriculture Commissioner, Ministry of Agriculture and Cooperation. Krishi Bhavan, New Delhi.
- 13. Inspector General of Forest, Ministry of Environment, Forests & Wild Life, Krishi Bhavan, New Delhi Planning Commission Cir. No. 16(25)/33/85-I&CAD dt. 30.4.86

Copy to:

Ministry of Irrigation, S.S. Bhavan, New Delhi

- 1. Shri R. W. Tolarg, Additional Secretary 2. Joint Secretary (I)
- 3. Shri A.Krishnacher, Commissioner (R.B.) 4. Shri G.S. Jakhade, Adviser
- 5. Shri S.J. Thomas, Member (JRC)
- 6. Shri R.V. Suryanarayana, Deputy Secretary (P) 7. Shri a.U. Tirthami, Deputy Secretary
- 8. Shri S. N. Lele, Chief Engineer (CAD), Krishi Bhavan, New Dolhi

9. Shri G. V. Rao, Deputy Secretary 10. Shri R. K. Kaushal, Jt. Commissioner (CAD) Central Water Commission, Sewa Bhavan, R. K. Puram, New Delhi

- 1. Member (P&P)
- 2. Member (I&R)
- 3. Member (Floods)
 4. Member (WR)
- 5. Shri M.S. Rao, Chief Engineer(TE)6. Director (TE) (I)/(II)
- 7. Director (P&P)(I)/(II)
- 8. Director F. A. I/II/III

Department of Pavi morment, Bikaner House, New Delhi

1. Dr. S. Maudgal, Director

Deptt of Mriculture & Cooperation, Krishi Bhavan, New Dolli

1. Shri S.S. Chauhan, Additional Commissioner

Central Ground Water Board, Jam Nagar House, New Dolli

1. Shri B.P.C. Sinha, Chief Hydrogeologist

(N.K. Dikshit) Joint Adviser (I&CAD) and . Member - Secretary

PLANNING COMMISSION (I&CAD Division)

Summary Record of the 33rd meeting of the Advisory Committee on irrigation, flood control and multipurpose projects held on 21-3-86 in Shram Shakti Bhavan, New Delhi.

The list of officers present at the meeting is enclosed as Annexure ${\bf I}_{\:\raisebox{1pt}{\text{\circle*{1.5}}}}$

At the outset, the Chairman of the Advisory Committee stated that the formats for the technical notes on the projects prepared by the CWC should be suitably revised in the light of the suggestions already given by him. The Chairman reiterated that before going into the technical details of the project, the case for the project (in the light of the available options for the given area) should first be argued; this should not be taken for granted. He added that for the projects already appraised by the CWC for which notes had been sent to the Planning Commission for the consideration of the Advisory Committee, supplementary notes should be prepared on these lines and made available in advance of the next meeting. The position of availability of funds for the projects should be indicated by the Planning Commission at the meeting. The projects The projects which were not included in the Seventh Five Year Plan of the State and those for which the funds allocated by the States were grossly inadequate should be given low priority for appraisal in the CWC. All the projects, both major and medium, should be considered by the Central Water Commission as a whole and their clear recommendations made available to the Committee. every case, and on every point or issue, there should be a clear indication of the CWC's view, and the CWC should not hedge its position as it tended to do in the standard concluding paragraph.

(Action: CWC, Planning Commission)

3. The projectwise discussion was then taken up and the following recommendations were made:

Major Irrigation Projects

(1) <u>Kanpur Irrigation Project (Estimated Cost 8603 lakhs)</u>

Joint Adviser (I&CAD) Planning Commission stated that this project was proposed by the State as a new scheme of Seventh Plan and due to constraint of resources no outlay was provided for it in the scheme-wise approved outlay conveyed by the Planning Commission

to the State Government. The Committee, therefore, decided that no useful purpose would be served by considering the project at this stage.

(Action: Planning Commission)

Gyanpur Pump Canal Project (U.P.) (Estimated cost Rs. 7338.85 lakhs)

It was observed that the project has been placed before the Advisory Committee ten years after its construction started. The Chairman enquired whether the C.G.W.B. had examined the scheme particularly when the water from Ganga is not to be lifted during the period 1st January to 30th June. The CWC representatives stated that the scheme had not been examined by C.G.W.B. It was also noted from the CWC note that the concurrence of the State Finance and the Agriculture Departments was still awaited, but during the meeting Chief Engineer (TE) CWC informed the Committee that the Agriculture Department had conveyed their concurrence. As regards the availability of power for the lift scheme it was indicated that this had been confirmed by the State Electricity Board, but the Chairman felt that this should be got confirmed by the Department of Power.

On a query raised by the Chairman about fund availability it was mentioned by Jt. Adviser (I&CAD) that the Seventh Plan outlay approved was Rs.19.26 crores as against a spillover of Rs.73.39 crores in the Seventh Plan. Chairman observed that the clearance of the project could be considered only if the State was willing to provide the full carryover outlay during Seventh Plan for its completion.

After some discussion it was decided that (a) the project be referred to the Ministry of Energy (Department of Power) and the Central Ground Water Board for comments (b) the State Govt. may be asked to provide the full carry over outlay on this project for its completion in the Seventh Plan. Thereafter the project will be put up agains for consideration of the Committee.

(Action: Planning Commission/CWC/State Govt.)

(3) Watrak Reservoir Project (Gujarat) (Estimated cost Rs. 2200 lakhs)

The Chairman observed that whereas during the earlier meeting of the Advisory Committee when the project was considered it was decided that the specific clearance

of the Ministry of Water Resources on the inter State aspects involved would be given, the present note only conveyed the one sided view of the Gujarat Govt. and the CWC's views about clearance from inter State angle were not given. It was, therefore, decided that the supplementary note be revised to give categorical replies to points raised by the Advisory Committee at its earlier meeting for reconsideration by the Committee at a subsequent meeting.

(Action: CWC)

(4) <u>Indira Gandhi Nahar Project Stage II (Rajasthan)</u> (Estimated cost Rs.94324 lakhs)

It was noted that this project estimated to cost Rs.943.24 crores has been revised to Rs.1331 crores and several aspects of the project were being sorted out by the CWC in consultation with the State Govt. It was therefore, decided that a modified note on this project be put up by the CWC for consideration at the next meeting of the Committee.

(Action : CWC)

(5) Raising Meja Dam (U.P.) - (Estimated cost Rs. 2969 Lakhs)

On a query made by the Chairman it was stated by Jt. Adviser (I&CAD) that full spillover cost has been provided for this project in the Seventh Plan of the State Adviser (I&CAD) mentioned that the auxiliary spillway proposed to be provided will increase the cost of the project. Chief Engineer (TE) CWC clarified that the cost thereof has already been included in the estimate and the design will be vetted by the CWC at the time of detailed design. It was noted that the environment and forest clearance were yet to be obtained and the concurrence of the State Department of Agriculture to the cropping pattern were also due. The project was, however, considered techno-economically viable. The project would be processed in the Planning Commission after the necessary clearances mentioned above were obtained.

(Action: Planning Commission State Govt)

(6) Revised Estimate of Rengali Multipurpose Project (Orissa) - (Estimated cost Rs. 19639 lakhs)

Member (Floods), CWC stated that the project could be of much more benefit if the embankment works

on the down stream of the project were also constructed on priority which the State was not pursuing vigorously and therefore the acceptance may be subject to carrying out of the down stream flood protection works. The project was considered techno economically viable.

or disease

(Action: Planning Commission)

(7) Revised estimate of Srisailam Right Bank Canal Project(A.P.) - (Estimatec cost Rs. 38605 lakhs)

The Chairman referred to the page 7 of the CWC note on the project wherein it was mentioned that the State Govt. had decided to exclude the common carrier from this project and include it under the proposed Telegu Ganga project. Member (WR) and Chief Engineer (TE), CWC stated that this had been accepted by the World Bank which has appraised the Srisailam R.B. canal project.

On the inter-state issues involved the Chairman referred to the objections raised by Maharashtra. Member (WR) CWC stated that the e had been taken into account before the original estimates had been cleared in 1981.

Adviser (I&CAD) wanted to know the implications of having the higher capacity of common carrier canal on the implementation of this project. Joint Adviser (I&CAD) stated that the originally approved Srisailam R.B. Canal project included the cost of the carrier canal which was to be constructed for providing 19 TMC for this project and 15 TMC for Madras water supply scheme. If the revised cost of common carrier channel is included in the revised estimates, the B.C. ratio 1.02 mentioned in the CWC note would become less than 1, affecting the viability of the project.

After some discussion, the Committee decided that the economic viability of the Project should be reassessed taking into consideration the allocable cost of the common carrier canal and, thereafter a supplementary note indicating the position put up for consideration of the Advisory Committee in its next meeting.

(Action: CWC)

Adviser (I&CAD) pointed out that considering the acquisition of land for construction, the clearance of forest Department would be necessary. Chief Engineer (TE) clarified that there was no forest land involved and that house the clearance of forest Deptt. is not

necessary. Chairman said that this should be got confirmed by the Forest Deptt.

(Action: CWC)

(8) Revised Estimate of Potteru Irrigation Project (Orissa) - (Estimated cost Rs.6974 lakhs)

It was mentioned that in the CWC note that the concurrence of State Agriculture Deptt. was still awaited and the information about forest clearance was to be obtained from the State. It was noted that the project was nearing completion and increase in cost was due to inadequate investigation, rise in prices of material, labour etc. The project is financed by the Central Govt. as a part of Dandakaranya Development for displaced persons. The project was found techno-economically viable. The Planning Commission would process the scheme after the necessary information about forest submergence and the concurrence of State Agriculture Department is obtained.

(Action: Planning Commission/CWC/ State Government)

Medium Irrigation Project

Revised Estimate of Singda Dam Project (Manipur) (Estimated cost Rs. 1989 lakhs)

The Chairman noted that the Project cost had gone up from Rs.8 crores in 1977 to Rs.20 crores which included about Rs.4 crores for the rectification of the damages arising from the land-slides which had occurred in the area. The Member (D&R) CWC explained the modifications which became necessary because of the occurrence of land-slides. However, the Chairman observed that there should be a critical analysis of the reasons leading to such a high escalation in the Project cost, and also indicating the lessons to be learnt from such experience. The Chairman also wanted to know whether the water supply component had been properly reflected in the BC ratio calculations. The CE(TE), CWC clarified that the Project cost was allocated between irrigation and water supply and the BC ratio had been worked out for the irrigation component only. It was decided that the revised estimate should be critically examined again, and a supplementary note covering all the aspects raised at the meeting put up for the consideration of the Advisory Committee at its next meeting. The position regarding the clearance still required should also be indicated.

(Action: CWC)

Anne Min

List of officers present in the 33rd meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 21. 3, 1986 in the Committee Room, Shran Shakti Bhavan, New Delhi.

PRESENT

1. Shri Ranaswany R. Iyer, Scoretary, Ministry of Water Resources

2. Snt. Priya Prakash, Joint Socretary, and Financial Advisor, Ministry of Water Resources

3. Shri C.G. Dessi, Advisor (I&CAD), Planning Commission

4. Shri N. K. Dikshit, Joint Adviser (I&CAD), Planning Corrission

... Chairman

Momber

Member

... Member-Secretary

Also Present

Ministry of Water Resources

1. Shri S.N. Lele, Chief Engineer (CAD)

2. Shri A. Krishnachar, Commissioner, River Basin

3. Shri R. K. Kaushal, Jt. Cormissioner (CAD)

Central Ground Water Board

1. Shri S. K. Sharma, Senior Hydrogeologist

Central Water Corrission

1. Shri N. K. Sarma, Mombor (W. R.)

2. Shri R. Rangachari, Member (Floods)

3. Shri K. Madhavan, Menber (ReR)

4. Shri S. N. Sethi, Momber(P&P)

5. Shri M.S. Rao, Chief Engineer (TE)

6. Shri A.S. Khurana, Director (TEI)

7. Shri O.P. Saigal, Director (TE II)

8. Shri S. K. Govil, Director (PP Cell -I)

9. Shri S. T. Chaudhury, Birector (PP Coll-II)
10. Shri M.G. Ajwani, Director (FA II)
11. Shri P. R. Chopra, Dy. Director (FA II)

12 Shri M. C. Dhawan, Dy. Director (TE I)
13 Shri B. B. Vats, Dy. Director (TE I)
14 Shri S. M. Date of the S. M. Director (TE I)

14. Shri S.M. Pai, Dy. Director (TE I)

15. Shri S.L. Kowal ramami, AD (PPC III) 16. Shri K.S. Jacob, AD (PPC III)

17. Shri P. Nandi, ADC (PPC I)

18. Shri S, S, Narang, (PPC I)

19, Shri D.N. Dahiya, ADC (TE II)

20. Shri K.T. Israni, AD (TE II)

21, Shri S. T. Hasnain, ADC (TEI)

22 Shri P. R. Bernan, EAD (TE I)

23. Shri M. Poddar, EAD (TÈ II) 24. Shri Rati Bhan, EAD (TE II)

PLANNING COMMISSION

1. Shri R. Nagaraj, Deputy Advisor (I&CAD)

PLANNING COMMISSION (1&CAD DIVISION)

.37

Subject: 34th meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Project held on 13th, 14th and 15th May, 1986 in Shram Shakti Bhavan, New Delhi.

The Summary Record of the 34th meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 13th,14th and 15th May, 1986 in Shram Shakti Ehavan, New Delhi is circulated herewith.

(N.K. Dikshit)
Joint Adviser (I&CAD) and
Member-Secretary

- 1. Shri Ramaswamy R. Iyer, Secretary, Ministry of Water Resources, S.S. Bhavan, New Delhi.
- 2. Shri M.A. Chitale, Chairman, Central Water Commission, Sewa Bhavan, R.K. Puram, New Delhi.
- S. Shri M.K. Samba Murthy, Chairman, Central Electricity Authority, Sewa Bhavan, R.K. Puram, New Delhi.
- 4. Adviser (Energy). Planning Commission, New Delhi.
- 5. Shri C.G. Desai, Adviser (I&CAD) Planning Commission, New Delhi.
- 6. Joint Secretary, Plan Finance Division, Ministry of Finance
- 7. Smt. Priya Prakash, Jt. Secy. and Financial Adviser, Ministry of Water Resources, New Delhi.
- 8. Shri K. Padmanabiah, Joint Secretary, Department of Power, S.S. Bhayan, New Delhi.
- 9. Chairman. Central Ground Water Board, Ministry of Water Resources, Krishi Bhavan, New Delhi.
- 10. Joint Secretary, Deptt. of Heavy Industry, Udyog Bhavan, New Delhi.
- 11. Joint Secretary, Department of Environment, Bikaner House, New Delhi.
- 12. Agriculture Commissioner, Ministry of Agriculture and Cooperation, Krishi Bhavan, New Delhi.
- 13. Inspector General of Forest, Ministry of Environment and Forests, Krishi Bhavan, New Delhi.

Copy to:

Ministry of Water Resources, S.S. Bhavan, New Delhi

- 1. Shri D.W. Telang, Additional Secretary
- 2. Joint Secretary (I)
- 3. Shri A Krishnachar, Commissioner (RB)
- 4. Shri G.S. Jakhade, Adviser (PP)
- 5. Shri S.J. Thomas, Member (JRC)
- 6. Shri R.V. Suryanarayana, Deputy Secretary (P)
- 7. Shri K.U. Tirthani, Deputy Secretary (Floods)
- 8. Shri S.N. Lele, Chief Engineer (CAD), Krishi Bhavan, New Delhi.
- 9. Shri G. V. Rao, Deputy Secretary
- 10. Shri R.K. Kaushal, Jt. Commissioner (CAD)

Central Water Commission, Sewa Bhavan, R.K. Puram, New Delhi

- 1. Member (P&P)
- 2. Member (D&R)
- 3. Member (RM)
- 4. Member (WP)
- 5. Shri M.S. Rao, Chief Engineer (TE)
- 6. Director (TE) I / II
- 7. Director (P&P) I / II
- 8. Director F.A. I/II/III

Department of Environment, Bikaner House, New Delhi

1. Dr. S. Maudgal, Director

Central Ground Mater Board, Jam Nagar House, New Delhi

Shrim B.P.C. Sinha, Chief Hydrogeologist

Ganga Flood Control Commission, Patna

- 1. Shri J. Bahadur, Chairman
- 2. Shri G.R. Keskar, Director

(N.K. Dikshit)
Joint Adviser (I&CAD) and
... Member-Secretary

PLANNING COMMISSION (1&CAD DIVISION)

Summary Record of the Thirty-fourth meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 13th, 14th and 15th May, 1986 in

Shram Shakti Bhavan, New Delhi.

The list of Officers present at the meeting is enclosed as Annexure

2. Opening the discussion, the Chairman of the Advisory Committee asked the CWC officers to change over to the new format suggested earlier by him for preparation of the notes from the next meeting of the committee.

(Action : CWC)

3. <u>General Issues:</u>

(i) Procedure for clearance of medium schemes

The Chairman of the Committee raised an issue whether the procedure for examination and acceptance of medium schemes could be modified or dispensed with in order to avoid delay in the examination of such schemes by the Centre. Joint Adviser (I&CAD) clarified that the terms of reference of the Advisory Committee constituted by Planning Commission included examination of both major and medium irrigation projects and the Committee's recommendations were to be taken into account for inclusion of such schemes in the Plan. Also implications of such a change in the procedure will have to be considered before the Committee could take a view on this issue. After some discussion, it was decided that CWC would prepare a paper bringing out the implications for change in the procedure in respect of medium schemes for considerations by the Committee.

(Action : CWC)

(ii) Priority for examination of major and medium Projects by the CWC

It was observed that the CWC was bringing up new major and medium irrigation projects for consideration of the Committee, although no specific outlay for such schemes was accepted by Planning Commission within the overall irrigation sector ceiling for the Seventh Plan. After some discussion, it was decided that CWC would give first priority for examination of on-going schemes particularly the revised estimates and if time permits, examination of new schemes could be taken up depending on the workload in the CWC. It was, however, suggested that CNC should get a clarification in the first instance from the State Governments as to how they would finance such schemes since no outlay had been approved by Planning Commission in the Seventh Plan.

(Action : CWC)

It was noted that initially the Advisory Committee had been set up for the purpose of clearing projects for inclusion in the Plan; however, over the years there had been a change in the situation and projects were being nominally included in the Plan, subject to their being scrutinised and cleared at a later stage. For the present, therefore, the priority in the selection of projects for examination should be based on whether they stood included with an appropriate provision in the Plan, as mentioned above. Eventually, however, it was agreed that we should move towards the position (at least from the Eighth Plan onwards) that a project would get included in the Plan only after its technoeconomic examination and clearance.

(Action: Planning Commission/CWC)

(iii) Invitation of State Covernment representatives to the meetings of the Advisory Committee.

It was felt that it would be useful to invite the representatives of the State Governments to the meetings of the Advisory Committee, so that they could provide immediate answers to some of the questions which were being raised at the meetings and thus obviate correspondence and delays. Besides, it was also desirable that the State Government officials should get a first—hand knowledge of the kind of questions that were being asked and the approach that was being brought to bear on project examination at the meetings of the Advisory Committee, as this would result in an improvement in project formulation. If necessary, the agenda for the Advisory Committee meetings could be so structured that the representatives of only one or two State Governments need be invited to each meeting.

(Action: CWC/Planning Commission)

Major Irrigation Projects

(i) Punjab Irrigation Project Phase_II (Punjab) (Estimated Cost Rs.452.57 croves)

The Chairman enquired about the components of the works proposed in the project. It was clarified by the Chief Engineer (TE), CWC that although the main component of the work is lining (Rs.294.88 crores), the other major components are land acquisition, earth work and establishment. It was also clarified by CWC representative that no forest clearance was involved in this project. On a quary, the Chief Engineer (TE) further clarified that the planning of the works c in Phase-II was based on the experience gained in construction of phase-I which is nearing completion.

Joint Adviser (I&CAD), Planning Commission, sought the clearification as to how 0.6 MAF to Rajasthan could be allocated in the ultimate stage as there did not seem to be alternative sources for ensuring irrigation in areas where committed use would be developed in Punjab. It was clarified by the Chairman that the Committee was not concerned with questions of water-sharing among the different States, but with the fact that lining would lead to a saving water; the question of the sharing of the waters was a matter to be decided by the Ravi Beas Waters Tribunal.

In response to a query by the Chairman regarding the attractiveness of the investment from the point of view of the quantum of water saved, it was clarified that the project would result in a saving of 1.8 MAF of water and that this was a worthwhile investment. The Committee noted that this was a large project extending over a very long period (upto 2001 AD), and that the capital of Rs.453 crores which had been mentioned was purely notional, as it would undoubtedly undergo a change by the time the project was completed. The Committee could therefore at best only take note of the project. What could be approved at this stage was only the first time-slice of the project.

There was some discussion at this stage regarding the impact of the lining of the canal system on the shallow tubewells and dugwells in the area. The Committee took note of the comments of the CGWB as well as the replies given by the State Covernment. It was noted that the CGWB's view was that the lining should be selective. The Committee agreed that at the time of execution of the project further investigations should be conducted in the field and then decisions taken on the need for the lining of the different reaches of the canal system,

In conclusion, the Committee decided that while taking note of the total project, the clearance for the present should be confined to the first time-slice (estimated cost 8, 106.45 crores, additional annual irrigation 74.29 thousand hectres) subject to

(a) the components of the works proposed in the first time-slice being clearly set forth by the CWC in a note to the Planning Commission, together with the details of the calculation of the IRR of 18% and (b) the State Government agreeing to GGWB's suggestion of further investigations in the field at the time of the execution of the project with a view to deciding on the selective lining of the different reaches of the canal system.

(Action : CWC/P.C., State Government)

(ii) Second Revised Estimate of Toktak Lift Irrigation Scheme. (Manipur) (Estimated cost Fs. 24.40 crores

The revised cost was found techno-economically viable.

(Action : P.C.)

(111) Modified Som Kamla Amba Irrigation Project (Rajasthan) (Estimated Cost - R. 3.01 crores)

The representatives of CWC stated that the scheme had been appraised by USAID and about 15.15 crores have been spent on this project till march, 1986. The CGWB's representative mentioned that in the absence of proper drainage, water logging might result after introduction of irrigation. CWC's representative pointed cut that one of the observations of the CWC was that the State Government would need to take action about necessary remedial measures including conjunctive use of groundwater for checking water logging problem.

Joint Adviser (I&CAD) mentioned that against a spillover of about Rs. 45 crores on the project in the Seventh Plan, the approved outlay for the Seventh Plan is only Rs.12 crores. Since it is an externally—aided project, the State Government will have to provide the full carry over in order to complete the project in the plan period. After some discussions, the project was found techno-economically viable subject to

(a) the concurrence of the State Finance Department being obtained, particularly in view of the negative financial return; and (b) the State Government providing full carry-over outlay needed for the completion of the project in the Seventh Plan.

The following suggestions should be kept in view at the time of detailed designs and execution of the project:

- (a) Free board provided above the MWL is 2 m, which may be increased to 3 m by providing 1 m masonry parapet wall to ensure additional safety to head works structures.
- (b) Sediment observations to determine actual silt load coming into the reservoir may be carried out to verify the silt rate adopted.
- (c) Taking up of Tidi Stage_II project by the State sooner, is likely to reduce the sediment deposition in the reservoir against canal outlet provided at El 200.5 m. However, alternate high irrigation outlets above zero elevation expected after 100 years 4 desirable.
- (d) The initial reaches of canals and their head works would require regular maintenance.
- (e) The State Covernment may establish a close network of hydrelogical stations and monitor them on a regular basis to demandate areas having shallow water depth and the zones of heavy scepage in the command.
- (f) After introduction of irrigation, the water table is likely to rise further and cause water logging conditions (as the command soils are moderately permeable). Necessary remedial measures including conjunctive use of groundwater need to be taken to check water logging problem.
- (g) Provision for drinking water supply from the project to the adjoining rural areas may be considered.
- (h) The project has also been cleared by the Department of Environment, Forest and Wildlife from the environmental angle subject to certain safeguards to be implemented during the execution of the project.

(Action: P.C., State Government)

- 5. Revised Estimates of project which are rearing completion or almost completed.
 - (i) Saryu Pump Canal (U.P.) (Estimated cost Rs. 8.25 crores
 - (ii) Exacavation of Right side channel above Sathnur pick-up anicut (Tamil Nadu) (Estimated cost Rs. 4.05 crores)
 - (iii) Khoupam Dam project (2nd R.E.)(Manipur)
 (Estimated cost Rs. 2.98 crores)
 - (Estimated cost Rs. 2.69 crores)
 - Phulwaria reserveir (2nd RE) (Bihar) (Estimated cost R. 31.37 crores)
 - (vi) ∫ Udarsthan Irrigation scheme (1st RE) (Bihar) (Estimated cost Rs. 4.4 crores)
 - (vii) Parambikulam Aliyar Project (Tamil Nadu) (Estimated cost Ns. 84.90 crores)
 - (viii) Rupahi Trrigation scheme (RE) (Assam) (Estimated cost Rs. 4.95 crores)

It was observed that these projects are almost completed or nearing completion. Hence, the Committee felt that no useful purpose would be served in considering the projects at this stage, and saw no reason to regularise the irregularity through the provision of <u>ex post facto</u> approval. The Committee requested P.C. to crivey the irregularity to the State concerned.

(Action: P.C.)

Medium Irrigation Projects

(i) Masalga Medium Irrigation Project (Maharashtra)
Estimated cost No. 4.63 groves.

Chairmen enquired whether the C.G.W.B. and Ministry of Water Resources were consulted on the project. Chief Engineer (TE) GWC clarified that medium schemes for which proforms information is submitted by the States were not referred to those

agencies by the CWC. Joint Adviser (I&CAD) stated that the estimated cost as reported by the State at the time of recent 1986-87 Plan discussions was Rs. 2.9 crores as against Rs.4.63 crores mentioned in the CWC note. C.E. (TE) CWC explained that the cost as indicated by the CWC was based on a detailed scrutiny whereas the amount indicated in the Annual Plan could be approximate. It was noted that the outlay provided for the scheme in the Seventh Plan was only \$3.1 crore. After some further discussion the Committee found the project to be technoeconomically viable, subject to an adequate cutlay being provided for the project in the Seventh Plan and the Annual Plans of the State. As regards the question of forest clearance it was mentioned that no forest area was involved but a confirmation of this should be provided by the State Government.

At the time of detailed design and the execution of the project the following suggestions should be kept in mind by the State Government:

- (a) As agreed by the State Engineers, the free board for the dam may be increased from 2.2. metres to 3.0 metres by constructing a parapet wall.
- (b) If there is a demand for drinking water supply in the project area, a suitable provision should be made in the project in consultation with the Public Health Engineering Department of the State.

(Action: P.C./State Government)

(ii) Modernisation of Ananthnar Channel (Tamil Nadu) (Estimated Cost N. 3.48 crores)

Joint Adviser (I&CAD) stated that the latest estimated cost as intimated by the State at the time of recent Annual Plan discussions for 1986-87 was Rs.4.45 crores as against Rs. 3.48 crores mentioned in the CWC note on the project. It was noted that the BC ratio was as high as 3.4 and that the updating of the cost to current price-levels might not affect the viability of the project significantly. After

some discussion the Committee found the project techno-economically viable, subject to:

- (a) the cost estimate being quickly updated with reference to the relevant index and communicated to the Planning Commission and
- (b) the State Government communicating to Planning Commission the position regarding forest clearance.

(Action: State Covt./CWC/P.C.)

(iii) Revised Estimate of Dekodong Irrigation Scheme (Assam - Estimated cost Rs.4.60 crores)

The project was considered technoeconomically viable subject to the information regarding forest clearance being communicated by the State Covernment to the Planning Commission

(Action: PC/State Covt.)

(iv) Kusei Irrigation Project (Orissa - Estimated Cost Rs. 27.03 crores)

The Committee noted that the outlay provided for this project in the Seventh Plan was only Rs.2 crores and no provision was made in the Annual Plan 1936-87. After discussion, the project was considered techno-economically viable subject to the following:

- (a) The information about forest clearance should be communicated by the State Government to the Planning Commission.
- (b) The State Government would make adequate provision for this scheme in the Seventh Plan and Annual Plan.

The following suggestions should be kept in view by the State Covernment at the time of detailed designs/execution of the project:

- (a) Suitable provision should be made for the foundation treatment of the dam based on the report of the GSI.
- (b) For the rehabilitation and resettlement of oustees suitable provision should be made on the lines of the guidelines on the subject.

(Action: PC/State Govt.)

1.5

(v) Chaken Irrigation Project (Rajasthan) (Estimated cost 8.4.04 crores)

Joint Adviser (I&CAD) mentioned that the project is not included in the Seventh Plan of the State. After some discussion, the project was found techno-economically feasible subject to the following:-

- (a) The information about forest clearance would be communicated by the State Covernment to the Planning Commission.
- (b) The State would make adequate provision in the Seventh Plan and Annual Plans.
- (c) The project authorities have to furnish the concurrence of the Finance Department for taking up the project.

The following suggestions should be kept in view by the State Covernment at the time of detailed designs/execution of the project:

- (a) The extra storage in the reservoir may be used for providing drinking water to the population in the command area of the project.
- (b) Possibilities of hydel-power generation should be explored, and if necessary suitable provision made for initial installations like penstocks.
- (c) Provision for compensation to and rehabilitation of oustees from the submergence areas should be made on the lines of the guidelines on the subject.

(Action: P.C./ State Govt.)

(vi) Morna (Gureghar) Irrigation Project (Maharashtra) (Estimated cost Rs. 9.42 crores)

Joint Adviser (I&CAD) mentioned that the project was not proposed by the State Government for the Seventh Plan. After some discussion, the project was considered techno-economically viable subject to:

- (a) The information about forest clearance would be communicated by the State Government to the Planning Commission.
- (b) The State would make adequate provision in the Seventh Plan and Annual Plan,

The following suggestions should be kept in mind at the time of detailed design and execution of the project:-

- (a) After sufficient data on hydrological observations at the project site and hydrometeorological observations for the catchment becomes available, the hydrology of the project may be firmed up.
- (b) Possibility of hydel power development may be explored.
- (c) The adequacy of the provision for field channels should be reviewed.

(Action: PC/State Govt.)

(vii) Ker River Medium Project (Maharashtra)
(Estimated cost No. 8.02 crores)

The Joint Adviser (I&CAD), Planning Commission mentioned that there is no outlay for the project in the Seventh Plan. After some discussion, the project was considered techno-economically viable subject to the following observations:-

- (a) The information about forest clearance would be communicated by the State Government to the Planning Commission.
- (b) The State would make adequate provision in the Seventh Plan and Annual Plans.

(c) It may be confirmed if water rates stated to be based on 1974 State Covernment circular are the latest. In case, these have been revised, revised revenue calculations and financial statements may be furnished.

The following should be kept in mind at the time of detailed design/execution of the project:-

Possibilities of hydel power generation may be explored, and if necessary, provision may be made for initial installations like penstocks.

(Action: PC/State Covernment)

(viii) Revised Estimate of Som Kagdar Irrigation Project (Rajasthan) Estimated Cost 8.17.50 crores)

On a query by Joint Adviser (I&CAD) it was clarified by the CWC representative that the higher cost of ks.19.68 crores indicated in Annual Plan 1986-87 proposal of the State was due to USAID appraised cost including price escalation.

After some discussion, the project was considered technoeconomically viable subject to the following:-

- (a) The information about forest clearance would be communicated by the State Government to the Planning Commission.
- (b) The State should make adequate provision in the Seventh Plan and Annual Plan.
- (c) The concurrence of the State Finance Department for the revised-estimate of the project has to be furnished.
- (d) The concurrence of the State Agriculture Department for the cropping pattern has to be furnished.
- (e) Provision for compensation and rehabilitation of the custees from the submergence area may be made on the basis of the guidelines on the subject.

(Action: PC/State Government)

(ix)

Jam River Medium Project (Maharashtra) (Estimated cost: Rs.11.75 crores)

Joint Adviser (I&CAD) stated that the outlay provided for this project in the Seventh Plan is only Rs. 3 crores. After some discussion, the project was considered techno-economically viable subject to the following:-

- (a) The information about forest clearance would be communicated by the State Covernment to the Planning Commission:
- (b) The State should make adequate provision in the Seventh Plan and Annual Plans.

The following points may be kept in mind at the time of detailed designs/execution of the project:

- (a) Possibilities of hydel power generation may be explored and appropriate provision made for initial installations like penstocks.
- (b) A minimum free board of 3 m. may be provided.

(Action: PC/State Government)

(x) Chauli Irrigation Project (Rajasthan) (Estimated cost Rs. 8.71 crores)

It was mentioned by Joint Adviser (I&CAD) that the scheme was not included in the Seventh Plan of the State. After some discussion it was decided that the project should be put up again for consideration by the Committee with the following:-

- (i) The concurrence of the State Departments concerned;
- (ii) information regarding forest clearance, and
- (iii) an indication of adequate provision in the Plan.

(Action: CWC/State Government)



Jangamhatti Medium Irrisation Project(Maharashtra) (Estimated cost Rs. 4.29 crores)

On a query by Joint Adviser (I&CAD) about minor irrigation use not included in the total utilisation in Ghataprabha sub-basin, the CWC representative clarified that there was enough cushion in the total 7 TMC allotted for Maharashtra. Since the utilization under this project was only 0.98 TMC the inter-state aspect may be taken as cleared. It was mentioned that the Seventh Plan provision for this project is only Ro.1 crore, After some discussion, the project was found techno-economically viable subject to the following observations:

- (a) The information about forest clearance would be communicated by the State Covernment to the Planning Commission.
- (b) The State should make adequate provision in the Seventh Plan and Annual Plans.

The following should be kept in mind at the time of detailed design/execution of the project.

- (a) It would be advisable for the State Covernment to review and firm up the hydrology of the project after sufficient gauge and discharge data have been collected at the dam site.
- (b) Provision, as considered necessary may be made for supply of drinking water to the rural areas.

(Action: PC/State Covernment)

(xii) Khudia Reservoir cum Modernisation Project(Bihar)
(Estimated cos t R. 5.07 crores)

Joint Adviser (I&CAD) mentioned that the project was not proposed by the State Government for the Seventh Plan. However, the Committee felt that this was a good modernization scheme which deserved priority, and that the State Government should be persuaded to include this scheme in the Plan. After some discussion, the

project was considered techno-economically viable subject to:

- (a) The information about forest clearance would be communicated by the State Covernment to the Planning Commission.
- (b) The State should make adequate provision in the Seventh Plan and Annual Plan.
- (c) Concurrence of State agricultural department for the proposed cropping pattern and crop water requirement has to be furnished.

The following should be kept in mind at the time of detailed design/execution of the project:

- (a) It appears that discharge observations were made at weir site only for six years, from 1969 to 1974. These may be continued to firm up the hydrology. Short term rainfall data may also be collected and water availability and design flood may be reassessed at the time of preparation of detailed design:
- (b) The provision for rehabilitation and re-settlement of the oustees may be made as per the guidelines issued by the Ministry of Water Resources and Ministry of Home Affairs.

(Action: PC/State Government)

(xiii) Kaliabor Lift Irrication Scheme - Second RE(Assam)
(Estimated cost Rs. 8.51 crores)

It was reported by the Director(TE), CWC that the Finance concurrence to the revised estimate had since been received in the CWC and that the same would be intimated to the Planning Commission. The project was considered techno-economically viable.

(Action: PC)

(xiv) Bhabour Sahib Lift Irrigation Scheme - Fhase II (Himachal Pradesh) (Estimated cost & 4.26 crores)

It was noted that the Seventh Plan provision is only Rs.O.45 crores. After some discussion, the project was considered techno-economically viable subject to:-

- (a) The information about forest clearance would be communicated by the State Government to the Planning Commission.
- (b) The State should make adequate provision in the Seventh Plan and Annual Plans.
- (c) The concurrence of the State Finance Department has to be furnished.
- (d) Concurrence of the State Revenue Department to the enhanced water changes adopted in the calculation of financial return may be communicated.

(Action: PC/State Government)

(xv) Darjang Irrigation Project(RE) (Orissa) (Estimated cost R. 9.09 crores)

There is no provision for this project in the Seventh Plan. After some discussion, the project was found techno-economically viable subject to:-

- (a) The information about forest clearance would be communicated by the State Covernment to the Planning Commission.
- (b) The State should make adequate provision in the Seventh Plan and Annual Plans.

The following should be kept in mind at the time of detailed design/implementation:

(a) Proper design, construction and maintenance of breaching section is to be ensured for the safety of Angul town.

(Action: PC/Starto Covernment)

7. Flood Control

(i) Adhuara Flood Control Scheme Phase I (Bihar)
(Estimated cost %.17.22 crores)

The representative of the GFCC mentioned that a Master Plan for the Flood Control of Adhwara River has been completed by them. The works have been divided in 3 reaches, namely, lower reach, middle reach and the upper reach. The flood control works in the Upper Reach have been covered under the Bagmati Project approved by the Planning Commission. The Joint Adviser (I&CAD). Planning Commission stated that there is no specific provision for this project in the 7th Plan. The GPCC representative clarified that the State Covernment has promised to provide funds for this project after it is cleared by the Flanning Commission. On the advice of the State TAC, a Committee of Engineers has been formed to clear this Project from Railway angle. The Committee has not submitted that Report so far. Since the recommendation of this Committee might affect the scope of the Project, the Advisory Committee decided that the Project with modification, if any, after the recommendation of the Committee of Engineers, should be put up to the Advisory Committee again for reconsideration. In the meantime, CFCC should write to the State Covernment to make suitable provision for this scheme in the State Plan.

(Action: GECC/P.C.)

(ii) Drainage Scheme for Bhagwanpur - Nandigram area (West Bengal) - Estimated cost B. 3.00 crores)

It was noted that the 7th Plan provision as indicated by the State Government for this project was only Rs. 25 lakhs. After some discussion, the Project was considered techno-economically viable subject to:-

- (a) the information about forest clearance being conveyed by the State Government to the Planning Commission and
- (b) ensuring adequate funds for implementation of this project during the 7th Five Year Plan and Annual Plans.

(Action: PC/State Government)

(iii) Revised Estimate of increasing capacity of Najafgarh drain from Dhansa Bund to Bharat Nagar Bridge (Delhi) - (Estimated cost Rs. 37.11 crores).

The Froject was considered techno-economically viable.

(Action: PC)

8. Next Meeting

The Chairman desired that the Committee may meet on 2nd and 4th Friday of every month subject to availability of CWC Notes on the Froject.

(Action: CWC/r.C.)

Annexure-I

List of Officers present in the 34th meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 13th, 14th and 15th May, 1986 in the Committee Room, Shram Shakti Bhavan, New Delhi.

PRESENT

1.	Shri Ramaswamy R. Iyer, Secretary, Ministry of	î .
	Water Resources	Chairman
2.	Shri M.A. Chitale, Chairman, CWC	Member
3.	Smt. Priya Prakash, Joint Secretary and	
	Financial Adviser, Ministry of Water	
	Resources	Member
4.	Dr. T.V. Sampath, Agriculture Commissioner	Member
5.	Shri M.K. Dikshit, Jt. Adviser (I&CAD),	
	Planning Commission	Member-Secretary
Also Present		

Ministry of Water Resources

- Shri S.J. Thomas, Member (JRC)
- Shri S.N. Lele, Chief Engineer (CAD) 2. 3,
- Shri A Krishnachar, Commissioner, River Basin Sari R.K. Kaushal, Jt. Commissioner (CAD)
- 5. Shri R.V. Suryanarayana, Dy. Secretary (PI)
- 6. Shri K.U. Tirthani, Dy. Secretary (Flood)
- Shri M.R. Shingal, Under Secretary (Budget) 7.
- Shri P. Rajendran, Ex Asstt. to Socretary

Central Ground Water Board

- Dr. D.K. Dutt, Chairman 1.
- 2. Shri B.P.C. Sinha, Chief Hydrogeologist

Genga Flood Control Commission

Shri G.R. Keskar, Director

Central Water Commission

- Shri R. Rangachari, Member (Floods)
- Shri S.M. Sethi, Member (P&P) 2.
- Shri M.S. Rao, Chief Engineer (TE) 3.
- 4. Shri O.P. Kumra, Chief Engineer (RM)
- 5.
- Shri A.S. Mhurana, Director (TE I) Shri O.P. Schgal, Director (TE II)
- 6. 7. Shri M.G. Ajwani, Director (FA II)
- Shri P.R. Chopra, Dy. Director FA II) 8.
- 9. Shri B.B. Vats, Dy. Director (TE I)
- Shri S.M. Fai, Dy. Director (TE I) 10.
- Shri Krishna Dev Chaudhary, DD (TE II)

- 12. Shri C.D. Khoche, Dy. Director (TE)
- 13. Shri S.L. Kevalramani, AD (PPC III)
- 14. Shri P. Nandi, DD (PPC I)
- 15. Shri S.S. Sarang, (PPC I)
- 16. Shri D.N. Dahiya, ADC (TE H)
- 17. Shri Rati Bhan, EAD (TE II)
- 18. Shri V.K.R. Das, DD (RE I)
- 19. Shri Madholal, EAD (TE I)
- 20. Shri S.R. Jagwani, AD (TE II)

Planning Commission

- 1. Shri R. Nagaraj, Deputy Adviser (I&CAD)
- 2. Shri J.N. Nanda, Semior Research Officer (I&CAD)

PIARMING GODGE COTON (IECAD DIVISION)

Subject: 35th meeting of the Advisory Cosmittee on Irrigation, Flood Control and Multi-purpose Project held on 15th and 16th October, 1986 in Shran Shekti Bhavan, Now Delhi.

The Surmary Record of the 35th meeting of the Advisory Committee on Irrigation, Flood Control and Multispurpose Projects held on 15th and 16th October, 1986 in Shram Shakti Bhayan, New Dolhi is circulated herewith.

(N.K. Dikshit)
Joint Adviser (I&CAD) and
Momber-Socretary

- 1. Shri Romasuamy R. Tyer, Socretary, Ministry of Water Resources, S.S. Bhavan, New Dolhi.
- 2. Shri M.A. Chitale, Chairman, Contral Water Commission, Sowa Bhavan, R.K. Puram, New Dolhi.
- 3. Shri M.K. Samba Murthy, Chairman, Central Electricity Authority, Sawa Bhavan, R.K. Puram, New Bolhi.
- 4. Adviser (Energy), Planning Commission
- 5. Shri G.G. Desai, Adviser (I&CAD), Planning Commission
- 6. Joint Secretary, Plan Finance Division, Ministry of Finance
- 7. Smt. Priya Prakash, Jt. Socretary and Financial Adviser, Ministry of Water Resources, New Delhi.
- 8. Shri K. Padmanabiah, Jt. Secretary, Doptt. of Power Krishi Bhavan, Now Delhi.
- 9. Chair an, Central Ground Water Board, Ministry of Water Resources, Krishi Bhavan, New Delhi.
- 10. Joint Secretary, Deptt. of Heavy Andustry, Udyog Bhavan, New Dolhi
- 11. Joint Secretary, Dopartment of Environment, Bikaner House, New Delhi
- 12. Agriculture Commissioner, Ministry of Agriculture and Cooperation, Krishi Bhavan, New Dolhi,
- 13. Inspector Coneral of Forest, Ministry of Environment, Forests & Wild Life, Krishi Bh van, New Dolhi.

Planning Commission Cir. No.16(25)/35/86_IRCAD dated 28.11.1986

Conv tos

Ministry of Irrigation, S.S. Bhavan, New Delhi

- 1. Shri D.W. Telang, Additional Scoretary
- 2. Shri M.S. Rao, Currissioner (IEF), 11th Block 7th Floor C.G.O. Complex, Lodi Road.
- 3, Shri T, Kumara Dad, Goldissioner (P)
- 4. Shri G.S. Jakhado, Adviser (PP)
- 5. Shri A.J. Thomas, Momber (JMC), 11th Block 7th Floor C.G.O. Complex, Lodi Road, New Dolhi.
- 6. Shri K.U. Tirthani, Joint Commissioner (F)
- 7. Shri S.N. Lele, Chief Engineer (CAD), Krishi Bhavan, New Delhi.
- 8. Shri G.V. Rac, Joint Commissioner (P)
- 9, Shri R.K. Kaushal, Jt. Commissioner (CAD)
- 10. Shri M.G. Joshi, Joint Commissioner (P)

Control Mater Commission, Stan Bhouan, B.M. Puram, Mou Rollie.

- 1. Member (P&P)
- 2. Member (D&R)
- 3. Maleber (RM)
- 4。 March 17 (源)
- 5. Shri K.C. Kathuria, Chief Engineer (PAC)
- 6. Director (VA)(I)/(II)/(III)

Deportured of Errica poonts Alkerer Horson For Dalling

1. Dr. S. Phudgal, Birbatar

I. G. A.R. . Krisini Phayon . New Dalbi

1. Assistant Director Coneral (ICAR)

Septe Theod Contant Commission, Sinchai Bussen, Bibon, Patra

Shri O.F. Kumma, Member (Goordination) and Acting Chairman

(N.K. Dikshit)
Joint Adviser (I&CAD) and
Momber Secretary

Planning Commission (USCAD Division)

Surmary Record of the 35th meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 15th and 16th October, 1986 in Shram Shakti Bhawan, New Delhi.

A list of participants is enclosed. (Annexure I)

Secretary, Ministry of Water Resources who was in the Chair, mentioned that from the agenda items circulated the important projects, namely, Upper Ganga Canal (U.P.) Kanupur Irrigation Scheme (Orissa), Northmand Medium Irrigation Project (Maharashtra) and Kharmuzha Lift Irrigation Scheme (Assam) would be taken up for consideration first. The Flood Control schemes would be taken up thereafter. As regards projects which are in the advanced stage of completion Secretary (Water Resources) mentioned that they would be taken up at a later stage.

Some of the projects examined and cleared by the Advisory Committee were for the purpose of developing a shelf of projects. The Advisory Committee, however, foresaw a possibility that the States may tend to spread their resources on all the projects in the shelf. In order to avert such a situation, Secretary (Water $R_{\rm e}$ sources) said that the "acceptance" or "clearance" of a project should be suitably worded and communicated to the States.

I. Major Irrigation Projects

U.P. Composite Irrigation Project - Modernisation of Upper Ganga Canal - (Retimated Cost M. 251 crores)

This project for which World Bank aid agreement has already been signed has not been cleared by the Advisory Committee so far. Secretary (Water Resources) mentioned that there were a few missing items in the Advisory Committee note which needed clarifications. With a view to clarify the position the State representatives were also invited to attend the meeting. At the request of the Secretary (Water Resources) Secretary (Arrigation), Govt. of Utuar Pradesh mentioned that the schome was in the nature of a replacement work without which the entire area may go out of irrigation. He mentioned that

the project will be taken up in phases and the present provisel is only to take up the first time slice.

Adviser (I&CAD) brought to be notice of the Committee that cortain length of the old canal will remain unused after the construction of the parallel canal. He vanted to know how they would serve the area beyond the canal. The U.P. Irrigation Secretary montioned that they would resort to suitable crossings for serving the area on the right bank of the old canal which would ramain ille. On the requestion of meed for replacement of some structures, the CWC engineers stated categorarically that the Canal system has been inspected by the Chairman and Members of the CWC and has come to the conclusion that the system requires replacement. Adviser, I&CAD said that it would have been desirable to incorporate the technical reason for the change of views on the CWIs mart in the Technical Note. The Chairman observed that the CMC was the technical arm of the Ministry and provided technical support to the Advisory Committee, and that when they gave a categorical opinion it would have to be accepted. However, as it had been stated during the discussions that there was enough bechnical material in the GMC in sup ort of the views mpressed, the Chairman suggested that this might be separately made availble to the Planning Commission for their record.

On the question of conjunctive use proposals included in the scheme Chairman, CGB pointed out that the regionale of the ground water development should not be lest sight of.

On a query raised by the Jt. Adviser (18CAD) about forest and environmental elements, the State representatives stated that the necessary forest elements has been obtained and Department of Environment has alven their elements in principle.

Advisor (MaCAD) remarked that advance action taken now for place II may forestall the options at a later stage, After elaborate discussions the project was found acceptable subject to (1) working out a B.G. ratio for the entire project and submitting a total project report within six menths (2) providing adequate drainings arman, pronts in the command area; (3) deferring the thems which involve advance action for the next phase until the total project is element; (4) the conjunctive use modalities to be evolved in consultation with the State and Control Ground Water Pourds; (5) the State Covernment providing a link from Mm. 189.6 of the Unper Guya Canal to the Mat Brunch to augment the assurence of the irrigation supplies to the command of the Mat Branch Joyev degree (6) the State Government obtaining an assurance from the U.P.S.B.B. that proposed works on Falra and Tathri Hydelstations will be taken up simultaneously with the construction of parallel Upper Carga Capal; (7) the State Covernment obtaining an assurance from U.P.S.E.D. for power supply to 53 augmentation tuboscills to be installed on Dulandshahr and Hardungani distributories and communicated; and (0) Environmental clearance from the Department of Environment would be obtained.

(Action CWC/Planning Commission)

2. Hipparei Irrigation Project (Karnataka) (Estimated cost Rs. 186.70 crores)

The CWC officers intimated that this project serves drought prone areas. Adviser (I&CAD) stated that during his discussions with the State representatives it was clear that State Government was not able to provide any money for this project and there was a backlog of ongoing projects and also due to the fact that Upper Krishna project needed more outlays. The project has not been provided any outlay during the Seventh Plan. Since the State had incurred an expenditure of over Rs. 3.76 crores on this project during the earlier plans from relief funds the Planning Commission has provided an outlay of Rs. 43 lakhs during Seventh Plan for protecting the works already done.

The State representative however mentioned that during the Amnual Plan discussions for 1987-88, the State Government would provide cutlay for this project in view of its importance to serve the drought areas of Bijapore district.

On the inter-State aspect, it was pointed out that the CWC mentioned about likely submergence of land in Maharashtra territory and the need for carrying out detailed study of backwater curves and construction of a few bunds to prevent submergence of land in Maharashtra on the basis of such studies. Regarding concurrence of State Agricultural Department to the changes in the cropping pattern, CWC representative clarified that the concurrence has since been received.

There was some discussion on the provision of %s.500 lakks for ground water development included in the cost estimate of the project. Adviser, (I&CAD) pointed out that the Plan envisaged groundwater development being carried out through private efforts to the extent possible and that it would not be proper to add to this element to the cost of the project. FA(WR) said that institutional financing bodies like N.A.B.A.R.D. could be requested to concentrate their lending efforts in the command of this project to ensure the conjunctive use of surface water and ground water. There was general agreement regarding this. As regards the provision, it was decided that the question of using this should be considered in the light of the general policy regarding investments from public, private and institutional sources for minor irrigation development in the command area.

After some discussion, the scheme was found technocomemically feasible subject to the following:

- i) State Government would provide adequate funds for its implementation in the State Plan at least for the barrage so that benefits may accrue early,
- ii) Formal clearance of the Ministry of Forest and Environment would be obtained and conveyed to the Planning Commission; and
- iii) Detailed backwater effect study would be carried out by the State engineers and the protection works required, if any, to prevent submergence of any land in Maharashtra territory would be taken well in time before filling up of the reservoir.

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iv) Funding aspects for the ground water component of the project should be separately examined.

The following auggestions would be kept in view at the time of datailed design and examination of the project:

1. Water availability, design flood and sedimentation aspects have been accepted for Planning purposes. However, detailed studies as per suggestions given to These may be done and State are to be carried out. studies submitted to CWC for vetting as soon as these are completed; (2) State Govt. undertaking micro level surveys for precise resource evaluation, for more precise information regarding additional quantum of feasible ground water development; (3) the proposal for the drinking and industrial water supply to the area being worked out in consultation with the concerned Department of the State Govt.; (4) cropping pattern being reviewed for optimisation; on the basis of results of soil survey; (5) a suitable operation schedule may be prepared for integrated operation of Hippargi barrage with the Upper Krishna Project; and (6) the State Govt. confirming that the provisions made for rehabilitation and resettlement of oustees are in accordance with the guidelines issued on this by the Govt. of India from time to time.

(Action: CWC/ P.C.)

Ranupur Irrigacion Scheme (Ormissa) - Estimated cost Rs. 86.03 crores

The Kanupur Triigation scheme was considered by the Advisory Committee at its meeting held on 21.3.86 and the Committee decided that no useful purpose would be served by considering this project which was not having any provision in the Seventh Plan. Chairman, CWC observed that the State Govt. was very keen on taking up this project as a shelf of projects and they would make efforts to provide outlays during the Seventh Planand also pose it to the external aiding agencies to get more financial resources. The CWC officers intimated that this project has a benefit cost ratio of 1.54 which includes the water supply part. In case of augumentation of funds from the water supply component the B.C. ratio would further improve. On this question Adviser (ECAD) stated that irrigation projects including urban water supply component should also get proper reimbursement from such schemes from

-5-

the water supply sector.

After some discussion the project was found technoeconomically feasible subject to the following: (1) clearance of the project by the Department of Environment; would be obtained and conveyed to Planning Commission. (2) as financial return is negative it is suggested to increase the existing water rate suitably in consultation with btate Revenue Department; (1) there is no proposal for apportionment of cost of common works for irrigation and water supply. However, this may be looked into by the State and concurrence of the concerned department obtained to allocate a part cost to uses other than irrigation; (4) possibilities of hydel generation may be explored. If they exist, suitable provision for initial installation like penstocks etc. may be made; (5) the dependable yield and design flood for the dam may be firmed after more data becomes available and get vetted by CWC before detailed designs and execution of the project; (6) certain other suggestions of CWC communicated vide CWC letter dated 23.1.1985 relating to the design aspects of the dam may be kept in view by the State Govt. during the stage of detailed designs for the project; (7) the proposed reservoir is likely to submerge about 465.54 ha. of forest land for which the clearance from the angle of Forest Conservation Act may be obtained; and conveyed to the Planning Commission and (8) the State Govt. providing adequate funds for the project in the State Plan.

JI. Medium Irrigation Projects:

Action: (CWC/P.C./State Govt)

I. Martineral line within in which (Merry shire - Methorical cost Re. 6.71 orores)

Maharashtra and as such no outlays are provided for the project. The project was found techno economically viable subject to the state govt. providing adequate funds for it in the State Plan and concurrance of State Finance and Planning Department being obtained and conveyed to the Planning Commission.

The following points are required to be attended to by the State Govt, before actual execution:

- i) After sufficient data on hydrological observations at the project site and hydrometeorological observations for the catchment becomes available, the hydrology of the project may be firmed up.
- ii) Possibilities of hydel power development may be explored. However, a provision of Rs. 10 lakhs has been made in the project estimate for initial installations. This may be

reviewed.

iii) Since all the available yield is not proposed to be utilised, the possibility of making provision as considered necessary may be made for supply of drinking water to the rural areas from the project.

iv) Though the provision of Rs. 17 lakhs has been made in the project estimates for rehabilitation, it needs to be confirmed that this provision for the oustees from the submargance areas has been made on the lines indicated in the Maharashtra Regettlement of Project Displaced Persons Acr. 1976.

v) Free board of 3 m. may be provided by construction of a parapet wall, if necessary.

Action (CWC/PC)

Karomuzha lift Irrigation Scheme (Assam)
Rotimated cost M. 9.86 crores

The project is included in the 7th Plan of Assam and an outlay of R. 300 lakes is provided. The project was considered techno-economically feasible subject to (i) formal concurrence of the State Finance and Planning Departments for taking up the project being obtained and conveyed to the Planning Commission; and (ii) The information about forest classence, if any, to be conveyed to the Planning Commission.

(Action: CWC/PC/State Govt.).

III Flood Control Schomes:

Protection of Mululman (Howlighat) and its adjoining area from erosion of the Frahmaputra in (Assam) (Estimated door Rs. 5.18 crores)

Member (RM). CWC stated that this was one of the several schemes suggested by the Assam Govt. for clearance by the Advisory Committee. A similar scheme by name 'Palasbari and Gumi' was discussed in the Advisory Committee on 26.2.85 when a view was taken that this project would be in the nature of a proto-type experiment to tackle the bank erosion problem of the Brahmaputra. The present proposal is of a similar pature. As the Palasbari and Gumi

scheme is still not complete and its performance pattern is not yet available, the proto-type experiment would provide some use-ful data only after the floods of 1987. The views of the CWC on this scheme would be available only after that. Member (RM) could not comment, even qualitatively, regarding the efficacy of this scheme. Further, the financial commitment of the Govt. of Assam on numerous flood control schemes is a huge amount and in case this project is cleared, it will be only for providing a shelf of approved schemes. The government of Assam have not fixed any relative priorities for the different schemes in the Brahmaputra Master Plan. Thus, in view of the likely changes in the scheme dur to completion of the Palasbari Gumi scheme and its performance to be watched, the Committee decided to defer this project for consideration for a special meeting in which official, from the government of Assam and from the Brahmaputra Board would be invited.

(Action : CWC)

Anti-erosion scheme for protection of Bokakhat and Kaziranga area (Moriaholla) from erosion of the Brabsaputra (Assam - Estimated cost m. 10.46 crores)

This project is also falling in the same category as the earlier one, namely, Muhulmua (Howlighat) project and it was decided to consider the project also at a special meeting as proposed above.

(Action : CWC)

Karatiz Nacartala Basin Drainage Scheme in the district of 24 Parganas (West Bengal) - Estimated cost Rs. 6.56 cr.)

The scheme was discussed by the Advisory Committee on 25.7.85 and its was decided at that time that (1) the project report together with the ground water data should be supplied to CGWB for their examination and their comments duly considered by GFCC; (1) the cutlay available for the scheme in the approved Seventh Flon and annual Plan 85-86 should be ascertained; and (3) the approval of the State Flood Control Board should be obtained. On examination by the CGWB; it has been found that the removal of draigage congestion in the basin is not expected to bring about any adverse changes in the existing condition of ground water and/or the soil cover. It is also intimated that the scheme has been included in the Seventh Five Year Plan with a token provision of Rs. 4 lakks during 1986-87. The scheme has been approved by the State Flood Control Board in its meeting held in February 1986. In view of the above, the scheme was found techno-economically feasible subject to (1) confirmation of the

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views of CGWB corroborated by more ground water studies; (2) concurrence of the State Finance Department for provision of necessary funds during the current year as well as in the future years of the Seventh Plan and (3) information about forest clearance, if any, to be conveyed to the Planning Commission.

(Action: GFCC/PC/State Govt.)

Haroagong - Kultigong Basin Drainage Scheme (Sunti Basin)
Phase I in district Barasat, (West Bengal) - Estimated
cost R. 7,77 cross

Member, GFCC stated that this project is very essential for releiving drainage congestion of districts of Barasat and 24 Parganas. He also stated that the project has been based upon the studies made in the River Research Institute of West Bengal. The Scheme has been cleared by the Technical Advisory Committee of West Bengal State Flood Control Board. A provision of Rs. 50 lakhs has been made during the Seventh Plan and Rs. 10 lakhs for the year 1986-87. After some discussion, the scheme was found techno-economically feasible subject to (i) adequate funds being provided by the State Government during the Seventh Plan period; (ii) Information about forest clearance, if any, being obtained and conveyed to Planning Commission.

(Action : GFCC/PC/State Govt.)

Scheme for construction of marginal embankment on both banks of river Ami from Kauriram to Gorakhpur-Khaini Road in Gorakhpur district (Uttar Pradesh) - Estimated cost & 4.53 cross

It was observed that the State Government have provided only Rs. 50 lakks for this scheme in the VII Plan of the State, and no provision has been made in the 1986-87 plan. After some discussion, the scheme was found techno-economically viable subject to (i) concurrence of the Finance Department of the State for providing adequate funds to the project during the Seventh plan and Annual Plans and (ii) information about forest clearance, if any, being obtained and conveyed to the Planning Commission.

Action:PC/GFCC/State Govt.

6. 33 Irrigation Scheme in advanced stages of construction (Annexure II)

33 projects which were in an advanced stage of construction were scheduled to be discussed in the Advisory Committee. Secretary(Water Resources) postponed discussion on these projects

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to a later date. He wanted the CWC to prepare a detailed note specifying therein the status of the projects and classifying them into schemes on which more than 75 per cent expenditure has been incurred and also those on which less than 75 per cent expenditure has been incurred. He also wanted the note to indicate the extent of delay on clearance of project - time taken in CWC and time taken by the State Govt. To reply to comments. After detailed discussions, it was decided that a separate meeting of the Advisory Committee could be specially called to consider this problem in its entirety very shortly on the basis of a note prepared by the CWC.

(Action: CWC)

List of officers present in the 35th meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 15th and 16th October, 1986 in New Delhi

PRESENT

- Shri Ramaswamy R. Lyer, Secretary, Ministry of Water Resources
- 2. Shri MA.A. Chitate, Chairman, Central Water Commission
- 3. Smt. Priya Prakash, Joint Secretary, & Financial Adviser, Ministry of Water Resources
- Shri C.G. Desai, Adviser(I&CAD), Planning Commission
- 5. Dr. D.K. Dutt, Chairman, Central Ground Water Board
- 6. Shri N.K. Dikshit, Joint Adviser (ISCAD), Planning Commission

- ...Chairman
- ... Member
- ... Member
- ...Member
- ...Member
- ... Member Secretary

Also present.

Ministry of Water Resources

- 1. Shri S.N. Lele, Chief Engineer (CAD)
- 2. Shri R.V. Suryanarayana, Commissioner (P)
- 3. Shri S.J. Thomas, Member (JRC)
- 4. Shri P. Rajerdran, Executive Assistant to Secretary
- 5. Shri V.N. Wakpanjar, Deputy Director

Department of Agriculture & Cooperation

1. Shrt S.S. Chhibbar, Director (PF)

Ganga Flood Control Commission

- 1. Shri O.P. Kumra, Member(C)
- 2. Shri A.V. Rao, Director(P)

Contral Water Commission

- 1. Shri R. Rangachari, Member (RM)
- 2. Shri V.A.Prakash, Member (P&P)
- 3. Shri M .S. Rao, Chief Engineer (PAO)

- 4. Shri C.D. Khoche, Director (PA)
- 5. Shri T.S. Murthy, Director (PA.II)
- 6. Shri A.S. Khurana, Director (PA.III)
- 7. Shri M.C. Dhawan, Deputy Director
- 8. Shri S.M. Pai, Deputy Director
- 9. Shri Krishan Dev Chaudhary, Deputy Director
- 10. Shri B.B. Vats, Deputy Director
- 11. Shri D.N. Dahiya, Asst. Director
- 12. Shri S.T. Hashain, Asst. Director
- 13. Shri S.R. Jagwani, Asst. Director 14. Shri M.S. Haque, Extra Asst. Director

Government of Karnataka

- 1. Shri H.R. Channaveeraiah, Deputy Secretary (Irrigation)
- 2. Shri K. Shiva Kumar, Asst. Engineer

Government of Uttar Pradesh

- 1. Shri V.K Dixit, Secretary (Irrigation)
- 2. Shri R.K. Agrawal. Engineer-in-Chief 3. Shri S.A. Sultan, Chief Engineer, U.P. ID
- 4. Shri N.L. Gaur, Ex. Engineer, U.P. ID

Planning Commission

- 1. Shri R. Nagaraj, Deputy Adviser
- 2. Shri J.N. Nanda, Senior Research Officer

·	Schemes :	in Advanced Stage of Constru	uction Ans	nexure II.
	Sl.No.of CWC Note	s Name of the Project	State	Est.cost
1	2	3	4	5
I. M.	ajor Irri	gation Project		
1.	18	R.E. on Batane Reservoir Scheme	Bihar	1855,79
2.	20	R.E. on Sajnam Dam Project	U.P.	1266.00
3•	29	R.E. on Kangsabati Reservoir Project	West Benga	1 10016.00
4. Æ	33 36	Revised Estimate of Kosi Irrgn. Scheme R.E. of Manira Irrgn.	U.P.	1732.31
√5.		Project R.E. of Thandaya	Maharashtra	a 3160.47 .
6. 7.	39 40	Reservoir Project R.E. on Sir Arthur	A.P.	1519.11
		Cotton Barrage Project (Godavari Barrage Project)	A.P.	8602.40
8	41	Revised Estimated of Augasi Pump Canal	U.P.	327.•0
9,	42	R.E. on Aliganj Sinchai Pariyojna	U.P.	696.∞
10.	43	R.E. of Baigul Reservoir	•	
11.	44	Scheme R.E. on Adwa Dam Project	U.P. U.P.	718.38 766.30
12.	4.6	Suheli Irrigation Scheme	U.P.	640,00 .
13.	47	Modhotanda Irrigation Project R.E. of Bhimgoda Barrage.	U.P.	280.4.6
14. 15.	50	Froject Khatima Irrigation	U.P.	3302.00
16.	52	Scheme Second Revised Estimate	U.P.	217.57
		of Chitturpuzha Trrigation Project	Kerala	1763.71
17.	35	Increasing capacity of the Bibipur lake	Haryana	149.07
m.	Medium I	rrigation Project		•
18.	16	R.E.on Jajpur Reservoir	_	
19.	17	R.E. of Lorgara Reservoir	Bihar	262.75
. 20.	21	R.E. on Rohini Dam Project	Bihar U.P.	198.88 3316.00

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1	2	3	4	5	- -
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21.	23	R.E.of Murahir Reservoir Scheme	Bihar	703.84	
22.	24	R.E.of Ganga Pump Canal Scheme at Chausa	Bihar	591.00	
23.	25	R.E. of Tapkara Reservoir Scheme	Bihar	400.50	
24 •	26	R.E. of Surajgarha Pump Canal Scheme	Bihar	427.51	
25.	27	R.E. of Latratu Reservoir Scheme	Bihar	2523.90	
26.	28	R.E. of the Sakrigali Pump Capal Scheme	Bihar	307.50	
₂ 7.	31 ·	R.E. of Kukurjhap (Anjan) Reservoir Scheme	Bihar	2102.43	
28.	32,	R.E. of the ^T orlow Reservoir Scheme	Bihar	1068.73	
29.	34	R.E. of Shah Nahar Feeder Project	Punjab	3345.00	
30.	48	Second Revised Estimate of Lethpora Lift Irrigat- ion Scheme	J&K	476.∞	
31.	53 .	R.E. of the Rajal Lift	Tev		
2.2	54	1rrigation scheme R.E. of Ranjan Lift	J&K	557.48	
32.		Irrigation scheme	J&K	631.00	
33.	38	2nd Revised Estimate of the Marval List			
		Irrigation Scheme	J&K	717.00	
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PLAUDING COMMISSION (120AD DEFISION)

Subjects - Susmary record of the 36th meeting of the Advisory Cormittee on Brightian, Flood Control and Multi-purposes projects held on 8.12.66 in Shram Shrkti Rayan, Hay Delhi.

The Summary Lecerd of the 38th meeting of the Advisory Committee on Irrigation, Flood Control and Multi purposes projects held on 8.12.1986 in Shram Shakti Bhavan, New Delhi in respect of Indira Gardhi Mahar Project is circulated herewith. The same in respect of remaining projects will follow

(M.K. Dikshit)
Joint Adviser (I&CAD) and
Momber-Secretary

- 1. Shri Remaswamy R. Tyer, Secretary, Ministry of Water Resources, S.S. Bhavan, New Dolhi.
- Sker Bahadur Chand, 2. Lindirman, Central Mater Commission, Sewa Bhavan, R.K. Puram, 1 Delhi.
- 3. Shri M.K. Samba Murthy, Chairman, Central Electricity Authority, Sawa Enavan, R.K. Furam, New Dolhi.
- 4. Advisor (Energy), Planning Commission
- 5. Shri C.G. Desni, Advisor (I&CAD), Planning Commission
- 6. Joint Secretary, Plan Finance Division, Ministry of Finance
- 7. Sat. Priya Prakash, Jt. Secretary and Pinancial Adviser, Ministry of Mater Rescurces, New Delhi:
- 8. Shri K. Padmanabiah, Jt. Secretary, Deptt. of Power Krishi Bhavan, New Dolhi.
- 9. Chairman, Central Ground Water Board, Ministry of Vater Resources, Krishi Bhavon, New Dolling
- 10. Joint Secretary, Deptt. of Honvy Industry, Udyog Bhovan, New Delhi.
- 11. J. A Secretary, Department of Mavironment, Bikaner House, New Dollhing
- 12. Agriculture Commissioner, Ministry of Agriculture and Cooperation, Krishi Bhavan, New Delhi.
- 13. Inspector General of Forest, Ministry of Environment, Ferests & Wild Life, Krishi Bhevan, New Bolhi.

Plenning Cornission Cir. No.16(25)/36/86-I&CAD dated 6 12.1986.

Corviva.

Ministry of Frication. S.S. Bhavan. Nov. In Uni.

- 1. Shra D.W. Teleng, Additional Secretary
- 2. Shri M.S. Rao, Cormissioner (IEF), 11th Block 7th Floor C.G.O. Complex, Lodi Road.
- 3. Shri Ta Kumora Dos, Cormissioner (P)
- &. Shri G.S. Jakhade, Advisor (PP)
- 5. Shri S.J. Thomas, Momber (JRG), 11th Block 7th Floor C.G.O. Complex, Lodi Road, New Dolhi.
- 6. Shri K.U. Tirthani, Joint Commissioner (F)
- 7. Shri S.W. Lele, Chief Engineer (CAD), Krishi Bhavan, New Delhi.
- 8. Shid G.Y. Roo, Joint Commissioner (P)
- 9. Shri B. K. Maushel, Jt. Commissioner (CAD)
- 10. Shri M.G. Joshi, Joint Commissioner (P)

Control Water Convission, Sown Bhovan, R.K. Puran, New Delhi.

- 1. Member (F&P)
- 2. Momber (MR)
- 3. Momber (Alf)
- 4. Momber (WP)
- 5. Shri K.C. Kathurin, Chief Engineer (PAO)
- 6. Director (PA)(I)/(II)/(III)

Department of Environment, Bikaper House, New D. Lai.

1. Dr. S. Moudgal, Director

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1. Assictant Director General (ICAR)

Comen Place Control Cosmission. Sinchei Bervone Biber. Pohn

Shri O.P. Kumra, Morbor (Coordination) and Acting Chairman

Indira Candhi Unber Project Covernment of Raisedbon, Jainuc

Chairman (I.G. M.P.)

(N.K. Dikshit) Joint Advisor (I&CAD) and Momber-Secretary

PLACETE G COLLEGE AN (IRCAD DIVISION)

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Summary record of the 36th meeting of the Advisory Committee on Irrication, Flood Control and Multi-purposes projects hold on 8.12.86 in Siran Shakti Bhayan, New Delhi.

The list of participants is enclosed in the Annexure.

Major Indication Projects
Indica Condhi Maka: Project State II (Revised) (Bajasthan)
(Estimated cost Rs. 1531 Takha)

Opening the discussions the Chairman, Secretary, Ministry of Water Resources, wanted the views of the Gentral Water Commission on the notes circulated for the meeting by the Planning Commission. Chief Engineer (PAO), CWC mentioned that the note circulated is based upon the revised proposals sent by the State Government in December 1985 and several features mentioned in this were not found acceptable for pant of adequate information on some aspects. One of the important points was the huge liff involved and extension of CCA and reducing the My of irrigation, As regards desert arresting it was found by CWO that the proposals mentioned in the present form of having a 1 Km. belt of afforestation is unlikely to prevent spread of deserts which, in the case of Rajasthan, has high intensity winds carrying a huge quantity of sand. Several features mentioned in this have not been acceptable to the commission for want of adequate information. It was felt by the commission that final view can be taken on this proposal after a detailed project report is prepared and made available to the commission. He referred to the specific points of huge lift involved, strip irrigation, afforestation programme, water requirement for savan grass, pasture development etc.

Director, PAO, CWC, also pointed out that the BC ratio took into account the secondary benefits arising from animal husbandry, dairy development etc., which was not the usual practice. Chairman of the Advisory Cormittee enquired whether the additional input costs needed to produce secondary benefits had also been taken into account, and it was explained that this was not the case. Director, PAO stated that when the same area was an ilable for irrigation with a lower lift the need for higher lift could not be justified as it is highly unseenchical. He also stated that even in the original crop pattern irrigation for fodder has been provided for 5 per cent of CCA and the yield of 10 tons per has assumed for fodder is on high side.

Chairman of the Advisory Committee solicited the latest thinking of the State Government regarding the present proposal of 1985.

Chairman, I.G.N. Board, Rajasthan Government while replying to the various observations stated that the State Government relies on the assessment of CWC, Ministry of Water Resources and the Planning Commission and would accept the decision of the Covernment of India. in regard to the feasibility or otherwise of the revised. proposal of 1985 as submitted to the Government of India. As regards water requirements for pasture development, he stated, perhaps, in the whole of India Rajasthan Government may be the pioneer in pasture development and even at present they are having rain fed pasture development and with the scanty rain fall of 4 to 6 inches growth of Sawan grass has been found to be successful. Ho referred to the vast majority of nomads inhabiting the area, whose main occupation is Animal Husbandry. A riculture is new to them but they are well versed in Animal Husbandry. This he clarified in reply to the doubts raised by some members about the viability of Animal Musbandry development as proposed in the project. He clarified that the scheme has been reformulated in 1985 only with a view to solve the problem of the vast cattle life in Rajasthan.

As recards the rate of yield of Savan grass indicated in the project report and which has been commented high by the CWG, he stated that the yield of 10 tons per ha is the outcome of 2 crop cutting and in actual practice each yield of 5 tons has been obtainable.

The Agriculture Commissioner, Ministry of Agriculture stated that the crop pattern proposed needs careful exemination and they had their own reservations about such a modified crop pattern. He was, however, of congerical view that yield of sawan grass cannot be more than 4 tons per ha, and also the cost of the fodder should be also not more than 8.15.0 per Q. instead of Rs. 40 assumed in the ; project report. It is in this context that the B.C. ratio has to be examined <u>de novo.</u> Ho has his own doubts of the workability of mater requirement as indicated in the project reports. Chairman, L.G.N.P. clarified that 4 inches of water proposed was on the basis of using sprinkler irrigation to save the scarce water resources in this area. Agriculture Commissioner pointed out that in that case the cost of sprinkler irrigation and the availability of power would also need to be taken into account.

On the afforestation programme he stated that although expert opinion on this would be rightly of the Forest Department, prime facto he thought that the present proposal was too scanty for preventing the spread of desert.

Advisor (I&CAD). Planning Commission brought to the notice of the Cosmittee that perhaps the present . revised proposal has been the cutcome of the urgent need of the State Government to solve the problem of vast cattle herds migrating to neighbouring States and creating a problem of low and order. It was not only the issue of Dairy Dovelopment and Animal Husbandry development but it also aims at solving social problem. Sacretary, Ministry of Water Rescurces was of the opinion that the revised proposal of the State Government anvisaging to have posture development preventing desert gread etc. deserve merits for consideration. Adviser(I&CAD) further drew the attention of the Committee to huge. maintenance and operation expenditure involved in the lift of 175 m. of the order of Rs. 3000/- per ha. It was supplemented by the Director (PAO), CAC by remark, that it is the order of Rec100 crores per year. Chief Engineer (PAO) indicated huge power requirement of the order of 151 MV in the revised proposal. To this Chairman, I.G.N.P. clarified that the state programme is already having 1000 MW generation.

Member (DSA), CWC stated that water supply is to be taken independently and that the use of water supply components have been increased from 1200 to 1800 cusees in the revised report. Chairman, I.G.N.P. clarified that the requirement of 1800 cusees was worked out as ultimate requirement by 2031 AD which was 50 years from the inception of the present proposal in. 1981 and hence can be mot with gradually through a separate independent pipeline.

Director (PAO), CWC raised the issue regarding magazinum allocation of Rs.50 crores per year for the project which would result in linguring for 20 years looking to the cost of the project. It was clarified by Adviser (I&CAD) that once line of action is decided and the State Government decides priority, suitable ways and means could be found by the State to complete the same in a time bound manner. The prepent committee has to go through the technical viability and give opinion or otherwise, of the revised proposal. He further suggested that since it is not possible to summarily reject the States revised concept as presented and which has get some point for consideration, the State Government may carry out the pilot project for pasture development as well as for afforestation programme, for providing shelter belt on strip manner

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and after knowing the efficacy of the project my bring the results for the consideration of the Advisory Committee to take a decision and decide further line of action. At this stage Chairman of the Committee enquired from CWC whether it would be possible to incorporate this revised concept at a later stage if the project is carried out as per the proposal of 1984 for 60 m. lift. Director (PAC) confirmed that there would be no difficulty in devetailing this concept at a later stage.

In order to have an optimum investment Adviser (I&CAD) also suggested to insist on the State Government to proceed on the works of the Stage II in a phased manner, ensuring completion up to the end of the distribution system in a particular reach that could be taken up with the available funds during the plan period.

After further discussion, the following decisions were taken:

- (a) The revised project proposal of 1985 as proposed by the State Givernment was not found techno-economically acceptable. In particular, it was felt that the high lifts proposed would be uneconomic.
- (b) The earlier clearance of the Advisory Committee on the 1984 proposal including lifts upto 60 mtrs. was reaffirmed.
- (c) While the Committee appreciated the concerns which had led to the ideas of pasture development, afforestation etc., it was felt that a technomeconomic case for incorporating these ideas in the project had not been established. It was further agreed that pasture development for sawan grass and afforestation for a shelter-belt should be undertaken as pilet projects on same of the tributaries. In the light of the results of the pilet projects, the question of further development along these lines could be considered at later stage.
- (d) It was also agreed that the programme new to be taken up should be phased out in such a way that the lengths taken up including the distribution system would be completed so as to start yielding benefits. The approach should be to complete one phase in all respects before proceeding to the next.

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PLANNING COMMISSION (18-CAD DIVISION)

Summary record of the 36th meeting of the Advisory Committee on Inrigation, Flood Control and Multi-purposes projects held on 8.12.86 in Shana Shakti Bhayan, New Delhi.

The list of participants is enclosed in the Annexure.

Major Irrigation Papiects Tadira Condhi Nehan Project Since II (Revised) (Raissthan) (Entimated cost Re 1831 lakha)

circular

Minutes already issued vide this office/of even no.

/dated 18.12.1998.

2. Man Irrication Papiest (M.P.) (Estimated cost N. 1410 lebbs)

It was observed that Department of Environment had suggested that the entire cost of catchment treatment should be charged to the project while the CWO held the view that such cost should be borne by the State A proculture Department from the funds provided for soil conservation. If the cast of the catchment treatment were charged to the project, the BC Ratio might become less than one. Chief Engineer (CAD) mentioned that the yield rate assumed in the B.C. ratio calculations was high. With regard to the relaxation of BC ratio from 1.5:1 to 1:1 for projects in drought-prope area, Advisor (T&CAD) stated that there was no general relaxation but the FO had made some relaxation in respect of a Maharashtra project some time ago on merits. He wanted CWC to sond a copy of the general circular if any, issued carlier on the subject.

Chairman pointed out that it would be inappropriate to take the cost of catchment treatment on the cost side without reckoning the benefits on the benefit side of the BC ratio. Considering the importance attached to catchment treatment, it was quite clear that substantial benefits were exocated to be derived from it, or to put it in another way, a a substantial loss of water resources and soll would be averted by catchment tentment. If this was the justification for catchment tentment, it could be held to be a self-justifying activity. This could be taken up for Pascu with project construction, but it may not be proper to recken the cost of

this activity against the benefit of the project in the form of incremental production. However, Chairman pointed cut that these were larger issues which needed to be discussed separately. In so far as the Man Project was concerned, he wanted answers to three questions:—a) Was the area to be served by the project in fact a drought-prone area? b) What was the basis for the relaxation of the BC ratio of 1.5:1 to 1:1 in the case of projects in drought-prone areas?
c) Was the catchment area of the project included in the total catchment area of the Naranda Sagar Project in respect of which comprehensive catchment treatment plans were being submitted separately by the M.P. Govt.,?

The Consists decided that the CWC should prepare a paper giving the answers to these questions and send it to the Chairman of the Committee for a decision.

(Action: CWC)

3. Karber Irrigation Project (U.P.) - (Estimated cost is 10744 lakhs)

It was observed that the estimated cost of the project had gone up to \$1.10744 lakes from \$1.0947 lakes when it was last considered by the Committee in 1981. With the increase in cost, the B.C. ratio which was 0.93 carlier would be further reduced. Hence, the committee did not find it technocommically viable. The State Government may be informed suitably.

(Actions PC)

4. Loharu Canal Lift Irrigation Schame (Marvana) - (c Estimated cost - N.5453 labba)

It was observed that the RE for Stages I & II of the project was sent by the State Government for experiment on by the CWG, although only Stage I of the project was originally approved. The expenditure incurred on the project was more than 85% when the RE was submitted to CWG and the project has since been practically completed. The Committee, therefore, did not find it appropriate to examine the scheme, but preferred to leave the irregularity unregularised. The State Government may be suitably informed emphasising the need for timely submission of RE.

(Action: PC)

II. Modium Trrigation Projects

1. Dhoba Puno Canal Schome (U.P.) - (Estimated cost N. 149.9 lakha

It was observed that the expenditure incurred on this project was more than 75% by March 1986. In the earlier meeting of the Committee, CWO had put up similar schemes which were in the advanced staged of completion although the RE had not been cleared. It was decided that this project would also be considered along with other schemes for which CWC was to prepare a note for consideration of the Committee.

(Acti na CWC)

Ill. Fleed Control Schoos

Protection works for Kosi Flood Jobankment (Bihar) (Estinated cost Bully 2 Jakha)

Consideration of this project was postponed to the next meeting,

(Actions PC)

Ligt of Officers present in the 36th meeting of the Advinory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 8th December, 1986 in New Delhi.

PRESENT

1. Shri Ramswamy R. Iyer, Scenetary Ministry of Water Resources

Chairman

2. Shri C.G. Desai, Advisor (T&CAD), Planning Commission

Member

3. Dr. D.K. Dutt, Chairman, Central Ground Water Board

Momber

4. Shri T.V. Sampath, Coxwissioner, Agriculture and Cooperation Department

Member

5. Shri N.K. Dikshit, Joint Advisor (I&CAD), Planning Commission

Meaber-Secretary

ALSO PRESE

Ministry of Water Resources

- 1. Shri S.N. Lelo, Chief Engineer (CAD)
- 2. Shri T. Kumar Das, Commissioner
- 3. Shri M.G. Joshi, Jt.Conmissioner
- 4. Shri K.V. Tirthani, Jt. Cornissioner
- 5. Shri P. Rajendran, Executive Assistant to Sucretary
- 6. Siri Thukur, Doputy Secretary (Budget)

Genra Flood Control Compission

1. Shri O.P. Kura, Momber (C) and Acting Chairman

Control Mater Cormission

- 1. Shri K. Mothavan, Marber (D&R)
- 2. Shri K.C. Kuthuria, Chief Engineer (PAO)

- 3. Shri C.D. Khoche, Director (FA)
- 4, Shri A.S. Khurana, Director (PA-III)
- 5. Siri S.M. Pai, Deputy Director
- 6. Shri BaB. Vats, Deputy Director

Government of Rolasthan

1. Shri B.P. Bhetnagar, Chairman, Indira Gandhi Nahar Boord

Planning Commission

- 1. Shri R. Nagaraj, Deputy Adviser
- 2. Shri J.N. Nanda, Senior Research Officer

PLANNING COMMISSION (I&CAD DIVISION)

* * * * *

Subject:- 37th meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose ProjectSheld on 22nd June, 1987 in Shram Shakti Bhavan, New Delhi.

The Summary Record of the 37th meeting of the Advisory Committee on Irrigation, Flood Control and Multi-purpose Projects held on 22nd June, 1987 in Shram Shakti Bhavan, New Dolhi is circulated herewith.

(N.K. Dikshit)
Joint Adviser (I&CAD) and
Member-Secretary

- Shri Naresh Chandra, Secretary, Ministry of Water Resources, S.S. Bhavan, New Delhi.
- 2. Shri M.A. Chitale, Chairman, Central Water Commission, Seva Bhavan, R.K. Puram, New Delhi.
- 3. Shri Bahadur Chand, Chairman, Gentral Electricity Authority, Seva Bhavan, R.K. Puram, New Delhi,
- 4. Adviser (Energy), Planning Commission
- 5. Shri C.G. Dosai, Adviser (I&CAD), Planning Commission
- 6. Joint Secretary, Plan Finance Division, Ministry of Finance
- 7. Shri D.K. Singh, Jt. Secretary and Financial Adviser, Ministry of Whter Resources, New Delhi.
- 8. Shri K. Padmanabiah, Jt. Secretary, Deptt. of Power Krishi Bhavan, New Delhi.
- Ghairman, Comtral Ground Water Board, Ministry of Water Resources, Krishi Bhavan, New Delhi.
- 10. Joint Secretary, Deptt. of Heavy Industry, Udyog Bhavan, New Delhi.
- 11. Joint Secretary, Department of Environment, Paryavaran Bhawan, C.G.O. Complex, New Delhi.
- 12. Agriculture Commissioner, Ministry of Agriculture and Cooperation, Krishi Bhavan, New Delhi.
- 13. Inspector General of Forests Ministry of Environment, Forests & Wild Life , Krishi Bhavan, New Delhi.

Copy to:

M. mistry of Irrigation S.S. Bhayan, New Delhi.

- 1. Shri M.S. Rao, Commissioner (I&F), 11th Block 7th Floor C.G.O. Complex Lodi Road, New Delhi.
- 2. Shri Ramesh Chandra, Commissioner (P)
- 3. Shri M.S. Reddy, idviser (PP)
- 4. Shri S.J. Thomas, Member (JRC), 11th Block 7th Floor C.G.O. Complex. Lodi Road, New Delhi.
- 5. Shri M. Pyda Raju, Joint Commissioner (F)
- 6. Chief Engineer (CAD), Krishi Bhavan, New Delhi.
- 7. Shri G.V. Rao, Joint Commissioner (P)
- 8. Shri R.K. Kaushal, Jt. Commissioner (CAD)
- 9. Shri M.G. Joshi, Joint Commissioner (P)

Gentral Water Commission, Seva Bhavan, R.K. Puram, New Delhi.

- 1. Member (F&P)
- 2. Member (D&R)
- 3. Member (RM)
- 4. Member (WP)
- 5. Shri K. Hasan, Chief Engineer (PAO)
- 6. Director (PA)(I)/(II)/(III)

Department of Environment. Paryerager Bhaven, C.C.O. Complex, New Delhi.

1. Dr. S. Maudgal, Director

I.G.A.R. Krishi Bhayan, New Delhi.

1. Assistant Director General (ICAR)

Ganga Flood Control Commission, Sinchai Bhavan, Bihar, Patna

Shri O.P. Kumra, Member (Goordination) and Acting Chairman

(N.K. Dikshit)
Joint Adviser (I&CAD) and
Member-Secretary

PLANNING COMMISSION (1&CAD DIVISION)

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Summary Record of 37th meeting of the Advisory Committee on Irrigation, Fleed Control and Multipurpose Projects held on 22.6.1987 in Shram Shrkti Bhavan, New Delhi.

The list of participants in enclosed in the Annexure-I.

1. Ceneral

(a) The Chairman observed that some of the members of the Committee especially from Ministry of Environment and Forests and Ministry of Agriculture are not attending the meeting regularly. He also informed that in a recent meeting held in Cabinet Sectt., the officers of the Department of Environment promised to attend the meetings in future, so that all aspects of clearance of project can be examined. The Adviser (I&CAD) stated that Planning Commission had specifically requested in the past, Department of Environment and Finance Ministry to depute their representatives. They will be again reminded to attend the meeting of Advisory Committee.

(Action: Ministry of Water Resources)

(b) It was earlier decided by the Committee about participation of concerned State's representatives in the deliberations of Committee. It was decided that the participation by States could be confined to selected large projects. For this purpose, C.W.C. may inform the Member-Secretary in advance and bunch the projects to be discussed in such a way that a few States could be called at a time.

(Actions G.W.C.)

The following irrigation and flood control projects were considered and the Committee's recommendations are as follows:

2. Imigation Schemes (Including Revised Estimates) on which more than 75% of the Estimate cost has been spent.

The Committee had on its agenda 33 irrigation schemes in advanced stage of constructions (Supplementary note of C.W.C.) 8 major irrigation schemes (in the form of short notes of C.W.C.) and 7 medium irrigation schemes (also in the form of short notes of G.W.). In respect of such schemes, Member (P&P) CWC referred to the following decision taken in the 30th meeting of the Advisory Committee.

"Where unapproved projects have been taken up for implementation by the States and substantial expenditures have been incurred or commitments made on such projects, or where the original sanctioned cost of an approved project has been substantially exceeded without approval, and the cases came before the Advisory Committee at a very late stage when no real examination is possible and what is sought is merely the formality of an expost facto approval, the Committee need not accord such an approval but could leave the irregularity un-regularised, and might request the Planning Commission to convey the irregularity to the State."

He stated that, as per this decision, the Planning Commission should convey the irregularity to the State. Adviser (I&CAD). Planning Commission stated that the action proposed by the Advisory Committee would have to be reviewed from the financial consideration of Central assistance to such Plan schemes already released during the various Plans in the past. The schemes have been already accepted for inclusion as a Plan scheme and expenditure incurred during the last. 10 years or so has been treated as Plan expenditure. Some of the schemes in the list are already approved once and their revised estimates have since been submitted to G.W.G. Since the issues raised by Adviser (PC) was of a financial nature, Chairman expressed that in consultation with Finance Ministry could be of examination assistance in scrting out the issue. Since Planning Commission had not agreed with the earlier decision of the Advisory Committee to leave the expenditure uncompared as an irregularity by the State, it was decided by the Chairman that Planning Commission should officially communicate their views on this issue for examination by the Ministry of Water Resources in consultation with Finance Ministry and then the same would be put up again for consideration of the Committee.

(Actions Planning Commission)

3. Major Irrigation Priects

(i) Srisailam Right Branch Canal (Andhra Prodesh) (Estimated Gost R. 386.05 crores & M. 23.52 crores for SRBC share of common works).

Joint Advisor (I&CAD), Planning Commission observed that subsequent to the consideration of the scheme in the 33rd meeting of the Committee, the Covernment of Maharashtra have raised objections to the acceptance of the original project in 1981 by the Planning Commission on the ground that as per the Krishna Tribunal Award, no consumptive use from Sriseilam Reservoir was envisaged. In the acceptance letter of 1981, it was stipulated that the water requirement of 19 TMC for this project would be met partly by regeneration flows available to Andhra Pradesh after 1983-84 and partly by remodelling of existing canal system/diversion of part of the Codavari water out of Andhra's share. Before sending a reply to Maharashtra, the matter was referred by the Planning Commission to the Ministry of Water Researces and CMC for comments. The CMC in their recent

reply to the Planning Cormission have stated that in the revised estimate submitted by the State Covernment the water requirement of this project is proposed to be partly met by surplus flows available in the Krishna river till the review of the Tribunal Award by the year 2000. Planning Commission has already written to CWC that this position cannot be accepted and the matter may be taken up with the State to ensure implementation as per stipulation laid down in the original acceptance letter.

As regards BC Ratio for this project, it was pointed out that the part cost of the common carrier chargeable to this project had been taken into account and the same is worked out as 1.09. When the common carrier which is built for a higher capacity taking into account the requirement of Tolugu Ganga Project, which is Still to be cleared, it is a matter for consideration whether the inter-State aspect in respect of this project would also be open to question as in the case of Tolugu Ganga, Commissioner (I&F) pointed out that Srisail am Right Branch Canal Project excluding the common carrier has been accepted by World Bank for financing. Adviser (I&CAD) stated that the Advisory Committee cannot take a similar view as has been done by the World Bank and the project has to be considered in totality for techno-economic viability.

Joint Adviser (I&CAD) also pointed out that the yield per ha, assumed in the BC Ratio calculation for paddy is six tonnes which is very high. Also the BC Ratio would need modification taking into account the cost of re-modelling of the existing canal system/diversion of Codavari waters as was done in the original acceptance letter. In which case, the BC Ratio would be less than one and the project thus would become not viable.

After detailed discussion, the Chairman mentioned that the issues raised are of vital nature and need examination in depth by the Ministry before consideration by the

Advisory Committee.
(Action: Ministry of Water Resources/GWC)

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Remedial Measures on Gracks in Hirakud Dam (Orissa) (Estimated cost & 8.33 crores).

(111)

Restoration of downstream flexible protection and upstream divide wells of Kosi project (Bihar) (Estimated cost No. 12.43 crores.

These two projects which are meant for safety of existing structures were considered acceptable subject to availability of resources in the respective State Plans for implementation in the Seventh Plan. In the case of latter, the Bihar Covt. want to divert funds from Western Kosi project which was not acceptable. The State has to find separate funds for this project.

(Action: Planning Commission)

iv) Warna Irrigation Project (Mabarashtra) (Estimated cost Rs. 231.36 orones)

Adviser (I&CAD) wanted to know the status of Soil Survey in Command Areas. Commissioner (Indus) clarified that the project was scruitinised by him earlier and adequate Soil Survey has been carried out. Adviser (I&CAD) referred then for the basis on which cost estimates of distribution net-work are worked out and expressed that it is desirable that canal capacities, water requirements etc. are planned on the basis of adequate soil survey. If soil survey is still to be carried out, project authorities should at least give detailed programme for its time-bound completion with specific milestones to enable CWC to monitor the progress of work. Such a programs for compliance of all such remarks has been emphasised by Member (Agri.), Planning Comedission on the lines it was done for the I.G.N.P. The CWC have been already requested for its compliance in the future scrutiny notes. Chairman (CWC) was of the opinion that such points would delay the clearance of projects but Adviser (I&CAD) Planning Commission reiterated stating / what is required is only programme for compliance of the observations of CWC such as soil survey etc. and project authorities should not have difficulties in giving that as done by I.G.N.P. authorities. This is the minimum requirement for planned programme. He indicated that earlier practice of proceeding on adhoc basis for canal planning needs to be rationalised to avoid cost over-run and time slippages. As required information of such basic issue : could not be made available to the Committee, Chairman suggested for furnishing all project information to the Committee to take decision. It was decided that the project would be put up for reconsideration of the Committee by the CWC, in which State representative would also be invited. The modified note to be provided by the CMC would cover the following:-B.C.

- (a) The revised Actio is to be calculated taking into account the cost of water course upto 5 to 8 ha. block at project cost.
- (b) Action plan for Soil Survey & Ground Water Development may be obtained from the State Government.
- (c) Information about Forest clearance has to be obtained for the submerged area for which land acquistion is proposed.

(Action: C.W.C.)

4. Midium Irrigation Projects

*) Revised estimate of Kaldiya Irrigotion School (Assam)
(Estimated cost No. 8.11 crops).

(ii) Revised estimate of Gunta Dam Project (UP)
(Estimated cost Rs. 7.92 crores)

These two projects were considered techno-economically viable subject to the State Government furnishing the forest clearance as per Ferest (Conserbation) Act. 1980.

(Action: Planning Commission)

/ that

5. Flood Control Projects

It was noted from the scrutiny note of Chairman G.F.C.C. that "The cost estimate is reported to be based on current schedule of " The technical scrutiny by GFCC does not cover the examination of detailed design and drawings of individual component of works with regard to their structural and hydraulic performance, the safety etc. The Chairman enquired to know what is the basis for clearance by Advisory Committee with this type of observations, Adviser (I&GAD) also pointed out that if estimates are not checked with reference to current schedule to rates, there will be no correctness and cost over-run can be ascribed in future due to under estimating. To this acting Chairman G.F.C.C. clarified that thispara is written as 4 otherwise he has himself practice satisfied about the correctness of rates, soundness of designs etc. and recommended only then for clearance by Advisory Committee.

∠per past

(i) Protections works for Kosl Embankment) (Bihar) (Estimated cost B. 16.92 crores)

The project was considered as technoeconomically viable. The acting Chairman, GFGC clarified that
the project estimate was based on current schedule of rates and
he was satisfied about the rates and technical soundness of design
works proposed. The reference to rates, designs, structural
soundness etc. mentioned in their scrutiny note is a conventional
one and should not be construct as worded. Actually, he is
satisified and then only it is recommended for clearance.

(Actions Planning Commission)

(ii) Anti-crosion works and retired embankment from 0 to 35 in niprasi piprashan reach on right bank of Gondak (Bihor) (estimated cos t Rs. 17.50 crores).

The project was considered as techno-economically viable. However the need for conducting model studies being carried out for river Candak was emphasised. It was also suggested that, if there is constraint in space for carrying out the model study at Pune, this could be accommodated in the irrigation research institutes of the States of Bihar and Uttar Pradesh.

(Action: Planning Commission/GFCC)

ANNEXURE_I

List of Officers present in the 37th meeting of the Advisory Committee on Izrigation, Flood Control and Multi-purpose Proje-cts held on 22nd June, 1987 in D New Delhi.

PRESENT

1. Shri Maresh Chandra, Secretary Chairman. Ministry of Water Resources 2. Shri M.A. Chitale, Chairman, CWC Member 3. Shri C.G. Desai, Adviser (I&CAD), Member Planning Commission 4. Shri D.K. Singh, Jt. Secretary & F.A., Member Ministry of Water Resources 5, Shri N.K. Dikshit, Joint Adviser (I&CAD), Nember-Secretary

ALSO PRESENT

Ministry of Water Resources

Flanning Commission

- 1. Shri Ramesh Chandra, Commissioner (Projects)
- 2. Shri M.S. Rao. Commissioner (18f)
- 3. Shri M. Pydaraju, Joint Commissioner (F)

Canga Flood Control Courission

- 1. Shri O.P. Kumra, Acting Chairman
- 2. Shri S.N. Jha, Director

Central Water Commission

- 1. Shri V.A. Parkach, Member (P&P)
- 2. Shri K. Madhavan, Member (D&R)
- 3. Shri Z. Hasan, Chief Engineer (PAO)
- 4. Shri S. T. Chaudhury, Director (PPC)
- 5. Shri T.S. Murthy, Director, (PAO)
- 6. Shri T.M. Suri, Director (PAO)
- 7. Shri C.S. Rao, Deputy Director
- 8. Shri P.R. Malhotra, Dy. Director
- 9. Shri B.B. Vats, Dy. Director
- 10. Shri M.C. Dhawan, Dy. Director
- 11. Shri W.M. Tesbhurney, Dy. Director
- 12. Shri K.S. Jacob, A.D.
- 13. Shri Rati Bhan, A.D.
- 14. Shri V.K.R. Das, A.D.
- 15. Shri D.N. Dahiya, A.D.
- 16. Shri S.R. Jagwam, A.D.
- 17. Shri Madho Lol, E.A.D.
- 18. Shri B.R. Sinha, E.A.D.
- 19. Shri P.K. Barman, E.A.D.

Central Ground Water Board

1. Shri S.K. Sharma, Sr. Hydrogcalogist

Planning Commission

- 1. Shri R. Nagaraj, Deputy Adviser
- 2. Shri J.N. Nanda, Senior Research Officer

Schemes in Advanced stage of construction

Sl. No.	Sl. N of CW Notes	C	State	Estimated cost in Lakhs			
1 2 3 4							
· —]	Asior	Irrication Projects					
1.	18	R.E. on Batane Res. Scheme	Bihar	1855.79			
2•	20	R.E. on Sajnam Dam Project	U.P.	1266,00			
3.	29	R.E. on Kangsabati Reservoir Project	West Bengal	10016.00			
4.	33	Revised estimate of Kosi Project	U.P.	1732.31			
5. ~	36	R.E. Manjara Irrigation Project	Maharasht	ra 3160.47			
6.	40	R.E. on Sir Arthur Cotton Barrage Project(Godavari Barrage Preject)	A.P.	8602,00			
7 _€	42 -	R.E. on Aliganj Sinchai Pariyojana	U.P.	696.00			
8.	43	R.E. of Baigul Res. Scheme	U.P.	718,38			
9.	44	R.E. on Advo Dam Project	U.P.	766.30			
10,	46	Subeli Irrigation Scheme	U.P.	640.00			
11.	47	Madhotanda Irrigation Prject	U.P.	280.00			
12.	50 -	R.E. of Bhimgoda Barrage Project	U.P.	3302,00			
13.	51	Khatime Irrigation Scheme	U.P.	217.57			
14.	52	Second Revised Estimate of Chitturpuzha Irrigation Project	Kerala	1763.71			
15.	35	Increasing capacity of Bibiour Lake	Horyana	149,07			
	Medium Traigntion Projects						
16,	16	R.E. on Jaipur Reservoir Scheme	Bihar	262.75			
17.	17	R.E. of Lorgara Reservoir Scheme	Bihar	198.88			
18.	21	R.E. of Rohini Dam Proje et	U.P.	3316,00			
19.	23	R.E. of Murchir Reservoir Scheme	Bihar	703,64			
20.	24	R.E. of Genga Pump Canal Scheme at Chause	Bihor	591,00			

					;
	1	- <u>2</u> .		4	
	21.	25	R.E. of Tapkara Reservor Scheme	Bihor	400,00
	22.	26	R.E. of Surajgarha Pump Canal Scheme	Biher	42751
	23.	26	R.E. of Latratu Reservoir Scheme	Bihar	2523.90
	24.	28	R.E. of the Sakrigali Pump Canal Scheme	Bihar	307.50
	25.	31	R.E. of Kukurjhap (Anjan) Reservoir Sch.	Bihar	2102.42
	26.	32	R.E. of the Torlow Reservoir Scheme	Bihar	1068.73
	27.	34	R.E. of Shah Nohar Fodeer Project	Punjab	3345.80
	28.	48	Second Revised Estimate of Lethora Lift Irrigation Scheme	J&K	476 , 00
	29.	53	R.E. of the Rejal Lift Irrigation	J&K	557 48
	30 _*	54	R.E. of Ranjan Lift Irrigation Scheme	J&K	631.00
	31.	3 8	2nd Revised Estimate of the Margel Lift Irrigation Scheme	J&K	717,00
1	32/0		Beas Dam Project Unit-II Pong Dam	(Punjab	24353,00
	3 3.		Extn. of non-perennial UBDC Tract	Punjab	924.07
	34.	;	Sewani Lift Irrigation St.I to IV	Haryana	2740.86
	35.		Sukta Irrigation Project	M.P.	1189,65
	36,		Yamuna Pump Canal	U.P.	1555.00
	37.		Sone High Level Irrigation	Bihar	5905,60
	38.		Periyor Valloy Irrigation	Kerala	6305.00
	39.		New Okhla Barrage	U.P.	3892,55
	40.		Banki Tank Project	M.P.	710,46
•	41.		Moddigadda Irrigation	A.P.	317,89
	42.		Dholbaha Dam Project	Punjab	940.00
	43.		Bolen Bankar	U.P.	51.6,60
	44.		Raiwada Reservoir	A.P.	460.00
	45.		Padderu Reservoir	A.P.	792.00
	46		Swarna Project	A.P.	468.50

Government of India Central Water Commission

Sewa Shawan, New Delhi.

Subject: 38th mesting of the Advisory Committee on irrigation, Flood Control and Multipurpose projects held on 27th January, 1988 in Shram Shakti Shawan, New Delhi.

Committee on Errigation, Flood Control and Sultipurpose Projects held on 27-1-88, in Charam Shakti Bhawan, New Delhi is circulated herewith.

a charts

(Z.HASAN) Chief Engineer(PAO) • Member Secretary

1. Shri Waresh Changra, Tochecary, Ministry of Water Resources, Shram Shakt' Shawan, New Delhi.

- 2. Shri M.A.Chicale, Chairman, Contral Water Commission, Sewa Bhawan, R.K.Suran, New Delhi.
- 3. Secretary(Engenishmen), Ministry of Cinance, North Block, New Delhi.
- W. 4. Secretary Depth. of Fourt. Chram Shakti Sharan, Rafi Hary, New Delhi (Bominse, 18. 7.K.Khan , Joint Secretary).
 - 5. Secretary, Ministry of Chvironment & Forests, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi. (Nomineed Dr. A.C.Ray, Addl. Secy.).
- 6. Secretary, Ospit. of Agriculture & Cooperation, Krishi Bhawan, New Oclhi. (Muminee- Sh. T.V.Sampath, Agriculture Commissioner).
 - 7. Secretary, Ministry of Welfae, Shastri Whawan, Waw Delbi.
- 8. Director-General, ICAR, Krishi Bhawan, New Delhi. (Nominee-L- Dr. I.P. Abrol, Deputy Director General).
- 9. Chairman, Central Misetricity Authority, Sewa Bhawan, R.K.Puram, New Delhi.
- 10.Chairman, Central Groun Water Board, Januagar House, M.S.Road, Mew Delhi.
- Advisor(IECAD), Planning Continuion, Yojna Shawan, New Delhi.

.2/ ...

- 12. Now Delhi.
- 13. Pinancial Advisor, Ministry of Mater Resources, Shram Chakti Bhawan, New Molhi.

CWC U.O. No. 16/27/87-P4(B)/701.III/657

t. 87 March, 88.

COSY CO I

Ministry of Mater Resources, Chras Shakti Bhawan, New Delhi,

- 1. Additional Sucretary.
- 2. Shil M.S.Rao, Commissioner(I&F), 11th Block 7th Cloor, CGO Complex, Lothi Road, New Dolhi.
- 3. Chri kamesh Chando., bomissioner(b).
- 4. Commissioner (PP).
- J. J. Fi S.J. Thomas, Member (B&N), lith Block Stn Floor, CGC Complex, Lodhi Rond, Mew Dolhi.
- 6. Shal G. J. Rao, by , secretary (F) ,
- 7. Shai m.G. Jashi, John Commissioner().

Central Water Commission, Sewa Bhacan, E.K. Puram, New Delhi.

- 1. Wember (Pap).
- 2. Member (0 R).
- 3. Werdber (RM).
- 4. Hember (WF).
- 5. Chiof Englacer, PP Joil.
- 5. Mirector PA-(N)/(S)/(S).
- 7. Director PPC- N/(*1/(*).

Cenartment of Environment

1. On. S. Maudgal, Director, Deptt. of Rostroweck, Payavaran Bhawan, CGC Complex, Schi Coad, New Oblic.

Ganga Flood Control Commission, Sinchai Bhawan, Bihar, PARWA.

1. Shri G.R. Keskar, Member, G.F.C.C., Simchai Bhawan , PATUA.

Summary Record of 38th Meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 27/1/1988 at 3.00 P.M. in the Committee Room of Ministry of Water Basources.

The list of officers who attended the meeting is enclosed as Annex-I.

1. GENERAL:

Shri Maresh Chandra, Secretary, Ministry of Water Resources and Chairman, Advisory Committee welcomed all the members of the reconstituted committee and officers from various organisations and State's representatives. He suggested that where necessary the projects could be considered, and if found acceptable, could be cleared by the Advisory Committee subject to the clearance from Department of Environment. He also stressed the urgency of calling the present meeting as a few projects were required to be sanctioned before 31/3/1988 as necessary funds have to be provided for these projects by the Central Government.

The Secretary, Ministry of Welfare, Government of India mentioned that in most of the notes circulated no mention has been made in respect of rehabilitation and resettlement of the project affected tribals. He emphasised that the provisions made for this item should be clearly indicated in such Notes. He added that when the provision for resettlement and rehabilitation of the affected oustees was not provided for, the project could/be certified as economically viable. He was informed that provisions for R&R were examined in CWC before finalising the estimates. These aspects were also examined by Ministry of Environment & Forest. Chairman agreed that as now Ministry of Welfare is also associated to look into this aspect, necessary provisions for rehabilitation and resettlement made in the projects should also be highlighted in the TAC Notes.

(Action: CWC - PAO)

2 The following projects were considered by the Advisory Committee and the decisions taken as follows:

New Major Irrigation Projects

(i) Integrated project for development of water logged areas of South Western districts of Punjab - Punjab Est. Cost Rs. 50.87 Crores

The project was found to be acceptable subject to the clearance by the Deptt. of Environment. Government of Punjab would obtain the alearance from DOM at the earliest and furnish it to Planning Commission.

(Askion thate Govt ./Flanning Commission).

(ii) Puni h Irrightion Project Phase_II - Lining of Water Courses (Puniab) - Est. Cost Rs. 117.47

Crores.

Justification for entire lining of water courses by the State Government as mentioned at Page 9 Para-IX of the Note is not acceptable and that selective lining should be dobe. Punjab representative clarified that lining of water courses in this proposal has been considered on selective hash mostly in areas where ground water is saline and water optic is rising. These water courses are having a commend of 5.09 lake ha. and have been identified in tabular form at Annexure-I and in the index map at plate-I of the Note. Although the project was considered techno-economically viable, the Committee desired that the proposal may be put up again with the following additional information:-

- (a) Though the cropping pattern has the approval of State Agriculture Department & Central Agriculture Ministry, ressibility of reducing areas under Paddy and sugarcane may be considered to check further rise in ground water table.
- (b) All information regarding environmental aspects of the project be furnished to the Department of Environment and environmental clearance be obtained by Government of Punjab.

(Action: Government of Punjab/ C.W.C. - PP Cell)

Dupolementary Note on Sibernarekha Barrase
Project (West Peaul) - Estt. Cost Alternative-I - Es. 226, 82 Coores, Alternative II - Rs. 216 61 Charas.

Roth liternatives | A | I or the project were considered to be acceptable. Alternative | II, which does not include the flood prone command area on the right side of Distributary No. 7, may be taken up for implementation at this stage. Later on, when the flood embankment scheme is constructed and the left out areas protected from floods revised report for Alternative — I may be submitted. However State Govt. would make a reference to the Deptt. of Environment and seek their elearance before acceptance. Lefter is is sued by the Planning Commission.

 237

y) Modernisation of Vanusabati Project (West Bengal)
Est. Cost Rs. 311.07 Crores.

This project was found acceptable subject to the clearance by the Depth. of Environment. The Committee advised the Chief Engineer, Govt. of West Bengal, to get the matter expedited with the Department of Environment and obtain the clear mose at the earliest.

(totion: State Govt./Planning Commission)

) Gisi Khurd Project (Maharashtra) - Estt. Cost

Advisor, Planning Coumission pointed out that in this project some of the important parameters such as design flood, spillway atc. are tentatively finalised and further/investigations/studies are yet to be carried out before the project proposals could be firmed up. During the discussions the CWC officers and the State Chief Engineer clarified various points raised by the Adviser, Planning Commission. However, after detailed deliberations, the Committee took a decision that the aspect of rehabilitation and resettlement, clearance from environmental and forest angle should be taken care of and simultaneously the project proposals may also be firmed up and put up to the Advisory Committee in the next meeting.

(Action: State Govt./CWC-PAO).

Hat hnikund Barrase Project (Harvana) - Estt. Cost - Ra.42.37 Crores.

Chairman informed the Committee that during the recent meeting taken by him with the Chief Secretaries of both Haryana and U. P., it was agreed that construction of Hat bnikund Barrage be taken up immediately, as replacement of age old existing Tajewala weir was necessary and the question of a pacities of Head regulators could be kept in absyance till an amicable solution was reached based upon the users requirement on downstream side.

The Committee agreed to this and it was decided that construction of Hathnikund Project be restricted to barrage portion only and construction of Head regulators be kept in abeyond, till an agreement is reached between the two States regarding their capacities, including therein a reasonable provision for Delhi Water Supply.

(Action: Planning Commission - MOWR)

TI. Revised Major, Irrigation Projects

(i) SYL Conal Part - I Main Canal, Punjab - Estt. Cost Es. 366.00 Crores.

Advisor, I&CAD, Planning Commission enquired whether the combined P.C.Patio of SYL Canal Project as a whole including Enryana portion had been worked out. Director, PP Cell, CYO while explaining the project background explained that the combined B.C. Estim as desired by the T.C in its meeting held on 28.11.85 had already been furnished to the Planning Commission which comes to 1.53. Commissioner (I&F), Ministry of Water Assumees stabled that the question of combined B.C.Batto was debated in detail in the meeting of 28.11.85 when the project was accepted for hstare crafts, presently, only the updated cost estimate of the project was under consideration and as was pointed out in the last TAC meeting of 11/85. B.C.Ratio calculation would be only of scademic interest. Chairman while mentioning the urgency informed that the project was being financed by the Centre and it was necessary that the project was cleared by the Committee, so that the funds were released for execution and completing the work within the stipulated time.

Additional Secretary, Ministry of Environment enquired about the environmental/and forest alearance of the project. Director, CWC intimated that the project had already been cleared by the Ministry of Environment in November, 1984 from environmental and forests angle. However, the Additional Secretary, DOE desired that the project need to be referred back to the Ministry of Environment for fresh clearance.

issue that concurrence of Rijasthan and Maryona for Chairman stated that necessary follow-up action was already in hand and night be sorted out soon. Adviser, final cost of the project and whether any further increase in the cost was anticipated by the State Govt. The State representative replied that the project cost might go up fact that Punjab might have to purchase cost lier non-railway bridges on SYL was also likely to be revised. Of the present estimate.

The project estimates were considered acceptable subject to fresh environmental eleurance, if required.

Commission)

(a): 9: 117

(ii) Mahanadi Barrose, Orissa - Estt. Cost: Rs. 4208.70

The project is a replacement work of the existing anicut on river Mahanadi and the same was found to be acceptable by the Advisory Committee.

(Letion: Plauning Commission)

Will) Upper Krishna Project Stars-I. Karnatska - Estt.
Cost Rs. 1249.15 Crores

Chairman, Advisory Committee was of the view that this project involved large-scale retabilitation and submergence, hence prior clearance from the Department of Environment should be obtained. The committee felt of Environment should be obtained. The committee felt that monetary provision for drainage and lining of that ribution system in Block Cotton soil may be reviewed. In the light of the above observations, the project may be again put up in the next meeting of the Advisory Committee.

(Action: State Government/CWC - PP Cell)

III. Revised Medium Irrigation Projects

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(i) Vattivisu Medium Irmisation Project Andhra Pradesh - Estt. Cost: Hs. 2870.75 lakhs

Secretary, Ministry of Welfare enquired whether sufficient provision had been made for rehabilitation and resettlement of tribals. He was informed that a provision of Rs.5000/- per family was sade for this purpose. The Committee accepted the revised estimate.

(Action: Flanking Commission)

(ii) Redauv lass Irrigstion Project, Anders Prodesh Estt. Cost Rs. 3889.00 lakhs.

The Committee approved this revised estimate.

(Action: Planning Commission)

(iii) Andhr: Irrigation Project andhra Pradesh Estt. Cost Rs. 1312.56 lakhs

The Committee approved this revised estimate. (action: Planning Commission)

(iv) Puhumara Irrig tion Scheme. Assaw - Estt. Cost Rs. 2694.64 Lakhs

The Committee observed that the revised cost of the project has shot up to Rs.2684.64 lakhs, as compared to the earlier approved estimate of Rs.500 lakhs. It was pointed out that increase in cost is mostly due to rise in priors and inadequate provision made in the earlier estimate. There was very little change in the scope of the project. The Committee approved the revised estimate.

(Action: Planning Commission)

Hat wane Freject, Mahasashtra, Estt. Cost - Rs. 4587.00 lakhs.

The Committee as roved the revised estimate subject to the clearance from forest/conservation angle. The Chief Engineer of the project need to expedite submission of necessary proposals through the State Chief Conservator of Forests to the Depth. of Environment and Forest and obtain their clearance at the earliest.

(Action: State Govt./Planning Cornaission)

Imphal Barress Project, Manigur, Esta. Cost - Rs. 633.68 lebbs

The project was approved by the Advisory Committee. (Setion: Planning Commission)

wii)Sunder Irrig tion Froject, Orissa, Estt. Cost - Rs.820.67 Slokhs

The project was approved by the Advisory Committee.

(Action: Planning Commission)

(viii) Vongalaraya Sangram Project, andhra Fradesh Estt. Cost - Rs. 2360.151 lakhs

The project was approved by the advisory Cosmittee. (Action: Planning Commission)

IV. Flood Control

(i)

Project estimate of Flood prevention works at Allahabed Phase-II. Stear Prodesh, Estt. Cost - Rs. 600.00 lakhs

The Scheme was not considered acceptable by the Committee and the following observations were node:

- water accomulating in the low areas of the town. It was not clear why the scheme could not be taken up for execution by the Municipal Corporation with their own funds.
- (b) The benefit cost ratio of the scheme is given to be less than 4. The cost estimate is based on 1984-85 price level. If the esculation in cost and cost of annual pumping (fuel/electricity) are also taken into account, the annual costs will go up. The annual benefits have been derived at by dividing the damages occuring four times during the period 1976-32. If subsequent years 1912-85 for which no flood damages have been reported are also taken into account, the annual benefits will be reduced and the benefit cost ratio will become considerably less than 1. The scheme is thus likely to become a perpetual liability.
- (c) The scheme aims at pumping of water accumulating from a rainfall of 1 in 10 years frequency. If the rainfall of a higher frequency occurs, the damages are likely to occur. This has not been suitably taken into account la working out the benefit cost ratio.
- (d) The Committee could not appreciate the reasons for putting up the scheme before the Advisory Committee when substantial work is reported to have been completed.

(Action: State Govt.)

Situar Town Flood Protection Schem. Its in Pradesh - Estt. Cost Rs. 601.00 lakhs.

The project was not considered acceptable by the Advisory Committee, and the following observations were made:

(a) The scheme wins at providing probection to a portion of the town between the railway line and National Highway 24, although it appears from the Index Map

that also create below the Mational Highway bridge were also flooded during 1971. The Committee suggested that a comprehensive scheme and be framed for the town as a whole so as to arrive at a realistic idea of each of protective work and the benefit dost ratio.

- (b) Estably populated and houses orist age The brink of the bank. It has, therefore, been proposed to very closely suggested and failure in base of occurence of discharges, higher than as designed. Also, the hydrological details we not original details we not original to be taken to regulate the developmental activities in the flood plain needs to be also discussed in the report on the scheme.
- (c) The assessment of annual damage is not substantiated with figures of actual year-wise damage. The average annual damage has been worked out by taking into account the total damages during the year 1971, 1975, 1976 and 1980 during the 10 year period 1971-80. If subsequent year, in which no damages have been reported, are also taken into account, the annual benefits and the benefit good ratio will be considerably reduced.
- (d) The execution of the scheme may have adverse inpact on the mailway and the Estional High-should, an refere, be obtained from the entire of the formal and the first the following and the first the following of factors with them of fractures of interest.
- (e) Clearance of the SFCB hay be obtained for the scheme. The view of the Advisory Count tee may be brought to the notice of the SFCB when the scheme is placed before them.

(Action: State Government)

(111) Lower regions braining others, West Bensel -Esti, One Ro 1410,00 lakes

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(ker. one figurate (Remiseion)

3. Miscellaneous

- (i) Chairman observed that in the case of multipurpose projects unnecessary burden is put
 on the irrightion component. He suggested
 that the norm for apportioning of cost of
 the project, between the irrightion and power
 portion, should be reviewed in a joint meet—
 ing. This has become necessary as costs
 towards reh bilitation and resettlement of
 project oustless needed catchment area treat—
 ment and soil conserv tion in the entenment etc.
 are also required to be included in the
 project estimates.

 (Action: CMC/CEA)
 - (ii) Chairman observed that the commitment made by the State Governments in many projects are not being honoured at a later date. He quoted the case of Tehri Dam Project which was cleared subject to the condition that water would be made available forthe Union territory of Delhi. But now, the State Governments seems to be backing out from this commitment.
- (iii) Chairman suggested that Monitoring Organisation of the Central Governments—should ensure that the various observations made by the Advisory Committee/Planning Commission while giving clearance to the schemes are being duly complied by the State Governments during the execution of the projects. Information in this respect should be brought to the notice of the Advisory Committee from time to time.

(Actions: CWC)

(iv) Chairman desired that more frequent meetings of the Idvisory Committee should be convened so that backlog of the projects in the CMC could be cleared at the earliest.

(Mction: CWC).

(v) Dr.4.C.Ray, Additional Secretary, Department of Environment clarified that all major irrigation projects/multipurpose projects irrespective or whether they are diversion projects or reservoir projects, as and when revised, need to be referred to the Department of Environment for fresh clearance.

(Action: CWC/State Govt ")

(vi) The projects which could not be considered during this neeting shall be taken up during the next meeting of the Advisory Committee.

(Action: CWC)

List of Offic rs present in the 38th Meeting of the Advisory Committee on Irrigation. Flood Control and Multipurpose projects held on 27th January, 1988 in the Ministry of Water Resources at New Delhi.

PRESENT:

7,	Shri Naresh Chandra, Secretary, Ministry of Water Resources.	Chairman
2.	Shri M.A.Chitale, Chairman, Central Water Commission.	- Member
3.	Dr.A.C.Ray, Additional Secretary, Department of Environment & Forest.	- Member
· + •	Shri Shamsher Singh, Specialist (S), representing Secretary, Deptt. of Agriculture & Cooperation.	- Member
5.	Shri S.S.Varma, Secretary, Ministry of Welfare.	- Member
6.	Dr.P.C.Bhasia, Assistant Director General, ICAR, representing Director General, ICAR.	- Momber
7.	Dr.H.R.Sharma, Chief Engineer, representing Chairman, Central Electricity Authority.	- Member
8.	Shri C.G.Desai, Adviser(I&C.D), Planning Commission.	- Member
9.	Shri D.K.Singh, Financial Advisar, Ministry of Water Resources.	- Member
10.	Shri Z. Hasan, Ohief Engineer (PAO), Central Water Commission.	- Member Secretary

Also present:

MINISTRY OF WITER RESOURCES

- 1. Shri S. Kanungo, Additional Secretary.
- 2. Shri M.S.Rao, Commissioner(T&F).
- 3. Shri Ramesh Chundra, Commissioner(P).
- 4. Shri S.J.Thomas, Commissioner(B&N).

Contd....II.

PLANNING COM (IESION

- 1. Shri W.K.Dikshit, Joint 'dviser(I&CAD).
- 2. Shri B.W. May alaw ha, Deputy Adviser

CENTRAL WATER COMMISSION

- 1. Chrl K. Madnawan, reaber (D&).
- 2. onri A.Fangachari, Manber(RM).
- 3. Shri V.A. Parkash, Member (PaP).
- 4. Shri K.C. Kathuria, Chief Engineer (CP&M).
- 5. Shri K.N. Frasad, Chief Engineer, PP Cell.
- 6. Shri T. M. Suri, Director (PA-C).
- 7. Shri T.S.Marthy, Director (PA-S).
- 8. Shri P.C. Lau, Director (P4-W).
- 9. Shri S.K.Govil, Director, PPC(5).
- 10. Shri S.T. Chaudhari, Director, PPC(N).
- 11. Shri P.S. angal, Director, PPC(C).
- 12. Shri M.K.Sharms, Director (TPA).

GANGA FLOOD COMENA COMMISSION

1. Shri G.F. Keskar, Momber

HARYANA STIFE

- 1. Shri P.S.Rho, Chief Engineer (Irrigation).
- 2. Shri S.N. Vig, Superint ending Engineer, H.K.B. Project.

WEST BENG L STATE

- 1. Shri S.K.D-s Gupt , Chief Engineer (I).
- 2. Shri S.B.Ray, Superintending Engineer.

contd....JII.

PUNJAR STATE

- 1. Shri B.E. Nagpal, Superintending Engineer (DAG).
- 2. Shri P.D. Khonna, Senior PLG, FST C, Chandigarh.
- 3. Shri Sotinder Singh, Superintending Engineer, SYL.

KARNTAK, ST.TE

1. Shri M. .. Sil m, Chief Bogineer, Upper Krishna Design.

MILE ANDERSON

- 1. Shri S.E. Bhelke. Chief Engineer, Konkur Region.
- Z. Ghri T.G.Ratnaparakhi, Chief Engineer, Nagpur.
- 3. Shri G.Y. Shukla, Superintending Engineer, Nasik.
- b. Gari M.V. Loot only luperint ending Engineer, TF10.
- 5. Obri V.M. Pendse, Superintending Spylaser, Wardna.
- 6. Shri 4.8. Mahendr kar, Superintending Engineer (Irrigation).

Gov mament of India Control Catar Complesion Project Appraisal Erganisation

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R.K. Purjaco, New Delhi.

40th mouting of the Advisory Committee on Irrigation, Flood Control and Weltipurposa Project held on 17.8.33 in Shram Shakti Bhawan, May Dollhi.

The Summary Rodord of the 40th menting of the Mivisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 17.8.88 at 3.00 D.M. in the Committee Room of Winistry of Labour, Shram Shakti Bhawan, New Delhi is circulated herewith.

In addition to the above an ameniment is also hereby circulated on the Summary Record of the 38th mosting held on 27.1.38.

Mar Iran

··· (z.Hāsaii) 🐷 **Chief** Engineer S Member Secretary.

- Shri-Harash Chandra, Secretary, Ministry of Water Resources, S.S. Bhawan, New Delhi.
- 2. Shri M.A.Chitale, Chairman, CWC, Sava Showan, R.K. Ruram, M.Delbi
- 3. Secretary (Expenditure, Min. of Finance, Morth Block, M.Delhi.
- Secretary, Deptt. of Fower, S.S. Thewan, Rafi Marg, Yew Delhi.
- Secretary, Win. of Environment & Forest, Paryavaran Shawan, OGO Complex, New Delhi (Nominae - Dr. TATC.Ray, Alil. Sccy.)
- Secretary, Min. of Welfarg, Shastri Bhawan, New Delhi,
- Secretary, Deptt. of Agriculture & Co-operation, Krishi Rhawan, Hew Dalhi (Mominea- Shrint, V. Sampath, Agricultural Commission.
- Director General, ISCAD, Krishi Bhawan, New Delhi (Nomines Dr. I.P.Abrol, Dy.Director General, SAE).
- Chairman, C.A. Sewa Bhawan, R.K. Puram, New Delhi.
- 10. Chairman, C.G.W.B., Krishi Phawan, New Delhi.
- 41. Adviser (IGCAD), Flanning Commission, Yojana Bhawan, New Delhi.
 - 12. Adviser (Energy), Planning Commission, Yojana Bhawan, N. Delhi.

 - 13. Financial Adviser, Min. of W.R., S.S. Shawan, New Delhi.

 CVC U.O. No. 16/27/88-Pa(N)/2966 Dt. 23/4/Sept., Dt. 23/4 Sept., 1988.

Copy to:

Ministry of Water Resources :-

- Additional Secretary, F.S. Bhawan, New Dolhi. Commissioner (I&F), 1th Block, 7th Floor, CGO Complet, 2. Lodi Road, New Delhi.

- Commissioner(R), S.S.Bhawan.
 Joint Secretary(PP), S.S.Bhawan.
 Commissioner(R&N), 1th Block, St. Floor, CGO Complet, 5. Lodi Road, NewDelhi.
- Dy.Secretary(PF), S.S. Bhawan. 6.
- Joint Commissioner (H.), S.S. Bhawan.
- Joint Commissioner (Flood), S.S.Bhawan.
- Under Secretary, P-III, Ministry of Water Resources, 9. S.S.Bhawan.

Central Water Commission, Sewa Bhawan, R.K. Auram, New Delhi:-

- Member (P&P),
- Member (D&R),
- Member (R&M),
- Member (WP),
- Chief Engineer, PP Organisation. Chief Engineer Mon. Organisation. 5. 6.
- Direct or (PA-N)/(PA-S)/(PA-C).
- Director(PPO-N)/(PPO-S)/(PPO-C).

Department of Environment: -

Dr.S. Midgal, Director, Deptt. of Environment; -Paryavaran Bhawan, CGO Complex, Lodi Road, New Delhi.

Ganga Flood Control Commission, Sinchai Bhawan, Patna, Bihar

5hri G.R. Keskar, Member, Ganga Flood Control Commission.

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The Covt. of

> (Zaffasan) Chief Engineer (PAO) & Member Secretary.

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List of officers who attended the meeting is at Annex I.

Item No.1.

The Advisory Committee considered the following projects and took decisions as under:

New Major Irrigation Projects

(i) Marna Irrigation Project- Maharashtra-Estimated Cost
Rs.33761.00 lakhs.

The Chairman stated that Warna Project was earlier considered by the Committee during its 38th menting and this was only a supplementary note indicating the compliance of the points raised earlier. The project estimate was examined by CVIC again and found to be techno-economically viable.

The Additional Secretary, Department of Environment and Forest informed the Committee that this project was earlier approved from the environmental angle on 30th May, 1985 subject to certain safeguards to be implemented during the execution of the project. He stated that as submitting the Master Plan of rehabilitation of oustess, and catchment area treatment programme, the approval given earlier may have to be cancelled. He also informed that the case of submergence of forest land of 914.644 ha, had not yet been received from the State Government.

The Committee while accepting techno-economic feasibility decided that the State Government should immediately inform the Department of Environment & Forests about the environmental safeguards implemented by it and expedite submission of forest case, in case the area was not denotified prior to 25.10.1980, under intimation to the C.W.C. Adviser, Planning Commission stated that in case the total cost of the project did not materially change after incorporating the costs for conservation of environment and forests, the project could be directly referred to the Planning Commission by the Central Water Commission for according necessary approval.

(Action: Heharashtra Govt./CWC)
*** there had been no response from the State Government in

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Estimated Cost: 18.6012 13khs.

Advisor (Nach)', Flooring Commission we inter out that the capacity of the canals were being orbits. A considerably and wanted to know another these were commensurate with the irrigation intensity planned. Director, PPO(C) explained that the present modernisation proposals were in three blocks out of 10 blocks of Takrapar command, while the proposed increase in the capacity of the main canal was for full modernisation of the command, was also explained that the irrigation intensities were proposed to be incrased to 115% after modernisation ragainst only 40% achieved at present. Member (P&P) stated that as already brought out in the agenda notes this being a pilot scheme being executed with external assistance, the Gujarat State would be advised to make regular scientific observations in post-modernised conditions and collect and analyse scientific data with respect to reduction in seepage losses after lining, additional area brought under irrigation as a data-base for consideration of modernisation proposals in other blocks. The representative from the Deptt. of Environment stated that for any change in the project, a formal reference to the Deptt. of Environment was necesary and should be made by the State.

After some discussions, the project was considered acceptable with the provisonsthat :

- the State Government will monitor the performance of pilot project and compile data-base as stated above before proposals for modernisation in other blocks are taken up ;
- 2) reference to the Department of Environment would be made by Government of Gujarat and their formal clearance obtained; and
- 3) State Government would submit a time-bound action plan to the Planning Commission for the completion of balance works yet to be execut

(Action: Gujarat Govt./Planning Commissi

walue of crops produced etc. so that this would serve

recall message to

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the representative of the Department of Phyliconment and Perist information that the project was not classed from the environment angle. The State representative informed that the reference was made in Supe, 1988 and necessary compliance to the observations of the Department of Edvictment had been submitted gesterday. In was also clarified by the State representative that there was no submergence of Forest area.

The Committee decided that the project can be considered techno-economically acceptable as the estimated cost of the project was not likely to be affected materially on account of environmental conservation as it was a diversion schame. The project was, therefore, considered acceptable subject to the following:

- (a) Concurrence of the State Finance Deptt. to the updated cost of %.11076 lakhs to be furnished by the State Govt.
- (b) Clearance from Department of Environment and Porests.

(Sction: Fiham Govt./Planning Commission)

w) Drainage Scheme in the Princetion Commans of Fansat and Wo. 1 Fro ect in Forth liker.

The representative of GFCC informed the Committee that detailed proposals in respect of only five drainage schemes in the Gardak Johnsond and Rase-LTI(E) of Western Tosi Command had been furnished by the State Government and the same were techno-economically cleared by GFCC. For the other drainage schemes, the cost had been worked out on pro-rate basis. It was also brought out that the cost per ha, of area benefitted was quite high varying from Ns.4850/- to Ns.10,000/na.

The Committee decided that only those five schemes of Ghniak Command and Thase ITT(D) of Western Kosi Command which were techno-economically cleared by GFCC would be

considered acceptable and recommended to the Planning Commission for approval. The details of the schemes are as under:

Sî. No.	Tame of Schoms	Estimated cost in D. lakes
Q 1.	Maniuri Wala Prainige Scheme of Schdat Commani.	\$9 . 50
Ø 2.	Upper Rone Draibage Scheme of Ganda's Continue.	1535.34
<i>()</i> 3.	Jharhi Drain, ge Scheme of Canlak Command.	224.08
	Dhaha Drainage Scheme of Gandak Command.	1236.47
<i>[</i> 5.	Tel Drainage Scheme of Gandak Command.	215.77
6.	Fhase III(2) of Western Command.	837.60
	Total:	4239.06

The above schemes were accepted subject to:

- (a) Clearance to be obtained by the State Government from Deptt. of Environment and Forest.
- (b) Concurrence of State Finance Deptt, to be obtained for the above schemes.
- (c) Performance of the schemes to be scientifically evaluated by the State and reported to CMC/GFCC before taking up other drainage schemes in the area.

(Action: Sihar Govt./Planning Commission)

Dhu Inganga Froject- Maharashtra Estimated Cost: %, 20458, 37 lakhs

The representative of Deptt. of Environment and Forests informed the Committee that this project was approved from environment angle in January, 1984 with certain safeguards to be implemented during the execution of the project. However, there had been no feed-back/ response from the State Government regarding compensatory afforestation, and constitution of a monitoring Committee for the implementation of their recommendations. Similarly, clearance from Deptt. of Environment and Forests regarding

#2

submergence of 1167.15 ha. of forest land was also required to 60 obtained. The representative of the Deptt. of Agree culture suggested re-examination of the cropping patter especially in view of inclusion of more area for sugard which consumes lot of water.

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Even though the cost of afforestation etc. had been incorporated, and the project is techno-economically acceptable, the Committee decided that the project could be considered for approval after the State Government obtained clearance from Deptt. of Environment and Forests after furnishing necessary data/information.

(Action: Maharashtra Govt./Deptt. of Environment & Forests/CWC)

Indira Ganghi Feeder Gang Cenal Link Channel-Rajasthan- Estimated Cost: 2,1764.00 lakhs

Porests stated that the Mojest real and him be sometimed by the advisory Committee as the same had not been referred for environmental dlearance. Chief Engineer () informed that this proposal was based on the recommendation the eraturile Ministry of Irrigation to facilitate repair and lining of the existing Gang Canal and was to ensure continuity of irrigation in the existing command in Rajasthan.

The Committee while accepting the techno-economic viability decided that necessary reference should be made by the State Government and concurrence of Beptt. of Environment obtained.

(Action: Rajasthan Govt./Planning Commission)

II. New Medium Irrigation Projects

SECTION SECTION SECTION

(1) Renapur- Maharashtra- Estimated cost to 736.06 lakis

Adviser. Planning Commission raised a point that hydrology of this project and cost estimation of certain components needed review. It was clarified by the Chief Engineer, Fig. that the hydrology was based on the data

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collected for the period 1944-1983 and was acceptable. In case of medium project the cost estimate was examined broadly on pro forma basis, and that checking of individual items was not possible. However, as the cost/ha. was only %.17118/- the project would remain economically viable even if there was some increase in cost.

The Committee decided that as the project would serve the drought-prone area and was being taken up by the State Government under Employment Guarantee Scheme, it could be recommended for approval.

(Action: Planning Commission)

(ii) Kundghat Reservoir Project- Bihar Estimated Cost-R. 560.04 lakhs.

project acceptable subject to the following observations

- discharge data at the proposed dam site and the spillway flood would be worked out on the basis of the same basope the detailed designs and the execution of the project was taken up.
 - (b) The project would be included in the State
 Development Plans by the State Government as it
 was not included in the 7th Plan at present.
 - (c) Concurrence of the State Finance Septt.

 for the estimated cost of E.550.04 lakhs
 would be furnished.

(Action: Bihar Govt./Planning Commission)

III.Revised Major Irrigation Projects

(1) Champamati - Assam- Estimated Cost & 4749.02 lakhs

The representative of the Deptt. of Environment and Forest informed the Committee that the scheme was not referred to them and reiterated that all major projects new or revised should be referred to Department of Environment for clearance. After some discussions, the Committee decided that the revised project estimate may be considered acceptable subject to the clearance from the environmental angle and review of the necessity of lining the branch aminor channels.

(Action: Assam Govt./Planning Commission)

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Estimated Cost: 8.640604 lakhs.

Secretary, Ministry of Water Resources stated that the cost of Rehabilitation & resettlement (R&R) which was about %.317 crores seemed to be on higher side. Member (P&P) explained that the costs of R & R provided in the estimate were based on the estimates furnished by the respective State Governments and that this was not the firm cost and the final cost would depend on the norms and details of rehabilitation and resettlement being finalised by the sub-group of NCA headed by the Secretary, Ministry of Welfare, GOI. The Secretary, Ministry of welfare, observed that norms were expected to be finali. shortly. Adviser, Planning Commission wanted to know the phasing of expenditure till completion of the project and the funding pattern. State representative agreed to furnish this to the Planning Commission. He also wanted to know whether alternative studies regarding the dam site, type of dam, power House etc. had been carried out. Shri I.M.Shah, Secretary (Narmada) stated that all these studies had already been carried out. Intervening in the discussions, Chairman, CWC stated that it was only a revised estimate of the project that was being discussed and the basic issues like alternative studies on dam site and type of dam should not come up for discussions at this stage as these were all considered by the Committee earlier.

After some discussions, the revised estimate was considered acceptable by the Committee.

(Action Gujarat Govt /Planning Commission)

(iii) <u>Sriram Sagar Stage-1 - Andhra Pradesh</u> Estimated Cost: Ps. 900.27 lakhs

The representative of the Department of Environment and Forest pointed out that the project was returned to the State Government in January, 1986 due to non-furnishing of the requisite information on environmental aspects. the State Government did not take any action inspite of several reminders, the project had been rejected from environmental angle. Secretary, Ministry of Welfare also pointed out that the rehabilitation details were not furnished by the State Government. However, it was stated

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by Member (FOF). CNC that other observations of the Advisory Committee on the earlier TAC Note were complied. It was also noted that no representative from the State was present to explain the present position in spite of the request made by CNC.

The Committee decided that consideration of the project would be deferred till the compliance to the observations of the Deptt. of Environment and Forests were furnished by the State Government, who should be asked to take expeditious action.

(Action: Andhra Pradesh Government)

(iv) SYL Canal Project - Part - I - Punjab.
Estimated Cost Rs. 42977 lakhs.

Shri K.S.Sharma, Commissioner (Indus), Ministry of Water Resources stated that based on the earlier approved astimate of B. 356 crores, Govt. of India had already released the amount to the State Government and only B.10 crores was in balance with the project authorities for execution of works.

He therefore, stated that the present revised estimate had to be cleared so that Govt. of India was in a position to release further funds for the project. The Committee accepted the revised estimate of the project.

(Action: Planning Commission)

Revised Medium Irrigation Projects

(i) Chevyeru Irrigation Project- Andhra Pradesh Estimated Cost R. 2807, 287 lakhs.

The project was found acceptable by the Committee for its revised cost.

(Action: Planning Commission)

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The Committee took note of the following Projects which wars in advanced stage of construction for which further action was to be taken by the Planning Committee.

Sl. No.	Tame of the Project/State	Estimated cost in G. lakke	Supenditure till 3/88 S. lekhs
	Utilisation of Surplus Revi Beas Waters (Punjah)	1578.01	1211.87
2.	Ohenkwa Dam (U.P.)	300.94	312.00
٠ ﴿ عَمْ	Shahzad Dam (U.P.)	2496.00	2928.00
4.	Mod. of Bewar Branch (U.P.)	160.44	167.00
-6	Mod. of Farralmabad Branch (U.F.)	252.35	229.00
18.	Kothari II(Med.) Irrigation Project(Rajasthan)	936,90	984.36
برجيا	S.Y.L. Canal (Haryana)	2830.00	2489.22
Junes.	Bassi Irrigation Scheme (Rajasthan)	859.42	780 • 72
ر. في	Parabikulam Aliyar Ayacut Ext. (Tamil Madu)	3055,22	2300.00
W.	Modernisation of Pariyar Vagai Stage-II (Tamil Nadu)	10445.00	9593.00
11.	Thimsagar Med. Irrigation Project(Rajasthan)	1992.06	1378,00

VI. Placed Control

(i) Protection of Falasbari and Gumi (Tandalpara) area From erosion of river Frahmabutra- Assam Estimated Cost (S.1537 lakhs

The revised cost of the project was found acceptable by the Committee.

(Action: Planning Commission)

Item Ro.II

Rechno-economic appraisal of on-going projects of 7th Plan
Adviser, Planning Commission handed over in the meeting
D.O.No. 16(25)/40/88-ISCAD dated 17.8.88 addressed to Recretary
Ministry of Water Resources in reply to D.C.No.23/67/88-PA(N)/
1705 dated 5.7.80 written by Chairman, CMC to Dr. Alagh,
Wember (Agriculture) Planning Commission. Since the points
raised in the letter had to be considered further, this item

H3)

could now be taken up.

Movever, during discussions, February, Ministry of Environment & Welfare and Additional Secretary, Ministry of Environment & Forest expressed their deep concern over the plan outlays being approved year after year by the Planning Commission on projects which have neither been cleared from techno-economic angle nor from the environment & forest conservation angle. Wember (PAP) stated that States were not responding properly on such projects resulting in delay, because of provisions being made in the State Plans without such clearance.

Item Mo.III

Consideration of the Draft Guidelines for submission, appraisal and clearance of Irrigation and Multipurpose Projects.

The guidelines as circulated <u>vide</u> CWC letter No. 16/27/37-PA(N)/965-1003 dated 30.3.88 were approved by the Advisory Committee with the proposed alterations/modifications as indicated in the summary record of the 39th moeting of the Advisory Committee held on 12th April, 1988 and circulated <u>vide</u> CWC letter of even number dated 5th May, 1988. A copy of the approved guidelines will be circulated to all the members of the Advisory Committee and the State Governments.

(Action: CMC)



List of officers present in the 70th meeting of the Advisory Committee on Irrication, Flood control and Aultipurpose mojects held of 17th august, 1988.

Present: .

- 1. Shui Namesh Chandra, Secretary, Ministry of Water Resources. - Chairman
- Shri S.S.Varma, Secretary,
 Ministry of Welfare

- Member
- 3. Shri M.A.Chitale, Chairman, CWC.
- Member
- 4. Dr. A.C.Ray, Additional Secy., Ministry of Environment & Forest.
- Member
- 5. Dr. T.V.Sampath, Agriculture Commissioner, Deptt. of Agriculture and Cooperation.
- Member
- 6. Dr. P.C. Shatla, Asstt. Line bo Galeral.
 Representing Director General, ICAR
- Representing Chairman, Central Electricity Authority.
- . Member

- Shri C.G.Desai, Adviser (ILCAD).
 Planning Commission.
- Member
- 9. Shri A.K.Thahur, Dy. Financial Adviser, Ministry of Water Rescurces, representing Financial Adviser, Ministr of Water Resources.
- [ಹಿಡ್ರಾವಿಕಿ
- 10. Shri Z.Hasan, Chief Engineer (PAO), Central Water Commission.
- Member -Secretary.

Also prosent:

4 L. To

Ministry of Water Resources:

- 1. Dr. D.K.Dutt, Chairman, CGWB.
- 2. Shri E.S. Sharma, Commissioner (Indus).
- 3. Shri M.G. Joshi, Ut. Commissioner (PR).
- 4. Shri T. Parthasarathy, JC (BSN).

Planning Commission:

- 1. Shri R.K. Shasin, Consultant.
- 2. Shri R. Nagraj, Deputy Adviser(1500).

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- 1. 1 min .1.400, 19 (1600) b.
- 2. Shri D. Gardoni, Selver(T).
- 3. Suri R. . Shah, Comber(407).
- 4. Sluti (J. . Sydnemi, Chief Dingineer (TPO).
- 5. Shot F. W.Chytterjed, Diructory CD(I).
- S. Shri J.S. Angal, Director (PROJO).
- 7. Shri S.P.Chandhari, Director(PFC at).
- 8. Shri F. .. Suri, Director (PNG).
- S. Shri J.S. Durthy, Director (PA-S).
- 10. Shri F.C. Fau. Director (PASS).

Ganga Flood Control Commission, Satnar -

1. Shri :.R. Waskar, Pember.

(Present for Relevant Items only)

Maharashtra:

1. Shri M.R. Mayangul, Executive Engineer, Dudhganga Project.

Gujarati

- 1. Shri E.M. Shih, Secretary, Marmada Dev. Deptt.,
- 2. Shri C.A.Sabapasa, OSO, (CAD), Irr. Daptt.,
- 3. Stmi B.V.S.Subbaiak, OLD (ISF), Err. Daptt.

Bin

- 1. Shri M.M.Singh, 3.B., Siktin Bannage.
- 2. Shri S.K. Fall, S.E., Pr Call.
- 3. Sari 1.5. Parsal, S.S., Mivance Planning.

<u>Punjak</u>

1 Shridhii.Gupta, C.E. SYL.

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38th Treting of the Advisor Committee on Irrigation, Flood Control & Militagrasse Frojects held on 27.1.88 in Shram Showti Bhawan, New Dolhi.

Summary Record of the 38th Meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 27.1.88, in the Ministry of Water Resources which were circulated vide C.W.C. U.O. No. 16/27/87-PA(N) Vol.III/648-93 dated 6.3.88 may please be amended as follows:-

Item No.II (ii) Page 5
Mahanadi Barrage , Orissa

The estimated cost "Rs.4208.70 lakhs" may be replaced with "Rs.11967.91 lakhs."

Government of India. Central Water Commission

Subject: 39th Meeting of the Advisory Committee on Irrigation, Flood Control, and Multipurpose Projects held on 12th April 1933 in Shram Shakti Bhawan, New Delhi.

The Summary record of the 39th meeting duly approved by the Chairman, Advisory Committee on Trigition, Flood Control and Multipurpose Projects is sant herewith for information and appropriate action by the concerned Organisations.

(Z.Hasan) Chief Engineer(PAO) & Member Secretary

- 1. Shri Naresh Chandra, Secretary, Ministry of Water. Resources, Shrom Shakti Bhawan, New Delhi.
- 2. Shri M.A.Chitale, Chairman, Central Water Commission, Sewa Bhawan, R.K.Purom, New Delhi.
- 3. Secretary (Expenditure), Ministry of Finance, North Block, New Delhi.
- 4. Secret ry, Depar. of Power, Shran Shakti Bhowan, Rafi Marg, New Delhi. (Nominee Shri V.K.Khan, Joint Secretary).
- 5. Secretary, Ministry of Environment & Forests, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi. (Nominee Dr. A.C.Ray, Addl. Secy.)
- 6. Secretary, Deptt. of Agriculture & Co-operation, Krishi Bhawan, New Delhi. (Mominee Shri T.V. Sampath, Agriculture Commissioner).
- 7. Secretary, Ministry of Welfare, Shastri Bhawan, New Delhi.
- 8. Direct or General, ICAR, Krishi Bhawan, New Delhi. (Nominee Dr. I.P. Abrol, Deputy Director General).
- 9. Chairman, Central Electricity Authority, Sewa Bhawan, R.K.Puram, New Delhi.
- 10. Chairman, Central Ground Water Board, Jamnagar House, M.S.Road, New Delhi.

contd...2.

: 2:

- 11. Adviser (I&CAD), Planning Commission, Yojna Bhawan, New Delhi.
- 12. Adviser (Energy), Planning Commission, Yojna Bhawan, New Delhi.
- 13. Financial Adviser, Ministry of Water Resources,
 Shram Shakti Bhawan, New Delhi,
 CWC U.O.No.: 16/27/87-PA(N)/ dt. May, 1988.

Copy to:

Ministry of Water Resources, Shram Shakti Bhawan, New Delhi,

- 1. Addition 1 Secretary.
- 2. Shri M.S.Rae, Commissioner (I&F), 1th Block 7th Floor, CGO Complex; Lodhi Road, New Delhi.
- 3. Shri Ramesh Chandra, Commissioner (P).
- 4. Commissioner(PP).
- 5. Shri S.J.Thomas, Member (B&N), 1th Block &th floor, CGD Complex, Lodhi Road, New Delhi.
- 6. Shri G.V.Rao, Dy. Secretary (P):
- 7. Shri M.G.Joshi, Joint Commissioner(P).

Central Water Commission, Sewa Bhawan, R.K. Puram, New Delhi, 1. Member (P&P).

- 2. Member(D&R).
- 3. Member (RM) .
- 4. Member(WP).
- 5. Chief Engineer, PP Cell.
- 6. Direct or (PA-N)/(PA-S)/(PA-C).
- 7. Direct or (PPC-N)/(PPC-S)/(PPC-C).

Department of Environment

1. Dr.S. Maudgal, Director, Deptt. of Environment, Paryavaran Bhawan, CGO Complex, Lodhi R-oad, New Delhi.

Department of Power

1. Shri R.Dayal, Desk Officer (Hydel) representing Secretary, Dept. of Power.

Department of Agriculture & Co-over sion

- 1. Shri M.H.Rigve, Jt. Commissioner representing Secretary, Dept. of Agriculture & Co-operation.
- 2. Shri S.S. Chibbar, Director (F).

Ministry of Welfare

- T. Shri B. K. Mishro, Jt secretary representing Secretary, Ministry of Welfere.
- 2. Shri D.K.Sikri, Dy.Secondtary.

Department of Agrenany

1. Dr.J.V.Rec, Scientist (Agronomy), ICAR representing Director General, ICAR.

Central Electricity inthority

t. Shri V.V.R.K.Rao, Director(HEP) representing Chairman, Control III of ricity Authority.

Planning Commission

1. Shri N. W. Dilishit, Jt. Adviser, representing Advisor (I&CAD), Planning C-ommission.

States:

- i. Secretary (IFC), Govt. of Punjab, Sinchal Bhawan, Chundig kh-160018.
- 2. Secretary, Irrigation & Power Depth., Govt. of Maharashtra, Mantraleya, Bombay-400032.
- 3. Secretary, Irrigation & CAD Deptt., Govt. of Andhra Fradesh, Secretariat, Hyderabad-560032.
- 4. Secretary, (Irrigation), PWD, Govt. of Karnataka, Vidhan Soudha, Bangalore-560001.

(Z.Hasan) Chief Engineer(PAO) & Member Secretary. SUMMARY RECORD OF 39TH MEETING OF THE ADVISORY COMMITTEE ON IRRIGATION, FLOOD CONTROL AND MULTIPURPOSE PROJECTS HELD ON 12TH APRIL, 1988 AT 3.30 P.M. IN THE COMMITTEE ROOM OF MINISTRY OF LABOUR, SHRAM SHAKTI BHAWAN, NEW DELHI.

The list of Officers who attended the meeting is enclosed as Annex-I.

Item No. 1:

The following projects were considered by the Advisory Committee and the decisions taken are as under :-

I. NEW MAJOR, IRRIGATION PROJECTS



Raising lining of Bhakra Main Line to restore its authorised capacity (Punjab) - Estimated Cost: Rs. 827.25 lakhs.

The Jt. Adviser, Planning Commission pointed out that a meagre provision of Rs.34 lakhs had been made in the 7th Plan by Govt. of Punjab, but no provisions have been made by Haryana or Rajasthan Governments. He also pointed out that it should be treated as a modernisation proposal and the B.C. Ratio calculations may be done. The State Government epresentative clarified that this project envisaged restoring of the original design capacity of the Bhakra Main Line and this could not be considered as a modernisation project. He also stated that the complete distribution system was already in existence and was capable of utilising the increased discharge in the carrier channel, i.e. Bhakra He also informed that Govt. of Haryana had Main Line. already deposited Rs.110 lakhs while Government of Rajasthan had deposited Rs.67 lakhs for carrying out these repairs. Upto 31.3.88 work to the extent of Rs.1 Crore had been carried The Additional Secretary, DOE stated that environmental clearance will be required if new works were involved.

The Advisory Committee decided that this being a restoration work of Bhakra Main Line and as no new work was involved, the project be recommended to the Planning Commission for approval.

(Action : Planning Commission)

(ii) Supplementary note on Gosikhurd Irrigation Project
- Maharashtru, Estimated Cost :.Rs.46119 Lakhs.

The Additional Secretary, Department of Environment observed that the DOE clearance for this project was conditional and the State Government should furnish the required information by 30 th April, 1988, falling which

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the DOE clearance may be withdrawn. The Chief Engineer, Maharashtra replied that the State's compliance on DOE observations was being submitted to the DOE as per schedule.

On the issue of command area development works raised by the representatives from Planning Commission, it was clarified that a provision of Rs. 13.33 crores had been made at the rate of Rs. 2000 per ha. for 1/3rd of. the CCA towards land development which covered landlevelling, field channels, field drains and farm roads under CAD works. The Planning Commission representative indicated that the project should be taken up in the 8th Plan instead of 7th Plan due to very nominal provisions in the 7th Plan for this project. The State Chief Engineer clarified that taking up of Gosikhurd Project in the backward Vidarbha region was necessary and urgent in the sense that in this particular region, the rate of expenditure for development was only Rs. 40 crores per annum as compared to Rs.70 crores per annum in other regions of Maharashtra. Further, there was no scope for resorting to other types of medium and minor irrigation schemes as they alone could not meet the requirement of the region and that programme of minor irrigation in this region was more or less completed. He concluded that taking up of this project in the VII Plan was a must as it was linked with the Employment Guarantee Scheme for the poor people in this backward region.

The Chairman of the Committee shared the concern regarding availability of funds for the project and observed that while issuing the clearance letter, the Planning Commission should take care that adequate funds in a phased manner with a time-bound programme were provided by the State Government for proper implementation of the project, otherwise the project would languish for want of sufficient resources.

(Action: State Govt./Planning Commission)

(iii) Jurala Project (Andhra Pradesh) - Estimated Cost : Rs. 20475 lakhs.

The representative of the DOE pointed out that this project had been rejected by their Department in October 1987 from the enviornmental angle due to non-submission of information required by them from the State Government inspite of reminders. The representatives from Andhra Pradesh clarified that recently in Feb. 1988

they had furnished all the required information in addition to that furnished earlier. They also stated that since no forest land was involved, only clearance from the environmental angle was required. The Department of Environment representative stated that they would first look into the information furnished by the State Government and take a decision for taking up re-examination of the project.

The Planning Commission representative wanted to know whether the consent of the Government of Karnataka had been obtained for the provisions made in the estimate towards compensation for submergence etc. in Karnataka State as a result of the project. It was clarified that provision of Rs.300 lakhs made in the estimate towards the same was based on the information furnished by the Karnataka State Superintending Engineer to his Chief Engineer. However, recently the Government of Karnataka in their communication addressed to the Government of Andhra Pradesh have indicated that the amount of compensation to be paid as Rs.400 lakhs. The State officials of Andhra Pradesh indicated that their State Government was agreeable to paythis compensation.

It was pointed out by the Planning Commission representative that in working out the B.C.Ratio calculations the loss of agricultural produce due to submergence from the barrage had not been taken into consideration. The Central Water Commission officials clarified that since most of the submergence consisted of dry land and the wet land involved was not much, even if this was taken into consideration the project would still be viable.

The officials of the Ministry of Agriculture pointed out that the proposed cropping pattern included high Water-consuming Crops like paddy. They suggested that efforts should be made to grow low water-consuming crops like Jowar, Maize etc. instead of paddy and increase the cropping intensity as this area was water scarcity area and also the area in the country under paddy cultivation was already substantial. The Central Water Commission officials explained that this project was a barrage project and constraint in increasing the rabi cultivation was the water availability during non-monsoon season and hence paddy irrigation during kharif had been provided to make use of the waters available during the monsoon period and derive maximum benefits. It was, however, agreed that the suggestion of the Ministry of Agriculture would be kept in view by the State Government.

The Advisory Committee concluded that the project was techno-sconomically viable and seved drought-prone area and therefore, it could be approved by the Planning Commission after it was cleared by the Department of Environment from environmental angle. The State's officials were requested to pursue the matter with the Department of Environment and expedite their clearance.

(Action: State/Deptt.of Env./Planning Commission)

(iv) Karanja Project (Karnataka) - Estimated Cost: Rs.9800 Lakhs.

The representative of the Department of Environment pointed out that this project was rejected by them sometime in 1985 due to non-submission of additional information by the state Government and the State Government had not bothered to approach the Department of Environment for me-examination the project and submitting the additional information. The officials of the Karnataka State explained that the information sought by the Deptt. of Environment was being collected and promised to furnish the same in about a month or two. The Chairman of the Advisory Committee stressed that the State officials should furnish the information to the Department of Environment without fail in about a month's time and see to it that the issue was re-opened and get the clearance of the Department of Environment without which it would not be possible for the Advisory Committee to recommend the project. In this project no forest land was stated to be involved and only the clearance from environmental angle was necessary.

On a query from the Planning Commission officials, the State's representative confirmed that the State Electricity Board had agreed to make available the power required for the lift irrigation components of the project.

Regarding the conjunctive use of ground water with surface water, the State engineers observed that the water table in the command area of this project was very low and as a result of this project the ground water level were not likely to rise appreciably. The State Ground Water Department had been separately requested to prepare a report of conjuctive use of ground water in this area and if considered necessary ground water utilisation will be implemented.

It was decided that the project will be put to the Advisory Committee again only after the clearance of Department of Environment was obtained.

(Action: State Government/Deptt. of Env./ Planning Commission)

Telugu Ganga Project (Andhra Pradesh) - Estimated Cost:Rs. 83449 Lakhs.

Before taking up this project for discussion, at the request of Chairman of the Advisory Committee the representative from the Andhra Pradesh briefly gave an introduction of the project and the inter-state issues involved and also explained as to how in their view taking up this project was within the KWDT award. The officials from Karnataka and Maharashtra States indicated that their views on this project from the inter-state angle had already been communicated separately to the Ministry of Water

Resources and they had nothing more to say in this regard.

Thereafter, the States representatives withdrew and the Committee discussed the main issues of the project broadly, The Department of Environment informed that all necessary data for forest clearance had since been received and a decision to clear the project from the ForestCoservation Act would be taken up soon. As regards clearance from environmental angle, the main issue was of the norms adopted by the State Government for rehabilitation of the population affected. The present policy of the Andhra Tradesh Government was to pay cash compensation to the population affected which was not accepted by the Department of Environment. The Andhra Pradesh Government had now furnished a modified proposal for rehabilitation in respect of this project and a view by Department of Environment would be taken soon on this proposal.

Since the project was yet to be cleared from the interstate angle, consideration of the project was deferred.

> (Action : Central Water Commission/ Ministry of Water Resources/ Deptt. of Environment)

II. NEW MEDIUM IRRIGATION PROJECTS

Nawargaon Tank Project - Maharashtra, Estimated Cost ; Rs. 526.03 lakhs.

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The Planning Commission representative pointed out that this project was not included in the 7th Plan and as such should be given a low priority vis-a-vis the project included in the 7th Plan-Lit was possible to finalise only those projects for which there was proper response from State Government. As the project angineers for this h prio- project had come forward to sort out the various technical issues, the project had been finalised and found to be techno-economically feasible. This project had also been taken up by the State Government under Employment Guarantee Scheme. The representatives from the Ministry of Agriculture suggested that there was scope for introduction of low duty crops to increase the intensity of irrigation.

t按 7th ... The Committee recommended that the project was technoeconomically viable and could be approved by the Planning Commission after the State Government provide adequate funds for this project in the Plan.

(Action: Planning Commission/State

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fi) Bah Irrigation Project - Madhya Pradesh Estimated Cost: R. 2992.00 lakhs.

As this project was a medium one, the clearance from Department of Environment was not necessary except for the clearance of 340 ha. of forest land. The state had already initiated and sent the forest case from the State to Centre. It was brought out that as the medium projects were prepared on a proforma basis, the details of CAD works etc. were generally not given in the report. Regarding concurrence, it was replied that the concurrence from the State Finance Department for the original estimate and concurrence of State to the estimate now finalised could be obtained. It was also suggested that the present cropping intensity of 137% could be improved by introduction of low duty crops like pulses and oil seeds.

The Committee considered the Project viable and recommended forAts acceptance by Planning Commission subject to concurrence of State Finance Department being submitted by the State Governments and also subject to clearance of Department of Environment from forest angle:

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(Action: Planning Commission/State Government / Department of Environment)

11) Birupa Ganguti Island Project - Orissa, Estimated Cost: Ps. 463.02 lakhs.

The Committee observed that this medium project involved a cost of about Rs.4.63 crores and the benefits could be achieved in about 3 years time. The project was, however, not included in the Seventh Five Year Plan. Since the State Government had shown its keenness to take up this project in the VII Plan and the project had been found techno-economically viable, it could be approved by the Planning Commission after the State Government, allocated sufficient funds for taking up this project.

(Action: State Government / Planning Commission)

(iv) Benetura Irrigation Project - Maharashtra Estimated Cost: Rs. 401.37 lakhs.

Though not included in the VII Plan, the State Government had taken up this project for execution under Employment Guarantee Scheme. The project was found to be technocommically viable and was recommended for approval by the Planning Commission subject to provision of adequate funds by the State Government in a phased manner to ensure its completion according to time-bound construction programme.

(Action: Planning Commission/State Government)

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(v) Decgad Irrigation Project, Maharnehtra Estimated Cost : 3,2463,60 lakhe

The representative from Ministry of Agriculture suggested that the Otate Government could improve the cropping intensity by introducing pulses and oil seeds. The project was already included in VII Plan. It was found techno-economically viable and was recommended for approval by the Planning Commission:

(Notion : Planning Commission/State Covernment)

i) Upper Manar Project - Maharashtra Estimated Cost : Rs.2618.342 Lakas

Member from Department of Invironment indicated that the case for forest clearance had not been received at centre. The Chairman decided that the project even though techno-economically viable could be recommended for approval only after the State Government had processed the case for elearance updarthe Forest Conservation act 1980 at State level and forwarded in the Centre. This procedure should be adopted in all projects where submangence of forest was involved. The Committee also recommended that the Planning Commission might considering approval only afteradequate funds were provided by the State Government to ensure its completion within a time-bound programme.

(Action: State Government/Planning Commission/ Department of Environment)

(Vii) Varadrajaswami Guddi Project, Andhra Pradesh Estimated Cost: Rs. 1396.67 lakhs

Joint Adviser, ISCAD, Planning Commission pointed out that the KMDT had not allotted any water to this. project and wanted it to be clarified how the State Government was proposing to meet their demand. The State's representative explained that the State Government was proposing to meet the demand by saving 1 TMC of water by modernisation and better water management in K.C. Canal, Magarjuna-Sägar Project and Krishna Delta System. Additional Secretary, Deptt. of Environment & Forest intimated that the Ministry of Environment & Forest had given its clearance to this project subject to cortain conditions and also stated that the construction of the dam should be taken up only after the villages, which were affected by the project had been shifted. He wanted to know whether these conditions had been fulfilled by the State Government. The State's representative explained that these villages had already been shifted and sufficient provisions had been made in the estimates for other conditions.

The project was recommended for approval by the Planning Commission.

(Sction : Flanning Commission)

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(viii)Supplementary Note on Baghlati Irrigation Project-Orissa Estimated Cost %.1249.22 lakhs

The compliance of the State Government on the observations of the Edvisory Committee and the recommendations of CMC there on were noted. It was seen that the submergence due to the project involved forest land to an extent of 99.93 ha, and the proposal for acquisition of this forest land under the Forest Conservation Act had not yet been received by the Centre from the State Govt.

It was recommended that the project could be approved by the Planning Commission after the proposals for acquisition of forest land were submitted by the State Govt. to the Centre and clearance received.

(Action: State Govt./Planning Commission)

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Regional Jiri Irrigation Project (NEC) Estimated cost Rs. 1586.00 lakhs

The Ministry of Agriculture officials were of the view that an yield of 60 quintals of paddy per ha. after irrigation, adopted in the benefit cost ratio calculations was on the higher side. The CWC officials pointed out that in the earlier proposals approved in this region, the yield figures adopted were of the same order. The Planning Commission representative expressed that this project was being funded by the PEC which did not have the expertise or man-power to execute and operate the project which was an inter-State project. The CWC officials indicated that the NEC had proposed to set up a Control Board to over-view the functioning of this project. The project would also benefit the North Eastern Region which is a backward area.

The project was considered techno-economically viable and was recommended for approval by the Planning Commission.

(Action : NEC/Planning Commission)

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REVISED MEDIUM IRRIGATION PROJECT

Revised estimate of Gumti Irrigation Project-Tripura Estimated Cost Rs. 1935.00 lakhs

This project which was originally approved for Rs. 5.88 crores in 1978 had to be revised due to escalation of cost, change in designs etc., and the revised estimate now stood at 19.35 crores. There was, however, no change in the scope of the project.

The revised estimate was recommended for approval by the Planning Commission.

(Action : Planning Commission)

Iten No.2:

Techno-economic appraisal of on-going Projects in advanced stage of construction:

The Joint Adviser, Planning Commission, requested that this item may be postponed to the next meeting of the Advisory Committee as Planning Commission was preparing a note on this issue and the same would be circulated to all the Members for their consideration in the next meeting.

(Action : Planning Commission)

Item No.3:

Consideration of the draft guidelines for submission, appraisal and clearance of irrigation and multipurpose projects.

The Joint Adviser, Planning Commission requested that some more time was required by the Planning Commission to study the above guidelines and this item could be postponed to the next meeting.

The Additional Secretary, Deptt. of Environment made the following observations:

- (i) State Deptt. of Environment should be involved from the very beginning when the project proposals were framed and finalised.
- (ii) Regarding Cl.2.17, he suggested that Unvironmental cost should also be taken into account while working out the B.C.Ratio and internal rate of raturn.
- (iii) Regarding Cl.2.19, he was of the opinion that at present there was no State-level Environmental Appraisal Committee in most of the States.
- (iv) Regarding Cl.2.22 he was of the opinion that Deptt. of Environment would not like to entertain project reports directly from the State Govts. and the same should be routed through the CWC. However, direct correspondence between the Deptt. of Environment and State Govts. could take place thereafter, as it was being done at present, for obtaining the required information/data. Final clearance will be communicated to CWC & the State Government.

The representative of Ministry of Welfare suggested that in paras 2.13 and 2.19 mention should be made that in projects where tribal population was affected, the State Tribal Welfare Deptt, should also be involved while finalising the project proposals.

Chairman of the Advisory Committee suggested that a paragaph may be included regarding obtaining clearance in respect of international angle from the Ministry of Water Resources in respect of projects located mean international borders or which might have international repercussions.

It was decided that this item may be deferred to the next meeting before which the views of the Planking Commission and other members will be available to enable finalisation of guidelines.

(Action: CWC/Planning Commission)

Flood Control Projects: ..

The Joint Adviser, Planning Commission stated that as the flood control projects circulated to the members of the Advisory Committee were costing less than 18.2 crores each the same are not required to be put upto the Advisory Committee and the same may be considered by the Planning Commission.

(Action: Planning Commission/GFCC)

AMNEXURE- I

List of Officers present in the 39th Meeting of the Advisory Committee on Irrigation Flood Control and Multipurpose projects held on 12th April, 1988.

PRESENT

- 1. Shri Naresh Chandra, Secretary, Ministry of Water Resources.
- ~ Chairman

2. Shri M.A. Chitale, Chairman, Central Water Commission.

- Member
- 3. Dr. A.C.Ray, Additional Secretary, Department of Environment & Forest.
- ., Member
- 4. Shri R. Dayal, Desk Officer (Hydel) representing Secretary, Department of Power.
- Member
- 5. Shri M.H.Rizve, Joint Commissioner representing Secretary, Department of Agriculture & Cooperation.
- Member
- Shri B.K.Misra, Joint Secretary, representing Secretary, Ministy, of Welfare.
- Member
- 7. Or. J.V.Rao, Scientist (Agronomy)
 ICAR, representing Director General,
 ICAR.
- Member
- 8. Shri V.V.R.K.Rao, Director (HEP) representing Chairman, Central Electricity Authority.
- Member
- 9. Shri N.K.Dikshit, Joint Adviser, representing Adviser (I&CAD), Planning Commission.
- Member
- 10. Shri Z. Hasan, Chief Engineer (PAO), Central Water Commission.
- Member
 Secretary;

Also Present:

Ministry of Water Resources: -

- 1. Shri S.Kanungo, Additional Secretary.
- 2. Shri M.S.Rao, Commissioner (L&F).
- 3. Shri Ramesh Chandra, Commissioner(P).

4. Shri A.K. Thakur, Dy. Financial Adviser.

Planning Commission:-

1. Shrift. Hagaraj, Deputy Adviser.

Ministry of Agriculture & Cooperation: ..

1. Shri S.S.Chibbar, Director(DF).

Ministry of Welfare: -

1. Shri O.R.Sikri, Deputy Secretary.

Central Water Commission: -

- 1. Shri S.J.Thomas, Hember (DER)
- 2. Shri R.B. Shah, Acting Member (PAP)
- 3. Shrik.N. Prasad, Chief Engineer, PP Cell.
- 4. Shri A.D. Mohile, Chief Engineer (Hyd.).
- 5. Shri T.M.Suri, Director (PA-Control)
- 6. : Shri T.S. Murthy, Director (PA-South)
- 7. Shri P.C. Lau, Director (PA-Morth)
- 8. Shri S.T. Chaudhari, Director, PPC (N).

(Present for relovant items only)

Punjab: -

- 1. Shri J.K.Dhir, Chief Engineer, Irgigation.
- 2. Shri Avtar Singh, Superintending Engineer, BML.

Karnataka :--

1. Shri H.R.Channa Veeraidh, Chief Engineer, IP Zone.

Maharashtra:-

- 1. Shri T.G.Rathaparakhi, Chief Engineer, Nagpur.
- 2. Shri K.G.Sankhya, Chief Engineer(MR) & J.S.
- 3. Shri M.V.Santani, Superintending Engineer, IPIO.
- 4. Shri V.N. Pendse, Superintending Engineer, Wardha.

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5. Shri A.B. Mahendrakar, Superintending Engineer (Irrigetion)

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6. Shri S.G.Shirke, Superintending Engineer.

Andhra Pradesh:

- 1. Shri S. Prabhakar, Commissioner & Ex. Officio Secretary.
- 2. Shri Rama Wrishna Rao, Chief Engineer, Irrigation & Investigation.

Government of India Central Water Commission Project Appraisal Organisation

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

SUB: '41st meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Project held on 25.10.88 in Shram Shakti Bhawan, New Delhi.

The Summary Record of the 41st meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 25.10.88 at 3.00 P.M. in the Committee Room of Ministry of Tabour, Shram Shakti Bhawan, New Delhi is circulated herewith.

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for Chief Engineer & Member Secretary.

- 1. Shri Naresh Chandra, Secretary, Ministry of Water Resources, S.S.Bhawan, New Delhi.
- 2. Shri M.A.Chitale, Chairman, CWC, Sewa Bhawan, R.K.Puram, New Delhi.
- Secretary (Expenditure, Min. of Finance, North Block, New Delhi.
- 4. Secretary, Deptt. of Power, S.S.Bhawan, Rafi Marg, New Delhi.
- 5. Secretary, Min. of Environment & Forest, Paryavaran Bhawan, CGO Complex, New Delhi(Nominee- Dr.qA.C.Ray, Addl. Secy.)
- 6. Secretary, Min. of Welfare, Shastri Bhawan, New Delhi:
- 7. Secretary, Deptt. of Agriculture & Co-operation, Krishi Bhawan, New Delhi'Nominee- Shri T.V. Sampath, Agriculturl Commission)
- 8. Director General, I&CAD, Krishi Bhawan, New Delhi (Nominee Dr. I.P.Abrol, Dy.Director General, SAE).
- 9. Chairman, CEA, Sewa Bhawan, R.K. Puram, New DElhi.
- 10. Chairman, C.G.W.B? Krishi Bhawan, New Delhi.
- 11. Adviser (I&CAD), Plannung Commission, Yojana Bhawan, New Delhi.
- 12. Adivser(Energy), Planning Commission, Yojana Bhawan, New Delhi.
- 13. Financial Adviser, Min. of W.R., S.S.Bhawan, New Delhi.

 CWC U.O. No. 16/27/88-PA(N)/ dt. 6- Nov. 1988.

SUMMARY RECORD OF THE 41ST MEETING OF THE ADVISORY COMMITTEE ON IRRIGATION, FLOOD CONTROL AND MULTIPURPOSE PROJECTS HELD ON 25-10+1988 IN THE COMMITTEE ROOM OF MINISTRY OF LABOUR, SHRAM SHAKTI BHAWAN, NEW DELHI.

List of officers who attended the meeting is at Annex:-I.

Item No.1:

Advisory Committee considered the following projects and took decisions as under;

I- NEW MAJOR IRRIGATION/MULTIPURPOSE PROJECTS

1. Vamsadhara Project Stage-II (Andhra Pradesh) - Estimated cost Rs. 27574 lakhs.

The representative of the Department of Environment pointed out that this project report was received by them in 1983 and the State Government was requested to furnish information in the prescribed form. As this information was not forthcoming from the State Government in spite of reminders, the project was rejected by the Department of Environment and the State Government was informed accordingly in 1986. Since then there had been no response or initiative from the State Government for getting the project cleared by the Department of Environment.

The Chief Engineer (PAO) explained that processing of this project was earlier held up due to inter-State issues relating to submergence of Orissa territory. These issues have since been resolved and the techno-economic viability of the modified proposals have been established. Suitable provisions have been made in the estimate for environment and ecology and rehabilitation and resettlement as per norms of the State Government.

The representative of the Ministry of Welfare observed that a population of 818 belonging to scheduled caste and 2068 belonging to scheduled tribe would be affected as a result of this project. However, no Rehabilitation Committee had been constituted by the State Government. The State

Government had indicated that the Rehabilitation Committee will be constituted after the project was cleared.

After some discussions, it was decided that the project could be considered by the Advisory Committee only after the State Government furnished the requisite information to the Department of Environment.

(Action: CWC/State Government/Ministry of Water Resources)

2. Pench Diversion Project - Madhya Pradesh -Estimated Cost Rs. 18404 lakhs

While discussing the project, representative from the Ministry of Welfare indicated that the proposals of rehabilitation and resettlement of the oustees were not spelt out clearly as in the case of Omkareshwar Project of Madhya Pradesh. The Chief Engineer from the State replied that the norms for rehabilitation and resettlement adopted for the project were as per the norms of Madhya Pradesh Government. However, he pointed out that the provisions made for the Narmada Sagar were perhaps more liberal. Adviser(IACAD), Planning Commission pointed out that the provisions for the conjunctive use should not be a part of the irrigation component and should be charged to minor irrigation sector. The Chief Engineer (PAO), Central Water Commission clarified that the conjunctive use of ground water was an integral part of the project and this aspect had been examined and approved by Central Ground Water Board. The benefits from the ground water utilisation were also taken into account while estimating the B.C.Ratio .

- धिर्मेष्याच्या है। विकास के स्वाप्त के स्व केवर भेजसा अध्यक्ति संस्थित ने मध्योगनी इन्हर्स अङ्ग्रहित से सामा असी । विस्तृत क्ष्यहरू सामा This to a Advisory Committee recommended this project for iscord representation the Planning Commission, subject to the sub-Introduct plans for achabilitation and resettlement of to a vivor of the contract of Jaof State Finance and Planning Departments. won sand this palatons of Action: State Government/Planhing CommissionF dog . Tew Omigareshwaru Multdipumpose, Project, Madhya Pradesh noideluquq त्र्यं व्यक्ति विशेष क्षात्र प्रतिवासिक प्रकारिक प्रतिवासिक प्रति देश के ताब महास्थान प्राप्त है। end needs south this project was a part of the Narmada Valley the Development of the Advisory Committee enquired end to why the Revised Cost for Narmada Sagar Project was - blacked ayed for which Member (Engg.) NVDA replied that it would be submitted, shortly. Representative of Department of Environment reported that the Omkareshwar Project was The source of the state of the environmental angle in 1936 and so far is to the State Government had not sent any proposal either for Jamie The envilonment or for forest case. Adviser (I&CAD) Planning Commission had remarked that the intensity irrigation of 193% adopted for this project was very the phigh compared to the intensities adopted generally for M.P. He attributed this to the conjunctive utilisation coids logog considered as part of irrigation system. The Chairman, CWC pointed out that the intensity of irrigation for ground water and surface water may be indicated क्षेत्र के किल्पान के किल्पान कर किल्पान कर किल्पान कर है। विश्व का कार्य के किल्पान कर कि separately for proper accounting and the State should furnish the requisite information.

Advisory Committee, however, decided to consider this project in the next meeting after the State had sent

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the case for the forest and environmental clearance to the Department of Environment.

(action: State Government)



Bhatsa Irrigation Project Maharashtra-Estimated Cost Rs. 16411 lakhs

Chairman, Advisory Committee raised the point regading the measures by the State for passing the higher design flood of 10171 cumec instead of the present flood of 5342 cumec for which the project was designed. The State representative clarified that the State Government was considering 3 alternatives, namely; raising of the dam suitably; lowering of the spillway crest by 2 m; and, provision of the saddle spillway for passing the additional discharge. Regarding the clearance from the environmental angle, representative of Department of Environment informed that they had closed the case as the dam was almost complete and there was no purpose in examining the same now. The representative of Ministry of Welfare also pointed out that the rehabilitation and resettlement plans were yet to be made and the Action Plan for the affected population was required. The State representative clarified that the rehabilitation and resettlement of 578 persons affected by Bhatsa has already been done and a provision of Rs.36.369 lakhs have been made for the remaining rehabilitation work which includes resettlement of 45 persons affected by Momri dam.

In view of the project having been taken up before the Forest (Conservation) Act 1980 came into existence, Advisory Committee recommended the clearance of the project

subject to State's follow-up action as given below:-

- 1. The State was to submit within 3 months firm proposals for providing additional spillway for Bhatsa and finalisation of Momri earth dam design catering to the revised design flood as approved by C.W.C.
- 2. Case for forest clearance for additional forest lands should be sent to the Ministry of Environment and Forest for obtaining necessary clearance from Environment and Forest angle.

(Action: State Government/Planning Commission).

Modernisation of Dantiwada Reservoir Project, Gujarat Estimated Cost Rs. 3488.01 lakhs

Chairman, CWC informed that Dantiwada was a modernisation proposal of existing canal and distribution system
and the State had already been requested to obtain clearance
of the Department of Environment from environmental angle.
Advicer (I&CAD) desired that the State be asked to give
action plan for the balance works yet to be completed.

The Committee considered the project acceptable subject to clearance from the Department of Environment and action plan for balance works.

(Action: State Government/Planning Commission)

6. Modernisation of Fatehwadi Canal System, Gujarat Estimated Cost Rs. 2476.53 lakhs

The Committee considered the project acceptable subject to following:

- i) Obtaining clearance of Department of Environment from environmental angle.
- ii) State Government would submit a time-bound action plan to the Planning Commission for completion of balance works yet to be executed.

(Action: State Government/Planning Commission)

S.Y.L. Canal Part-III, Punjab- Estimated Cost

Rs. 4812 lakhs.

Additional Secretar, Ministry of Water Resources conveyed the views of Chairman, CGWB, who could not attend the meeting, that some vital issues were yet to be resolved regarding use of ground water. Chairman, Advisory Committee desired that a meeting be convered by the CGWB with Government of Punjab to sort out the outstanding issues on Ground Water expeditiously before the project was recommended to Planning Commission for approval.

(Action: CGWB/State Government/ Planning Commission)

8. Singur Project, Andhra Pradesh-Estimated cost -10436 lakhs

This project was earlier considered by the Advisory Committee and was cleared subject to certain observations. The observations of the Advisory Committee were complied with by the State Government. The estimate was also updated and the project was recommended to the Planning Commission for clearance. The Planning Commission, however, desired that the updated project estimate shall be put up to the Advisory Committee for consideration. Accordingly, the project was put up. This was mainly a water supply project for supplying drinking water to the twin cities of Hyderabad and Secundrabad.

The updated estimate was considered acceptable by the Advisory Committee and recommended for approval by the Planning Commission.

(Action: Planning Commission)

II- NEW MEDIUM IRRIGATION PROJECTS.

1. 6 Deo Irrigation Project, Crissa-Estimated Cost Ps. 4076 Lakhs

This project involved acquisition of forest and of 320.45 ha. However, the proposal for release of this forest land had not been sent by the State Government to the Centre (Department of Forest). It was, therefore, decided that this project could be considered after the State Government submitted the proposal to the Centre for release of forest land and reviewed the design flood based on observed data as suggested by the Advisory Committee at its meeting held on 6th Jan., 1983.

(Action: State Government)

2. Rukura Irrigation Project(Orissa) - Estimated cost - 20.1517 lakhs

This project involved acquisition of forest land of 365 hm. However, the State Government had not made any proposal to the Centre (Department of Forest) for the release of this forest land. It was, therefore, decided that this project could be considered after the State Government sent proposal to the Centre for release of forest land.

(Action: State Government)

III REVISED MAJOR IRRIGATION/MULTIPUPPOSE PROJECTS

1. Jayakwadi Stage I Maharashtra- Estimated cost %.18543
lakhs

Adviser(IACAD), Planning Commission pointed out that the incréase in revised cost of the project from Rs.38.46 crores (1964) to Rs.185.62 crores (1984) was very high.

It was explained that rise in cost was high as besides escalation, certain new works like lining of the entire canal and distribution system including extension to 5-8 ha. block and drainage net-work were introduced, which were not provided for earlier. Adviser(IECAD) felt that this amounted to change in the scope of the project and, therefore, techno-economic viability of the project needed to be ro-stablished. Chairman, CWC opined that as expenditure of almost 100% of the latest cost of the project had, already been incurred and Stage-I of the project was almost complete, the exercise would be purely academic and need not be insisted upon. However, at the time of examination of Stage-II these spects could be taken care of.

After some discussions the Committee accepted the Revised Estimate of the Project.

(Action : Planning Commission)

2. Tehri Dam Project, Uttar Pradesh-Estimated Cost: %.137350 lakhs

The representative of Ministry of Environment and Forest informed the Committee that the project was not formally referred to the Department of Environment initially. In 1980, when the Prime Minister directed for review of the project a Working Goup was set up which submitted the report. So far, no formal approval had been given as far as environmental clearance was concerned. Necessary action plans for environmental protection wars to be prapared once the River Valley Authority was set up by the State Government. State Government representative informed that a concept paper for

constituting an Authority was already submitted to the Government and the Authority was likely to be set up very soon.

Chairman, Advisory Committee informed the . State representative that Ministry of Tourism had desired that their representative should also be included in the Authority so that necessary developments in that region from tourism considerations may be taken care of. The State representative noted the suggestion.

Chairman, Advisory Committee enquired if the seismicity aspect of the project was fully taken care of. In reply, the State Government representative informed that the Soviet Experts had already examined the detailed project and had agreed to the Indian designs from seis-mic considerations.

Adviser, Energy, Planning Commission enquired if the Soviets were preparing a detailed project report, as was the usual practice by that country. In reply, State representative informed that only appraisal sport prepared by USSR was received. However, detailed project report for the power component was being prepared by the Soviet Experts and would be submitted in due course.

After discussions, the Committee accepted the project with the suggestion that transmission system for evacuation of the power to the areas of demand should also be taken up simultane usly in order to obtain forest clearance for the complete project including transmission lines.

(Action: State Government/Planning Commission)

3. Western Kosi Canal (India portion), Bihar Estimated cost : 3. 32661.24 lakhs

Regarding abnormal increase in the cost of the project, Members wanted to know whether the State Government was also

including the maintenance cost of the various components of the project in the revised estimate. The estimate as put up to the Advisory Committee on review indicated that 88% of the increase in the cost was due to the price rise and the remaining was due to change in design and additional requirements. It could thus be inferred that no such provision in respect of maintenance of the project was included in the revised estimate.

The Committee accepted the revised estimate subject to clearance from Department of Environment.

(Action: State Government/Planning Commission)

IV. PROJECTS IN ADVANCED STAGE OF CONSTRUCTION.

Projects namely Guntur Channel(A.P.) and Belharna Reservoir Project(Bihar) which were in the advanced stage of construction were put up to the Advisory Committee as short notes. The position was noted by the Committee.

Adviser(1902), Planning Commission pointed out that the processing of such schemes should be carried out as suggested vide his 0.0. No. 16(25)/40/38-ISCAD dated 17.8.88. addressed to Secretary, Ministry of Water Resources.

Chairman, CWC stated that the Primary purpose of project appraisal in CWC was to establish technomeconomic viability of the projects before any decisions regarding investment clearance was taken by the Planning Commission. In these cases, when the projects had already been nearing completion, there was no purpose in continuing with the appraisal when the investment clearance was already given by the Planning Commission, Chairman, Advisory Committee suggested that Planning Commission might constitute a Monitoring Committee was concerned the decision taken by it in its 30th meeting have

been followed in subsequent meetings & it will not be possible to withdraw it now in 41st meeting.

(Action: Planning Commission)

V. REVISED MEDIUM IRRIGATION PROMECTS

1.√ Panchkhero Reservoir Project, Rihar

Estimated Cost Rs. 954.9 lakbs

The revised estimate was found acceptable by the advisory Committee.

(Action Planning Commission)

Item No.2:- Consideration of the Draft Guidelines for submission, appraisal a clearance of Ireland. & Multipurpose Projects.

Adviser(IRCAD) Planning Commission stated that the guidelines seemed to be on the same lines as the procedure being adopted at present except that certain time limits had been specified for completing the appraisal of a major and madium marigation projects. He was informed by the Chairman, CHC that it was not so, and the guidelines had been framed as per the recommendations of the Working Group set up by the Ministry of Water Resources headed by Chairman, CHC in conformity with the recommendations of the Conference of State Irrigation Ministers held in July, 1986. He was requested to offer his comments, if any for modification of the guidelines. Adviser(IACAD) after examination of the guidelines stated that these would be sent within a month.

(Action: Planning Commission)

Annex-I

LIST OF OFFICERS PRESENT IN THE 41ST MEETING OF THE ADVISORY COMMITTEE OF PRIGHTION, FLOOD CONTROL AND MULTIPURPOSE PROJECTS HELD ON 25-10-1988.

PRESENT:

- Shri Maresh Chandra, Secretary, Ministry of Water Resources.
- Chairman

 Shri M.A.Chitale, Chairman, Central Water Commission

- Member
- 3. Dr. S.Maudgal, Director, representing Secretary, Deptt. of Env. & Forest. Men
 - Member
- Shri M.C.Gehani, Director,
 representing Secretary, Deptt. of Power.
- Member
- 5. Shri S.S.Chibbar, Director (DF), representing Secretary, Deptt. of Agriculture & Co-operation.
- Member
- Shri R.C.Verma, Director, representing Secretary, Ministry of Welfare.
- Member
- 7. Shri A.K.Thakur, Py. F.A. representing Financial Adivser, Min. of Water Resources.
- Member
- 8. Shri J.C.Gupta, Member(ME), representing Chairman, Central Electricity Authority.
- Member
- 9. Shri C.G.Desai, Adivser(IACAD), Planning Commission.
- Member
- 10. Dr. Uddesh Kohli, Adviser (Energy),
 Planning Commission.
- Member
- 11. Shri Z.Hasan, Chief Engineer (PAO). Central Water Commission.
- Member Secretary

Also Present:

Ministry of Water Resources:

- 1. Shri J.P.Single, Additional Secretary.
- 2. Shri S.R.Sahasubudhe, Commissioner (Project)

Planning Commission:

- 1. Shri R.W.Bhasin, Consultant (I&CAD).
- 2. Shri Hemant Kumar, SRO (I&CAD).

GOVERNMENT OF INDIA CENTRAL WATER COMMISSION PROJECT APPRAISAL ORGANISATION

SEWA BHAWAN, R.K.P. NEW DELHI.

SUBJECT:-

42nd meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose-Project held on 11.1.89 in Shram Shakti Bhawan, New Delhi.

The Summary Record of the 42nd meeting of the Advisory Committee on Irrigation, Flood Control and Multipur, Projects held on 11.1.89 at 3.00 P.M. in the Committee Room of Ministry of Labour, Shram Shakti Bhawan, New Delhi is circulated herewith.

No. 319/A/INEAD/89

(z. ĤASAN) Chief Engineer & Member Secretary.

- 1. Shri Naresh Chandra, Secretary, Ministry of Water Resource S.S. Bhawan, New Delhi.
- Shri M.A.Chitale, Chairman, Central Water Commission, Sewa Bhawan, R.K.Puram, New Delhi.
- 3. Secretary, (Expenditure), Min. of Finance, North Block, Market
- 4. Sauratary, Deptt. of Power, S.S.Bhawan, Rafi Marg, New Delhi (Nominee Shri V.K.Khanna, Jt. Secretary).
- 5. Secretary, Min. of Environment & Forest, Paryavaran Bhis CGO Complex, New Delhi (Hominee Dr.A.C.Ray, Addl. Secy.),
- 5. Secretary, Min. of Welfare, Shastri Bhawan, New Delhi.
 - Secretary, Deptt. of Agriculture & Co-operation, Krish: Bhawan, New Delhi(Nomines Sh. T.V.Sampath, Agr. Commission Director General, IACAR, Krishi Bhawan, New Delhi. (Nomines Dr.I.P. Abrel, Dy. Director General, SAE).

Chairman, Central Electricity Authority, Sawa Bhawan,

R.M. Puram, New Dalhi.

10. Chairman, Central Ground Water Board, Krishi Bhawan, E. Advisur(IGCAD), Planning Commission, Yojana Bhawan, How Delhi.

12. Advisor (Energy), Planning Commission, Yojana Bhawan, Design

13. Financial Adviser, Min. of Water Resources, S.S.Bhawan. New Delhi.

CNC U.O. No. 16/27/88-71(N)/23(

it. 2 Feb.,

Copy to:-

Ministry of Water Resources:-

- 1. Militianal Secretary, S.S.Bhawan, New Delhi.
- 2. Joint Secretary (PP), S.S.Bhawan, New Delhi.

___3/-

- 3. commissioner (PR), S.S.Bhawan, New Delhi.
- 4. Commissioner(I&F), 11th Block, 7th Floor, CGO Com lex, Lodi Road, New Delhi.
- 5. Commissioner(B&N), 11th Block, 8th Floor, CGO Complex, Lod: Road, New Delhi.
- 6. Joint Commissioner (PP); S.S.Bhawan, "ew Delhi.
- 7. Joint Commissioner (PR), S.S.Bhawan, New Delhi.
- 8. Joint Commissioner (Flood), S.S.Bhawan, New Delhi.

Central Water Commission, Sewa Bhawan, R.K. Puram, New Delhi.

- 1. Member (P&P)
- 2. Member (D&R)
- 3. : Member (RM)
- 4. Member (WP)
- 5. Chief Engineer (PPO)
- 6. Chief Engineer (Mon-North)
- 7. ChiefEnginear (Mon-South)
- 8. Director (PA-N)/(PA-S)/(PA-C).
- 9. Director(PPO-N)/(PPO-S)/(PPO-C).

Department of Environment:

 Dr. S.Midgal, Director, Deptt. of Environment, Paryavaran Bhawan, CGO Complex, Lodi Roax, New Delhi.

Ganga Flood Control Commission, Sinchai Bhawan, Patna, Bihar

1. Shri G.R.Keskar, Member, Ganga Flood Control Commission, Sinchai Bhawan, Patna, Bihar.

T _O ,	
The Secretary,	,
Govt. of	

(Z.MASAN) Chief Engineer (PAO) & Member Secretary. Summary Record of the 42nd meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose projects held on 11.1.89 in the Committee Room of Ministry of Labour, Shram Shakti Bhawan, New Delhi.

List of officers who attended the meeting is at Annex-I.

Item No.1:- Advisory Committee considered the following
projects and took decisions as under:-

I- NEW MAJOR IRRIGATION/MULTIPURPOSE PROJECTS

1. Modernisation of Shetrunji Irrigation Scheme, Gujarat Estimated Cost, Rs. 2668 lakhs.

The representative of the Deptt. of Environment pointed out that though the main canal structures were already existing, in the process of modernisation the distribution system was being extended to provide irrigation upto 5 to 8 ha. blocks which involved acquisition of additional land. He pointed out that farmers with less than facres holding are required to be compendated on the principle of land for land. The State representative replied that the project being in the Saurashtra region, where the average farm holding was more than 5 acres the question of land compensation would not arise. The Deptt. of Environment representative stressed that this aspect should be kept in view while forwarding the proposal for environmental clearance.

Representative from the Ministry of Agriculture pointed out that the purpose of modernisation was to save water by way of lining so as to bring some more areas under irrigation. In such a situation he was of the view that high water consuming crops should be kept at a minimum. The State Representative brought to the notice of the Committee that

irrigation in this project was being provided to farmers where the main concern was to get staple food and, therefore, wheat has been provided in 22.3% of the area. However, it /Government was considered that the State Marks should try to increase the area under Groundnut to the extent possible by reducing wheat to 14.8%.

The representative of CGWB pointed out that the soil in this project being underlain by Basaltic lava flows, lining should have been done on selective basis for the reaches where heavy seepages were observed. The State representative informed that the nature of the command was predominantly sandy which required lining of the complete canal distribution system. However, he agreed that the views of CGWB would be looked into.

After discussions, the Committee recommended this project for approval by the Planning Commission subject to the following conditions:-

- i) State Government would make regular scientific observations in post-modernisation conditions, collect and analyse data with respect to seepage losses after lining, additional area brought under irrigation, value of the crops produced etc. so that this would serve as a data base for similar projects.
- ii)State would make arrangements for provision of additional spillway capacity required to pass the revised design flood.
- iii) The State would expeditiously obtain clearance from the Department of Environment.

2. Modernisation of Kharicut Canal System, Gujarat

Estimated Cost: Rs. 810 lakhs.

This project, also being a modernisation scheme in the same region, was recommended for approval subject to the following conditions:-

- i) State Government would make regular scientific observations in post modernisation conditions and collect, analyse data with respect to seepage losses after lining, additional area brought underitrigation, value of the crops produced etc. so that this would serve as a data base.
- ii) The State would expeditiously obtain clearance from Department of Environment.
- iii) Percentage of paddy crop should not be increased & on the other hand Bajra and other less water consuming crops should be encouraged.

(Action: State Government/ Planning Commission)

3. Modernisation of Bhadar Irrigation Project- Gujarat Estimated Cost: No. 1860 lakhs.

This project, also being a modernisation scheme in the same region, was recommended for approval subject to the following conditions:-

- i) The State would make arrangements for providing additional spillway capacity for the revised design flood.
- ii) State Government would expeditiously obtain clearance from the Department of Environment.

(Action: State Govt./Planning Commission).

O4. Mahanadi ChitrotpalaIsland Irrigation Project.-Orissa Estimated Cost: Rs. 3993.37 lakhs.

The representative of the Department of Environment information ment indicated that the Z and data furnished by the State Government was to be discussed with the State officials and it was also proposed to consider this project in the next meeting of the Environment Appraisal Committee to be held in January 1989.

After some discussions, the Committee recommended the project for approval by the Planning Commission subject to clearance of Department of Environment.

(Action: State Government/Planning Commission)

Wan River Project, Maharashtra Estimated Cost: Rs. 4685 lakhs.

The representative of the Department of Environment stated that, though the project had been cleared from environmental and forest angles, there was no feed-back from the State Government regarding the implementation of safeguards stipulated at the time of clearance. It was agreed that monitoring of follow-up actions in this regard will be done by the State and reported to Department of Environment. The representative of the CGWB suggested adoption of conjunctive utilisation in the project proposals. It was informed by Director(PA-C), CWC that 27.77 Mm³ of ground water of total availability of 56 Mm³ had been proposal in the project proposals and necessary provisions were made in the estimate.

The Committee recommended the project for approval by the Planning Commission.

(Action: Planning Commission)

Estimated Cost: Rs.25910.70 lakhs.

ment informed that the compliance of the State Government in respect of environment was under examination and the project would be considered soon. Regarding clearance of 11.1 ha. of forest land, the State Government had submitted the case in December, 1988. It was brought to the notice of the Advisory Committee that Central Ground Water Board had cleared the project with the suggestion that continuous ground water monitoring in the project command would be undertaken by the State Government for taking up any remedial measures, if had ssary, after implementation of the scheme.

The Project was recommended for approval by the Planning Commission subject to the following conditions:

- i) The State Government would expeditiously obtain clearance from Department of Environment.
- ii) The State Government would obtain concurrence of State Electricity Board for availability of Power (150 MW) for rubning of Pumps.
- iii) The State Government would obtain concurrence of State Finance Deptt.

 for the cost of %. 259.10 crores.

 (Action: State Govt./Planning Commission)



Karwa Project, Maharashtra. Estimated Cost: Rs. 2700.00 lakhs.

The representative of the Ministry of Agriculture pointed out that the irrigation intensity in the project was low, being 65% only. He suggested introduction of late duty crops and thereby improving the intensities of irrigation. The State representative agreed to keep the above observations in view during implementation of the project.

The Committee recommended the project for approval by the Planning Commission subject to clearance from Forest angle and subject to the suggestions of the CGWE being taken care of. The State Government was directed submit the forest case to the Ministry of Environments & Forests within three months, as well as the feed-back on follow-up action on environmental safeguards.

(Action: State Govt /Planning Commission:

8. Bargi Multi urpose Project, Madhya Pradesh. Estimated Cost: No. 56634 lakhs.

The Committee was informed that the project was examined by the Deptt. of Environment in 1984 and a communication was sent to the State Government in June 1985 informing that it was not possible for the Deptt. of Environment to consider the project as it was already in an advanced stage of construction. The State representation informed the Committee that the project construction was taken up during 1972-73 and as the main dam was already completed and 60% of the canal works were also completed.

clearance from the Depth. of Environment might not be insided upon. However, at the suggestion of Chairman, the representative from the Depth. of Environment agreed to examine the case for environmental clearance.

After some discussions, the Advisory Committee decided to defer the consideration of the project to the next meeting with directions to the State Government to furnish the following within two months preferably before the next meeting was held:

- i) As 35,000 people were affected by the project, the State Government should send rehabilitation and resettlement plans to the Ministry of Welfare for their scrutiny.
- ii) The Status regarding the catchment area treatment would be submitted after identification of the legraded areas and work programme of the catchment area treatment with approximate cost.
- iii) A complete case for environment clearance should be submitted as per the requirement of Department of Environment. Similarly, the State should furnish a copy of dereservation of forest land done before 1980.

(Action: State Govt.)

9. Narmada Sagar Project - Maihya Pradesh Estimated Cost: Rs. 196667 lakhs.

The project was earlier considered by Advisory Committee in 1984 and found acceptable subject to certain

observations including clearance from Deptt. of Environment, which have since be in complied with.

The representative of the Deutt. of Environment pointed out that the project was cleared subject to certain conditions and the same have not been fulfilled by the State Government especially with regard to :-

- i) Tdentification of non-forest land for compensatory afforestation.
- ii) Identification of land for oustees.

Representative of NVDA explained that non-forest land for compensatory afforestation was not available: in the State and a certificate to that effect was issued by the Chief Secretary and was submitted to the Department of Environment. Representative of Department of Environment also pointed but that catchment area treatment and ruhabilitation and resettlement proposals in respect of Omkareshwar, Maheshwar and Bargi Diversion Projects were still to be finalised and furnished to the Department of Environment. In reply, the NVDA representative informed that R&R Plan for Maheshwar were being submitted within one month and that for Omkareshwar within six months. Bargi Project not being under the control of NVDA it was not possible for him to give any commitment. Secretary, Ministry of Water Resources observed that catchment area treatment of Bargi would benefit the Narmada Gagar Project and as such MVDA should take initiative for early formulation of the CAT Programme at Bargi Project. He also stated that suitable action plan was being drawn up by State Government for the bustees of Narmada Sagar Project.

However, Secretary, Ministry of Water Resources observed that the clearance of the project need not be held up as the implementation of environmental and rehabilitation aspects are being taken care of by special sub-groups of Narmada Control Authority.

Secretary, Ministry of Water Resources pointed out that the submergence of the project was high compared to the command area benefitted. NVDA representative clarified that the annual irrigation from Narmada Sagar could be increased from the present 1.69 lakh ha. to 2.69 lakh ha. after introduction of sprinkler irrigation and conjunctive use of ground water. It was pointed out that this Project would also be benefitting the downstream projects namely, Mahoshwar, Omkareshwar and Sardar Sarovar projects both in irrigation and power production and as such it should be viewed in overall perspective. Chairman, CWC suggested that an overall picture of the various major projects in the valley should be projected on an integrated basis.

Secretary, Ministry of Water Resources pointed out that the cost of generation of power was indicated as 73 Paise per KWh which appeared to be high. He suggested that CEA may look into this aspect in more detail.

After some discussions, the project was recommended for approval by the Planning Commission.

> (Action: State Govt./CEA/Planning Commission)

II. NEW MEDIUM IRRIGATION PROJECTS

1. Sub Surface Orain ge in South Western Districts of Punjab.
Estimated Cost: Rs. 1001 lakhs.

Socratary, Ministry of Water Resources pointed out that the proposal was for reclamation of private land and no revenue would be realised by the Government. Chairman, CWC suggested that betterment levy could be imposed if it was permissible under State Ofinage Act. It was clarified by the State representative that certain low pockets in the irrigated commands had become waterlogged due to non-existence of proper drainage system. However, he promised that the question of imposing betterment levy would be looked into by the State Government. It was also brought out that this is a pilot project of subsurface drainage and its results will be useful. On a query raised by the Secretary, Ministry of Water Resources regarding the cropping pattern it was clarified by the State Repesantative that mostly low buty crops hall been proposed in the reclaimed area. However, percentage of Faddy was only 16% which was unavoidable due to prevailing gractics in the adjoining areas.

The project was recommended for approval by the Planning Commission subject to the condition that provision of betterment levy and replacement of proposed paddy crop with maize would be considered by the State Government.

(Action: State Govt./Planning Commission)

Bhairwa Reservoir Scheme- Bihar Estimated Cost: 7s. 2018.85 lakhs

The representative of the Ministry of Agricultura pointed out that the cost per ha. of irrigated area was very much on the high side and he suggested that offorts should be made for enhancement of the irrigated areas by adopting low duty crops like maize.

The Committee recommended the project for approval by the Planning Commission subject to the condition that the State Government would review the cropping pattern, if feasible, based on the soil survey.

(Action: State Govt./Planuint Commission)

III. REVISED MA JOR IRRIGATION/MULTIPURPOSE PROJECTS:

1. Bardikari Irrigation Project, Assam Estimated Cost: %. 2212.47 lakhs.

Director (PA-C), CWC informed that as the project works were mostly completed and the project was earlier accepted by the Advisory Committee during 1974, the project might not require environmental clearance. The representative of Deptt. of Environment informed the Committee that the clearance would be necessary even though the project was a revised estimate and might involutionly minor changes in the scope. However, Deptt. of Environment had examined the project from environmental angle and had sought certain clarifications, which had been submitted by the State on 23.12.88. The representative of Central Ground Water Board pointed out that there was

and the first

no provision for the conjunctive utilisation of ground water. Director(PA-C), GWC clarified that the original project proposals were formulated during 1970's and hence this acreet was not taken into account. It was informed that the State Government would be directed to monitor the ground water after the implementation of the Scheme.

The project was recommended for approval by the Planning Commission subject to formal clearance from environment and forest angle.

(Action: State Govt./Planning Commission

2. Potteru Irrigation Project, Orissa () Estimated Cost: Rs. 8370 lakhs.

The representative of the Deptt. of Environment informed that the project had not been referred for environment and forest clearance. It was clarified by Director (PAS) that the original project was considered by the Chbinot at its meeting on 27.11.75 and was cleared from the environment and forest angles. Moreover, the third revised estimate was also approved by the Planning Commission in October, 1987 and there was no change in the scope of the project. The representative of the Deptt. of Environment, however, insisted that a copy of the revised project estimate might be furnished to them for their information and necessary action. State Government will take action in this regard.

The Committee recommended the project for approval by the Planning Commission:

Estimated Cost: Rs.121491 lakhs.

Earlier, this project was considered in the 38th Meeting of the Advisory Committee held on 27.1.88 and in the light of the observations made by the Advisory Committee a supplementary note was now put up for consideration where the revised provisions had been made for drainage and lining of distribution system. The representative of Deptt. of Environment informal that certain additional information had been sought from the Government of Karnataka in Dec., 1988 regarding use of forest land in the project. It was informed that environment clearance would be considered after receipt of this information.

The Committee recommended the roject for approval by the Planning Commission subject to the clearance by Department of Environment.

(Action: State Govt./Planning Commission)

- IV. REVISED MEDIUM IRRIGATION PROJECTS.
 - Kansjore Reservoir Scheme, Bihar.
 Estimated Cost: Rs. 2090.80 lakhs.

The project was recommended for approval by the Plancking Commission.

(Action: Planning Commission).

V. PROJECTS IN ADVANCED STAGE OF CONSTRUCTION:

Projects as enumerated below, which were in the advanced stage of construction, were put up to the Advisory Committee as short notes. The position was

noted by the Committee.

- Wartak Reservoir Project- Gujarat, Estimated Cost : Rs.2200 lakhs.
- 2. Nandini Reservoir Project, Bihar, Estimated Cost : Ns. 833.16 lakhs.
- 3. Chittaurgarh Resevoir Project, U.P. Estimated Cost : Rs. 1354 lakhs.

Item No.2: Status of techno-economic appraisal of Major Irrigation/Multipurpose and medium Irrigation projects of VII Plan.

The position of appraisal of the on-going major and medium irrigation projects of 7th Plan as indicated in the agenda note was noted by the Committee. Amongst the major irrigation projects, it was decided that technoceconomic appraisal of Shahnehar Irrigation Project of Himachal Pradesh and Kishau Pam Project of U.P. which involved inter-State agreement would be expedited. Bansage Project, Unit-II Canals of MP and Rajghat Canal Project, U.P. which were being monitored by CWC would be taken up on priority and finalised at the earliest. Similarly, for other major projects necessary action would be taken to expedite their finalisation.

Amongst the medium irrigation projects it was decided that Rongai Valley Irrigation Project of Meghalaya would be taken up on priority and afforts would be made to be put up this project in the next meeting of the Advisory Committee.

(Action: CWC)

ANNEXLI

List of Officers present in the 42nd meeting of the Advisory Committee on Trrigation, Flood Control and Multi, irpose projects hel on 11th January, 1989.

PRESENT

 Shri Naresh Chandra, Secretary, Ministry of Water Resources

Chaiman

 Shri M.A. Chitale, Chairman, Central Water Commission

Member

3. Dr. A.C.Ray, Additional Secretary, representing Secy., Ministry of Env. and Forest.

Member

4. Shri K.C.Gehani, Director, representing Secretary, Department of Power

Member

5. Shri S.S.Chibbar, Director (DF).
representing Secretary, Department
of Agriculture& Co-operation

Member

 Shri B.K.Misra, Joint Secretary, representing Secretary, Ministry of Welfare.

Member

7. Shri D.K.Singh, Financial Advisor, Ministry of Water Resources.

Member

8. Shri P.C.Sinha, Chief Hydrogeologist representing Chairman, CGWB

Member

9. Shri Z. Hasan, Chief Engineer (PAO), Central Water Commission.

Member S cretary

Also Present:

Ministry of Water Resources

- 1. Shri J.P.Singh, Additional Secretary
- 2. Shri S.R.Sahastrabudhe, Commissioner (Projects).

Central Water Commission

- 1. Shri R.B.Shah, Member (P&P).
- 2. Shri Y.D. Pendse, Member (WP).
- 3. Shri P.C.Lau, Director (PA-N)
- 4. Shri T.S.Murthy, Director (PA-S)

- 5. Shri T.M. Suri, Director (PA-C).
- 6. Shri S.T.Chowdhary, Director (PPO-N)
- 7. Shri A.K.Mahana, Director, (PPO-C)
- 8. Shri S.K. Govil, Director, (PPO-S)
- 9. Shri P.K. Chatterjee, Director, Cost Engineering(I)

(Present for relevant items only)

Gujarat

1. Shri S.S.Patel, Superintending Engineer, Water Resources Department.

Maharashtra

- 1. Shri N.P.Anantharam, Superintending Engineer, Irrigation Project, Inv.& WRI.
- 2. Shri M.M.Joshi, Superintending Engineer, Irrigation Deptt.
- 3. Shri P.N.Diveker, Superintending Engineer, IPI Circle.

Madhya Pradesh

- 1. Shri R.S.Khanna, Vice Chairman, NVDA & ACS, NVDD Bhopal.
- 2. Shri M.S.Billore, Member Engg.& E-in-C, NVDA, Bhopal.
- 3. Shri T.N. Maharishi, Member (Evn. & Forest), NVDA, Bhopal.
- 4. Shri N.V. Kute , Chief Engineer, Indira Sagar Project.
- 5. Shri O.N.Thapar, Chief Engineer, Bureau of Design (BODHE)
- 6. Shri V.K.Vaidya, Superintending Engineer, Narmada Bav. Circle-8.
- Shri S.R. Vipyragiya, Superintending Engineer, Bargi Project.

Orissa

- 1. Shri M.P.Mohapatra, Chief Engineer, Mohanadi Barrage Project.
- 2. Shri M.L.Lath, Superintending Engineer.

Punjab

1. Shri B.S.Virdi, Executive Engineer, Drainage Deptt.

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GOVERNMENT OF INDIA.
CENTRAL WATER COMMISSION OF PROJECT APPRAISAL ORGANISATIONS

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SEWA BHAWAN, R.K.PURAM, NEW DELHI.

Subject: 43rd meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projectsheld on 18.5.89 in Shram Shakti Bhawan, New Delhi.

June 1840 Toupo

The Summary Record of the 43rd meeting of the 2916 Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 18.5.89 at 3.00 P.M. in the Committee Room of Ministry of Labour, Shram Shakti Bhawan, New Delhi is circulated herewith.

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(Z-HASAN) Chief Engineer & Member Secretary.

1. Shri M.A.Chitale, Secretary, Min. of Water Resources, S.S.Bhawan, New Delhi.

Shri M.S.Rao, Chairman, Central Water Commission, Sewa Bhawan, R.K.Puram, New Delhi.

3. Secretary (Expenditure), Min. of Finance, North Block, New Delhi.

4. Secretary, Deptt. of Power, S.S.Bhawan, Rafi Marg, New Delhi(Nominee Shri V.K. Channa, Jt. Secretary).

5. Secretary, Min. of Environment & Forest, Paryavaran Bhawan, CGO Complex, New Delhi(Nomince Dr. A.C.Ray, Addl. Secy.).

6. Secretary, Min. of Welfare, Shastri Bhawan, New Delhi.

7. Secretary, Deptt. of Agriculture & Co-operation, Krishi
Bhawan, New Delhi (Nominee Shri T.V.Sampath, Agricultural
Commissioner).

8. Director General, IGCAR, Krishi Bhawan, New Delhi. (Nomines Dr. I.P.Abrol, Dy. Director General, SAE).

9. Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi.

10. Chairman, Central Ground Water Board, Krishi Bhawan, New Delhi.

21. Adviser (ISCAD), Planning Commission, Yojana Bhawan, New Delhi.

 Adviser (Energ), Planning Commission, Yojana Bhawan, New Delhi.

13 Financial Adviser, Min. of Water Resources, S.S.Bhawan, New Delhi.

CWC U.O. No. 16/27/88-PA(N)//997

dt. 24 June 189.

Copy to:

Ministry of Water Resources:

- 1. Additional Secretary, S.S. Ehawan, New Delhi.
- 2. Joint Secretary (PP), S.S.Bhawan, New Delhi.
- 3. Commissioner(PR), S.S.Bhawan.

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GOVERNMENT OF INDIA CENTRAL WATER COMMISSION PROJECT APPRAISAL ORGANIS ATION.

· 4 4

SEWA BHAWAN, R.K.PURAM, NEW DELHI.

Subject: 43rd meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projectsheld on 18.5.89 in Shram Shakti Bhayan, New Delhi.

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(Z HASAN) Chief Engineer & Member Secretary.

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Shri M.A.Chitale, Secretary, Min. of Water Resources,
 S.S.Bhawan, New Delhi.

2. Shri M.S.Rao, Chairman, Central Water Commission, Sewa Bhawan, R.K.Puram, New Delhi.

3. Secretary (Expenditure), Min. of Finance, North Block, New Delhi.

4. Secretary, Deptt. of Power, S.S.Bhawan, Rafi Marg, New Delhi(Nominee Shri V.K.Khanna, Jt. Secretary).

5. Secretary, Min. of Environment & Forest, Paryavaran Bhawan, CGO Complex, New Delhi(Nominee Dr. A.C.Ray, Addl. Secy.).

6. Secretary, Min. of Welfare, Shastri Bhawan, New Delhi. 7. Secretary, Deptt. of Agriculture & Co-operation, Krish

Secretary, Deptt. of Agriculture & Co-operation, Krishi Bhawan, New Delhi (Nominee Shri T.V.Sampath, Agricultural Commissioner).

 Director General, INCAR, Krishi Bhawan, New Delhi. (Nominee Dr. I.P.Abrol, Dy. Director General, SAE).

9. Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi.

10. Chairman, Central Ground Water Board, Krishi Bhawan, New Delhi.

 Adviser (ISCAD), Planning Commission, Yojana Bhawan, New Delhi.

12. Adviser (Energ), Planning Commission, Yojana Bhawan, New Delhi.

13. Financial Adviser, Min. of Water Resources, S.S.Bhawan, New Delhi.

CWC U.O. No. 16/27/88-PA(N)//977

at. 247 June 89

Copy to:

Ministry of Water Resources:

1. Additional Secretary, S.S.Bhawan, New Delhi.

2. Joint Secretary (PP), S.S.Bhawan, New Delhi.

. Commissioner (PR), S.S.Bhawah.

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- 4. Commissioner'I&F), 11th Block, 7th Floor, CGO Complex, Lodhi Road, New Delhi.
- 5. Commissioner (B&N), 11th Block, 8th Floor, CGO Complex, Lothi Road, New Delhi.
- 6. Joint Commissioner (PP), S.S. Fhawan.
- 7. Joint Commissioner (PR), S.S.Bhawan.
- 8. Joint Commissioner (Flood), S.S. Bhawan.

Central Water Commission, Sawa Bhawan, R.K. Puram, New Delhi.

1. Member (P&P).

2. Member (D&R).

3. Member (RM).

- 4. Member (wP).
- 5. Chief Engineer (P-0).
- 6. Chief Engineer (Mon. North)
- 7. Chif Engineer (Mon- South).
- 8. Director (PA-N)/(PA-S)/(PA-C).
- 9. Director (PPO-N)/(PPO-S)/(PPO-C).

Department of Environment:

1. Dr. S. Maudgal, Adviser, Doptt. of Environment, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi.

Ganga Flood Control Commission, Sinchai Bhawan, Patna, Bihar.

1. Chairman, Ganga Flood Control Commission, Sinchai Bhawan, Patna, Bihar.

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•	The Secretary, Govt. of
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(Z.HASAN) Chief Engineer & Membor Secretary.



Summary record of the 43rd meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 18.5.1989 in the Committee Room of Ministry of Labour, Shram Shakti Bhawan, New Delhi.

List of Officers who attended the meeting is at Annex-I.

Item No.1:

Advisory Committee considered the following projects and took decisions as under:

I- D New Major irrigation/multipurpose projects:

1. Arunavati River Project, Maharashtra.

Estimated Cost- Rs.6648.00 lakhs.

At the out-set, the representative of Ministry of Environment & Forests informed that the State Govt. had not complied with the various requirements relating to the environmental aspects and hence the project was rejected 1986. It was also informed that Min. of Environment & Forestshad not received till date any further information from the State Govt. The State representative however, clarified that a detailed phyironmental report had been submitted to the Min. of Environment & Forests during April, 1987 and the forest case was submitted in January, 1989. Chairman, Advisory Committee, suggested that the matter may be sorted out by the State Govt. officers with the officers of Min. of Environment & Forests by personal discussions. The representative of the Planning Commission suggested that the ecology and environmental issues related to the excessive carry-over storage of 72 mm proposed by the State Govt. may also be examined by the Ministry of Environment & Forests. representative from the Min. of Welfare mentioned that the provisions made for rehabilitation and resettlement particularly in respect of scheduled tribes were not clearly spelt out in the note for the Advisory Committee. He was of the opinion that the financial provisions were very low. State officers pointed out that the provisions were dispersed under different heads. On this Chairman of the Advisory Committee suggested that a consolidated note indicating the complete proposal in respect of rehabilitation and resettlement of the oustees including the provisions made under

different sub-head should be prepared by the State Govt. and submitted to the Ministry of Welfare for their examination.

After discussions the Advisory Committee considered the project acceptable subject to the following:

- i) Concurrence of State Finance and Planning Deptt. to the revised cost of %.6648.00 lakhs to be firnished by the State Govt.
- ii) Clearance from Ministry of Environment & Forests to be obtained by the State Govt. and furnished.
- iii) The note giving the consolidated proposals for the rehabilitation and resettlement of the oustees to be prepared and submitted to Ministry of Welfate for their examination & acceptance.

(Action, State Government/Planning Commission)

Bawanthadi Project, Maharashtra.
Estimated Cost %.16157.50 lakhs.

The representative of the Ministry of Welfare pointed out that the provisions made for rehabilitation and resettlement of nearly 2023 persons belonging to the scheduled tribes was r required to be spelt out in complete details. He also felt that provisions as indicated in the agenda notes seemed to be quite low. On this Director, Cost Engineering(I), C.W.C. clarifiel that the provisions shown in the sub-head rehabilitation and resettlemen't were for the economic packages like transportation and for resettlement and construction of facilities like school buildings and other amenities required for their resettle-Provisions for compensations for submergence of the property, land etc. had been included under head B-lands. He stated that after these were also considered the cost of R & R would be of the order of %. 10,700 to %.15,000. Chairman of the Advisory Committee suggested that total provisions made for R & R including the provisions made under the sub-head B-Land may be worked out and submitted to the Ministry of Welfare for their examination.

The representative of Ministry of Environment & Forêsts mentioned that the revised norms of Govt. of Maharashtra regarding R & R namely free plot to displaced persons, cash

compensation when the land is not available, %s.2000/- per person for rehabilitation and resettlement etc. had not been indicated. Moreover, Master Plan for R & R were also not furnished.

The representative of the Planning Commission stated that the provisions made under the sub-head drainage were comparatively low. On this, Director, Cost Engineering(I) C.W.C. explained that the rate was worked out on the basis of a typical estimate prepared for 10 per cent area of the command after necessary surveys. The representative of CGWB mentioned that the existing ground water potential was around 221 Mm3 and by considering post-project re-charging of 108 Mm3 the ground water potential available would be of the order of 329 Mm3. However, in the project proposals only 10 Mm3 ground water would be utilised for conjunctive use. No detailed programme for utilisation of the balance ground water potential had been included in the project report. Chief Engineer (PAO) informed that besides conjunctive use, the ground water would also be utilised by shallow tube wells under minor irrigation as indicated in the TAC note. The Chairman of the Advisory Committee suggested that the State Govt. may study this aspect in full detail and formulate suitable programme for utilisation of the gound water potential available in the command, rather than allowing it to drain into the river system and lost to the total area.

After discussions, the Advisory Committee considered the project as acceptable subject to the following observations.

- i) Concurrence of the State Finance and Planning Deptt.

 to the revised cost of %.15157.50 lakhs to be furnished.
- ii) Detailed R & R Plans to be submitted to Ministry of Environment & Forests and Ministry of Welfare for their examination.
- iii) Ground water potential available was of the order of 329 Mm³, out of which 10 Mm³ was proposed to be utilised in the project for conjunctive use. A detailed programme for the utilisation of the balance ground water potential should be formulated by the State Govt.

(Action: State Government/Planning Commission)

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Sangola Branch Canal, Maharashtra. Estimated Cost Rs. 3701.00 lakhs.

The representative of the Ministry of Environment & Forests informed that the additional information asked for from the State Govt. had not been received by them. The State representative assured that the necessary information would be furnished to the Ministry of Environment & Forests at the earliest.

The Advisory Committee found the project acceptable, subject to the conditions that clearance from the Deptt. of Environment & Forests and concurrence of State Finance Department would be furnished by the State Govt.

(Action: State Government/Planning Commission)

4. Punjab Irrigation Project, Phase-II- Lining of Water Courses, Punjab.

Estimated cost- 3.11747.09 lakhs.

The Member-Secretary, informed the Committee that this project was earlier considered by the Committee in its 38th meeting held on 27.1.88, and two observations were raised. The Advisory Committee observations had been complied by the State Govt. and hence a supplementary note had been put up for consideration of the Committee. representative of the Ministry of Environment & Forests informed that the project had been cleared considering that lining of water courses was being undertaken in the same area where lining of distributaries etc. had already been done in the State. He also suggested that there was need to monitor the quality of the ground water so that some sagguards against any adverse impact could be taken. Chairman of the Advisory Committee suggested that monitoring of water Quality and evolving safe-guard measures etc. should form a component and part of the package to be placed before the World Bank for appraisal. The representative of the Planning Commission stressed the need for State Govt. to make adequate Provisions in the Annual Plan and 8th Five Year Plan for implementing the component of the package including the lining of the water courses.

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The Advisory Committee recommended the project for approval by the Planning Commission.

(Action: Planning Commission)

5. Modernisation of Cauvery Delta Phase-I, Tamil Nadu Estimated Cost %.7880.00 lakhs.

Member-Secretary, explained to the Committee that Cauvery Delta System was one of the very ancient irrigation systems of the country and the proposed modernisation was for improving the functioning of the system so that water could reache the tail end reaches even under emerging new situation of short supply. It was also explained that great care had been taken to see that neither annual irrigation nor CCA or the boundaries of the command of the Phase-I part pertaining to 70,000 ha. in any way altered the earlier situation.

Commissioner (Projects), Ministry of Water Resources, however, pointed out that in Phase-I area, there was some increase—proposed in the area under heavy-duty crops such as sugarcane & banana even though the total area under irrigation remained unaltered. Chairman, Advisory Committee, suggested that the areas under such crops should be strictly maintained at pre-project level only & the project features & requirements of water should be altered to that extent

The representative of the State Government informed that a letter was addressed to Government of Karnataka in Nov., 1985 and they have been kept apprised by sending to them the project proposals alongwith the maps. No response had been received from Govt. of Karnataka. The State representative further pointed out that 2.2 TMC of water saved from the modernisation of 70,000 ha. under Phase-I, would form part of the overall savings aimed out from the delta area and could be considered for reallocation between the various States. He also pointed out that for ensuring savings of water from Delta area as contemplated in the earlier interstate discussions, projects of this type would be necessary and will have to be taken up early.

Chairman, Advisory Committee, directed that the Tamil Nadu Govt, should give a clear undertaking that not only

the total cropped area but area under heavy duty crops would not be increased and the savings which would be available after implementation of Phase-I of the project, would be considered for allocation amongs the riparian States. The projects case can be taken up for clearance from the instestate angle only therafter.

The Advisory Committee recommended the project for approval by the Planning Commission subject to the clearance from the interstate angle by the Ministry of Water Resources.

(Action: State Govt./Planning Commission)

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- II. New Medium Irrigation Projects:
- 1. Chapdoh Tank Project, Maharashtra Estimated Cost Rs.608.00 lakhs.

The project proposals were briefly introduced by the Member-Secretary to the members of the Advisory Committee Adviser (I&CAD), Planning Commission informed that the project was not included in the 7th Plan and the State had desired to take up the scheme under Employment Guarantee Scheme. The State was required to justify for taking up the scheme before investment clearance could be accorded. On this, the State Govt. representative mentioned that the Project was to benefit Vidarbha Region which had least irrigation development as compared to the other regions. As such, the demand fortaking up this scheme was being 🗀 raised by the local people. On this Chairman, Advisory Committee, suggested that Govt. of Maharashtra may clearly communicate a detailed programme of Irrigation Development for removal of regional imbalances and the same should be furnished to the Planning Commission through the State Planning Department.

The representative of the Ministry of Welfare mentioned that R & R provision was quite low. The State representative clarified that free plots and other compensations given by the State Govt. had not been shown under this sub-heal. Chairman, of the Advisory Committee suggested that a detailed note on R & R may be prepared and furnished to Ministry of Welfare for their examination.

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After discussions, the Advisory Committee found the project acceptable subject to the following observations;

- i) Concurrence of the State Finance and Flanning Departments for revised cost of %.508.00 lakhs to be furnished.
- ii) A detailed programme of Irrigation works for removal of the regional imbalances, particularly in respect of Vidarbha region should be furnished to the Planning Commission through the State Planning Deptt.
- iii) Rehabilitation and resettlement plan be prepared and furnished to Ministry of Welfare for their examination.
 - iv) Forest clearance to be obtained by the State
 Govt. and furnished.

(Action: State Govt./Planning Commission)

2. Anaimaduvu Reservoir Project, Tamil Nadu Estimated Cost Rs.1146.09 lakhs.

The Advisory Committee recommended the project for approval by the Planning Commission.

(Action: Planning Commission)

- III. Revised Major Irrigation/Multipurpose Projects
- 1. Jamrani Multipurpose Dam Project, U.P. Estimated Cost Rs. 14484.00 lakhs.

Member-Secretary gave the background history of the Project and explained the revised proposals which had been examined by all the concerned scrutinising agencies of CWC, Ministry of Water Resources and Ministry of Agriculture. At the outset, representative of CEA pointed out that they had not received any project report for the power component and hence the allocation indicated as Rs.12 crores for the power, could not be examined and hence would not be acceptable.

The representative of the Ministry of Welfare pointed out that the details of the R & R proposals for the outstees specially, tribals were not available in the Advisory Committee note, and hence, it could not be assessed

if the provisions made were sufficient. On this Chairman, Advisory Committee, suggested that a copy of the project involving tribal ousters should invariably be sent to Ministry of Welfare for their examination.

Forests, informed the Committee that the Action Plans were not furnished by the State Govt. It was also informed that during discussions, with the State officers the various requirements had been listed out and further discussions were likely to take place on 7th June, when the project would be put up to the Environment Appraisal Committee. He informed the Committee regarding some of points which were raised with the State officers, which were as follows:

- v a) Though the catchment area was small, importance of the catchment area treatment attained significance because of industrial development, development of tourists spots and other levelopments in the region.
 - b) There was necessity to make a good assessment about the ground water situation in the command.
 - c) As 1500 people are affected, their rehabilitation and resettlement would have to be strictly worked out and furnished.
 - d) As Tarai and Bhabar areas are prone to water-bound diseases, status report shall have to be prepared, in consultation with the Health Authorities and furnished.
 - e) 7/8th of the water supply is earmarked for urban areas, while only 1/8th is to be provided to the rural areas. It had to be ensured that the water supply 'ar-marked for rural areas is not diverted for any other purposes.

Chairman, CGWB, stated that after introduction of surface irrigation, the utilisation of ground water structures would get reduced. With increase in the application of surface water in the Bhabar areas chances were that more

re-generation would take place in the Tarai areas thereby creating water-logging problem in certain patches. In view of this, he suggested that conjunctive use of ground water should have formed an integral part of the project's operational

planto avoid any water-logging problems in the Taral area in future.

The aspects relating to conjunctive use has been discussed on para 2.3 of TAC note and it is indicated that this area has a well established ground water withdrawal system through deep and medium State tube-wells constructed by Minor Irrigation Deptt. and farmers themselves.

After discussions, the Advisory Committee considered the project acceptable, subject to the following /

- i) Rehabilitation and resettlement of tribal/
 oustees shall be brought out in complete detail
 and furnished to Ministry of Welfare/Mih. of Environment & Forests for their examination.
- ii) Environmental & Forest clearance would be obtained by the State Govt. and furnished to the Planning Commission.
- iii) An operational programme for conjunctive use of ground-water would be developed during the course of implementation of the project.
 - iv) The allocation of Rs.12 crores made for the power component would be at present charged to the irrigation component and the B.C.Ratio/IRR would be re-calculated and furnished by the State Government.

(Action: State Government/Planning Commission)

IV Flood Control Projects:

Sitapur Town Flood Protection Scheme, U.P Estimated Cost % 601.00 lakhs.

Commissioner(P), Ministry of Water Resources explained the project's background. After discussions, the Advisory Committee decided that the project be put up again to the Advisory Committee after complying with the following observations:



- i) Clearance from the State Control Board would be obtained and furnished.
- ii) More detailed calculations would be made for working out the height of the embankments with respect to anticipated affilix.

(Action: State Govt./GFCC)

ITEM No. 2: Status of techno-economic appraisal of Major Irrigation/Multipurpose and Medium Irrigation Project of 7th Plan.

Chairman of the Advisory Committee apprised the Committee Members regarding a large number of on-going projects of 7th plan which still remained unapproved.

In addition, revised estimates were due in a large number of cases. Further, about 182 new projects (42 Major + 140 medium) are expected to be received during the year 89-90 for appraisal - before the get included in the eighth plan. The Advisory Committee was expected to handle about 350 cases in a year. He invited suggestions from the various Members as to how this peculiar situation could be handled by the Advisory Committee. With regard to the ongoing unapproved projects the representative of Ministry of Environment & Forests made the following specific suggestions:

- a) As the Centre's power was limited to sanction of outlays, he sugge ted that the Planning Commission should not approve the outlays in the case of projects which were not techno-economically cleared by the Advisory Committee, otherwise the functioning of the Committee becomes meaningless.
- b) He suggested that in the case of such States were habitual defaulters and are not observing the discipline of getting the projects approved before taking them up for implementation, no new projects should be entertained from them in CWC for a certain period till the backlog of compliance is settled.
- c) He suggested that the matter should be taken up by Chairman of the Advisory Committee with the

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Deputy Chairman, Planning Commission, or the concerned Member of the Planning Commission for laying down Further guidelines to the Advisory Committee in this matter. After liscussions, it was lecided that the whole situation should be placed before the Member (Agriculture) for further directions from the Planning Commission in the matter.

ITEM No. 3: Additional Items.

Two additional items were taken up by the Advisory Committee and the agenda notes for the same were circulated to all the Members during the meeting.

- 1) The first item pertained to the 7.0. letter dated 6.4.89 written by Adviser(I&CAD) to Secretary, Ministry of Water Resources. The letter contained enclosures giving the observations of the Adviser(I&CAD) on each of the projects which were considered in the 42nd meeting of the Advisory Committee. Chairman, of the Advisory Committee and other members of the Committee were of the view that re-consideration of the projects on which decisions had already been taken by the Advisory Committee in the earlier meeting was not advisable. Planning Commission's officers could hold meetings with the various States directly for getting further clarifications on these projects.
- draft guidelines for submission, appraisal and clearance of Irrigation, Multipurpose Projects. The guidelines were considered in the 39th meeting of the Advisory Committee held on 12.4.88 and found acceptable, except that for carrying out the study of the guidelines and offering his remarks. The item was again considered in the 40th and 41st meeting of the Advisory Committee held on 17.8.83 and 25.12.88, respectively when Adviser (IACAD), Planning Commission had stated that he would examine the guidelines and offer his comments, within a month so that a decision could be taken for circulating the guidelines to all the States. As no commentshed been received from the Adviser (IACAD), Planning Commission,

he representative of the Flanning Commission had requested some more time.)

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for consideration so far, the Committee decided that the guidelines were finally treated as acceptable and it was decided to circulate them to all concerned immediately.

(Action: Central Water Commission)

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List of officers present in the 43rd meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 18th May, 1989.

PRESENT

1. Shri M.A.Chitale, Secretary,
Hinistry of Water Resources. Chairman

2. Shri M.S.Rao, Chairman,
Central Water Commission.
Member

3. Or. S.Mudgal, Adviser representing Secretary, Ministry of Environment and Forests. Member

4. Shri D.K.Sikri, Deputy Secretary representing Secretary, Ministry of Welfare. Member

5. Shri A.K.Thakur, Deputy Financial Adviser, representing Financial Adviser, Ministry of Water Resources. Member

6. Dr. D.K.Dutt, Chairman,
Central Ground Water Board.
Member

7. Shri C.G.Desai, Adviser(I&CAD)
Planning Commission. Member

8. Shri V.V.R.K.Rao, Director
Representing Chairman, C.E.A. Member

9. Shri Z.Hasan, Chief Engineer (PAO)
Central Water Commission. Member-Secretary.

Also Present

Ministry of Water Resources:

- 1. Shri J.P.Single, Additional Secretary.
- 2. Shri S.R.Sahasrabudhe, Commissioner (Projects).
- 3. Shri M.G.Joshi, Jt. Commissioner (Projects).
- 4. Shri B. Pyda Raju, Jt. Commissioner (Floods).

Central Water Commission

- 1. Shri Y.D.Pendse, Member (W.P.).
- Shri P.K.Chatterjes, Director, Cost Engineering(I).

- 3. Shri T.S.Murthy, Director (PA-S)
- 4. Shri P.C.Lau, Director(PA-N).
- 5. Shri Y.V.Dharma Rap, Director (Pro-S).

Planning Commission:

1. Shri B.N.Navalawala, Joint Adviser(I&CAD).
(Present for relevant items only).

Maharashtra

- Shri N.P.Anantharam, Superintending Engineer, Irrigation Department.
- 2. Shri V.N.Pendse, Superintending Engineer, Irrigation Department.

UTTER PRADESH:

- 1. Shri P.S.Rastogi, Engineer-in-Chief(D&P), Irrigation Department.
- 2. Shri R.S. Mathur, Chief Engineer, Irrigation Department.
- 3. Shri B.K.Tripathi, Superintending Engineer, Irrigation Department.
- 4. Prof. K.P. Jain, WAIMI, Irrigation Department.

Tamil Nadu

- 1. Shri R.Sethuratham, Chief Engineer, PWD.
- 2. Shri S.R.Raghavan, Deputy Chief Engineer, PWD.
- 3. Shri K.Pandey, Director, PPC, PWD.

Punjab

- 1. Shri R.K.Gupta, Divisional Engineer, PSTC.
- 2. Shri Paramjit Rai, Divisional Engineer, PSTC.

Summary Record of the 44th Meeting of the Advisory Committee on Irrigation Flood Control and Multipurpose Projects held on 22.9.89 in the Committee Room of Ministry of Labour, S.S.Bhawan, New Delinia

List of Officers who attended the meeting is at Annex-I.

Advisory Committee considered the following projects and took decisions as under:-

I. V New Major Irrigation/Multipurpose Projects

() 1. Rehabilitation and Improvement of Canal regulation Structures in the Canal System of Punjab, Punjab.
Estimated Cost Rs.: 3449.00 Lakhs

Adviser(T&CAD), Planning Commission desired to know the reasons for rehabilitation of Canal regulation structures in the Bhakra System which was not very old. It was explained that only such control structures that were old and needed replacement were included for rehabilitation and they formed less than 10% of the total work in all the systems. It was also clarified that the rehabilitation and improvement included in the estimate proposed installation of 83 numbers of automated gauge recorders on branch canal heads where the discharges were over 5.66 curect. The provision for this work was meagre even though the description under item 'D'of Abstract of cost, highlighted and mentioned, "Regulators and measuring devices" at Rs.23.91 crores.

After discussions the Committee considered the project acceptable.

(Action: Planning Commission)

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Lower Wunna Project-Maharashtra

Estimated Cost: Rs.8755 Lakhs

A question was raised regarding low intensity of Irrigation which was 118% for which Director (PA-C), CWC replied that it was due to limitation of storage. The FRL had to be constrained to avoid submergence of upstream railway line crossing the upper and of reservoir. The State representative had informed that there was a limitation of command area also. There was good deal of discussion on the rehabilitation aspects and the representative from the Ministry of Welfare desired that the comprehensive pro-Posals for resettlement & rehabilitation of all the outstees was to be submitted to Ministry of Welfare for their examination/olimrance. He insisted that there should be special provision for the tribals/STs affected in the project. The State representative replied that as per the Maharashtra Resettlement Act'76 no special provision for STs had been laid down and informed that the rehabilitation of the persons affected by Nand storage had already been implemented according to the provisions made in the Maharashtra State Govt.Act.

After discussions the committee considered the project acceptable subject to the following:-

- i) The rehabilitation and resettlement plan sent to Ministry of Environment & Forest would also be submitted to the Ministry of Wilfare for examination and comments if any
- ii) Clearance from environmental and forest angle would be obtained.
- iii) Concurrence of the State Finance Deptt.for the present estimated cost to be furnished.

(Action: State Covt.)

. Punad Irrigation Project-Maharashtra

Estimated Cost: Rs. 2992.00 lakhs

Adviser (I&CAD); Planning Commission pointed out that there was no substantial expenditure incurred on the project. In to restriction on the availability of funds he suggested that the provisions made for this project during the 8th Plan should be diverted to the ongoing projects of Maharashtra so that early realisation of irrigation benefits was achieved. The State relation sentative informed that the project was to benefit drought project and tribal areas and the State Govt.wanted to implement the project for the benefit of the people in this backward region. The reposesentative from the Ministry of Agriculture pointed out that the project proposals envisaged very low intensity of irrigation which was 61% only. Director (PA-C), CWC clarified that the low intensity was due to the limitation of water availability. representative of Ministry of Welfare pointed out that there is 585 tribals affected by the project and adequate provision for the rehabilitation was required to be ensured. The State representation tive informed that necessary provisions were already made at 1966 the Rehabilitation and Resettlement Act 76 of the State.

After discussions the project was found acceptable subject to the following:-

- i) Details of rehabilitation and resettlement plan would be have shed by the State Govt. to Ministry of Welfare for their continuation.
- ii) Environmental and Forest clearance to be obtained.
- iii) Concurrence of the State Finance Deptt.to be furnished.

 (Action: State Only)
- 4. Sidhmukh Irrigation Project-Rajasthan
 Estimated Cost: Rs.10300 Lakhs.

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5. Nohar Irrigation Project- Rajasthan
Estimated Cost: Rs. 4059 Lakhs

A question was raised regarding the low intensity of irrigation proposed in the projects. The State representation

Clarified that the intensity of irrigation was low because of necessity of more numbers of waterings with the use of modified Penman Method adopted for working out crop—water requirement. He stated that more area could be irrigated if the crop water requirements were adopted as per the irrigation practices in the adjoining Bhakra System, where the intensity was as high as 62%.

Both the Projects were considered acceptable by the Committee subject to the following:-

- i) The State would furnish a detailed note within a week bringing out the Possible improvement in the intensity of irrigation by using crop water requirement as per the practice in the adjoining Bhakra System.
- ii) Environmental and Forest Clearance to be obtained.

(Action: State Govt.)

6. Bargi Multipurpose Project- M.P. (Renamed-Rani Avanti Bai Sagar)

Estimated Cost: Rs. 56634.00 lakhs

The Bargi Multipurpose Project was earlier considered by the Advisory Committee in Jan. 1989 and as per the observations of the Advisory Committee this supplementary note with the State Govt.compliance had been put up for reconsideration. The Advisory Committee enquired whether due to the above compliances the project benefit cost ratio would get affected. The State representative clarified that the detailed catchment area treatment plan had been prepared and about Rs.3 Crores had been allocated for charging to Eargi Diversion Project which was a component of Bargi Multipurpose Project and as such the B.C.Ratio of this project would not be affected. Further it was informed that the existing B.C.Ratio was 1.89 which was more than the acceptable value of 1.5. Even if the catchment area treatment cost was taken into γ account the revised B.C.Ratio would not be lower then 1.84. There was discussion on the economics of rehabilitation of the project affected people for which the State Representative replied that the effective rehabilitation measures as per the norms of the M.P. Govt.had already been taken care of and substantial expenditure was incurred.

Adviser(T&CAD), Planning Commission pointed out that the State Govt.had not complied to the observations of the Planning Commission sent earlier. Though the State representative clarified all the points in the meeting, the Adviser, Planning Commission desired that a note in reply be sent to the Planning Commission.

As the project was in an advanced stage of construction and the environmental clearance was yet to be accorded the committee suggested that the Deptt. of Environment might examine this project from environmental angle and suggest measures which could be monitored by CWC to ensure environmental protection for the project.

Contd..4/-

The Committee considered the project acceptable subject the conditions mentioned above.

(Action:State Govt./Min.of Environment & Forests)

Chimoni Irrigation Project - Kerala

Estimated Cost: Rs.3615.00 lakhs.

The Supplementary Note on Chimoni Irrigation Project was considered and the project was found acceptable by the Committee.

(Action: Planning Commission)

Morth Koel Reservoir Project-Bihar

Lstimated Cost: Rs.43903.00 Lakhs

The representative of Ministry of Agriculture Printed out that the intensity of Irrigation adopted as 85% web wear low for which the State representative replied that the area was poor and the existing cropping pattern was also were 1cmPherefore it was not possible to further increase the introll of irrigation. Adviser (I&CAD) Planning Commission wanted to lmow the reasons for such an increase in the cost of the way ject resulting in reduction of the B.C.Ratio from 2.75 mm . 13 The State representative informed the Committee that the light of so in cost was mostly due to esclation. On an inquiry of this Chairman of the Committee regarding the progress in the endurtion of the project the State representative informed that the flam, I arrage and main canals were almost completed. Sinimization system was 68% completed. The State Representation informed the Committee that with temporary arrangements is 2 a et the barrage for raising the water level, around 10,000 too. of land had alleady been irrigated. On the suggestions of the Adviser(I&CAD), Planning Commission to utilise the available funds for providing irrigation to as much area as possible the State representative informed that the water could not be smored behind the dam as the gates of the sluices were how yet installed. The representative of Ministry of Environment and Forest informed the Committee that though the project was clearred from environmental angle in 1984 no feedback had been econived regarding the implementation of the stipulations mertioned in the approval letter. Chairman of the Committee desire that the State Government should furnish all the relevant information to the Ministry of Environment and Forest.

After discussions the Committee considered the Project Acceptable.

(Action: State Govt./Planning Cornel & Fort

1. Rongai Valley Irrigation Project- Meghalaya

Estimated Cost: Rs.1630.00 lakhs

The project was considered and found acceptable by the Advisory Committee. Since this project was the first irrigation project to be taken up by the Meghalaya State, the Committee felt that any assistance by way of detailed designs, consultancy and also further studies and investigations if considered necessary by the Meghalaya State Govt.might be rendered by the CWC and the construction monitored closely.

(Action: Planning Commission)

III. Revised Major Irrigation/Multipurpose Projects

 Punjab Irrigation Project Phase II- Lining of Channels -Punjab.

Estimated Cost: Rs.8279.00 lakhs

The project was earlier considered in the 34th Meeting of the Advisory Committee. A Revised Estimate forming a part of the overall lining work identified was now placed before the Advisory Committee. It was informed that the lining work as included was as per the recommendations of the Gill Committee. Water saved on account of this lining was estimated as 24061 ha m. The Committee was informed that the water saved with the projected water use centering over increased cropped area under cotton, pulses and oil seeds generated returns that justified the investments.

Chairman of the Advisory Committee suggested to the Punjab Engineers for considering increase in water rates so that atleast O&M charges got recovered. Further it desired that the report on studies made regarding savings of water due to lining may be submitted to CWC for reference.

The Committee considered the project acceptable.

(Action: State Govt./Planning Commission)

2. Extension and improvement of Irrigation of Shah Nahar Canal System-Punjab (Estimated Cost:Rs.9525.00 lakins)

The Committee was informed that the surface water used in the Scheme was limited to what had been earlier accepted by the Planning Commission in Feb.1978. During discussions it emerged that H.P. was persuing another scheme having similar name which had to get water from Punjab. The State Representative admitted that the State Govt.stood by any committment already made to H.F.

Chairman of the Advisory Committee, however, directed that there should be a meeting between H.P. and Punjab officials in respect of the other school and pending issues if any sorted out for the clearance of scheme sent by HaP.

The Committee considered the project acceptable subject to the conditions mentioned above.

(Action: CWC/State Govt./Planning Commission)

IV. Flood Control Projects



1. Flood Prevention works at Allahabad Phase II-UP

Estimated Cost: Rs.600.00 lakhs

Chairman, GFCC, informed the Committee that the project was earlier considered by the Committee and certain points were raised. The State replies were received and the B.C.Ratio of the project had been worked out as per the Planning Commission criteria. It was also informed that pumping was involved in the scheme to protect the town from submergence due to the drainage water accumulated by the side of the flood embankments. Advisor (I&C.D) Planning Commission was of the view that in such a case the scheme could not be included in the flood control sector. He was of the view that the scheme should have formed part of the Urban Development Sector. The benefits projected were very low and required to be reassessed and updated.

The Committee decided that the Cost and benefits of the scheme should be reviewed by the State Govt. and GFCC and the scheme should be put up again to the Advisory Committee.

(Action: State Govt./GFCC)

Annex.-I

List of Officers present in the 44th Meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on \$2nd September, 1985.

PRESENT

1. Shri M.A.Chitale, Secretary,
Ministry of Water Resources.

.. Chalirman

 Dr.Nalini Bhat, Scientist-SE, representing Secretary, Ministry of Environment and Forests

.. Member

3. Shri B.K.Misra, Joint Secretary, representing Secretary, Ministry of Welfare.

- . Member
- 4. Shri Baldev Mahajan, Financial Adviser, Ministry of Water Resources
- .. Member

 Shri C.G.Desai, Adviser(I&CAD), Planning Cosmission.

. Member

6. Dr.H.R.Sharma, Chief Engineer, representing Chairman, CEA.

.. Member

7. Shri 3.S.Chhibbar, Director (DF) representing Secretary, Ministry of Assigulture & Co-operation.

.. Member

8. Shri Z.Hasan, Chief Engineer (PAO) Central Water Commission.

.. Member Secretary

Also Present

Ministy of Water Resources

- 1. Shri K.S.Sharma, Commissioner (Indus)
- 2. Shri S.R.Sahasrabudhe, Commissioner (Projects)
- 3. Shri M.G.Joshi, Jt.Commissioner(Projects)

Central Water Commission

- 1. Shri B.B.Karajagi, Chief Engineer (I.M.)
- 2. Shri Rajeshwar Verma, Chief Engineer (Mon.N)
- 3. Shri P.C.Jain, Chief Engineer(FM)
- 4. Shri Y.V.Dharma Rao, Director (PPO-S)
- 5. Shri V.P.Vohra, Director(IP).
- 5. Shri T.M.Sori, Director(PA-C).
- 7. Shri P.C.Lau, Director (PA-N).
- 8. Shri F.S.Murthy, Director (PA-S)

Planning Commission

- 1. Shri b.i. Navalwala, Dy. Adviser.
- 2. Shri R.K.Bhasin, Consultant
- 3. Shri Ranbir Singh, SRO.
- 4. Shri H. Kumar, SRO.

Ganga Flood Control Commission

- 1. Shri G.S.Singh, Chairman,
- 2. Shri G.R.Keskar, Member

(Present for relevant items only).

Bihar

. 1. Shri K.N.Singh, Chief Engineer, Water Resources (Irrigation)

Punjab

- 1. Shri S.K.Bali, Chief Engineer (K.D).
- 2. Shri Harbans Singh, S.E., Kandi Canal Circle.
- 3. Shri Ramesh Chander, Superintending Engineer, Irrigation Works.

Kerala

1. Shri K.Sasidharan, Chief Engineer (Projects) &Ex. Officio Addl S/G.

Madhya Prakesh

Shri P.Sampath, Chief Engineer, Irrigation Deptt.

Maharashtra

- Shri S.B.Sohoni, Superintending Engineer, Irrigation Deptt.
- 2. Shri V.G.Washimkar, Superintending Engineer, Irrigation Deptt.
- Shri S.Y.Shukla, Superintending Engineer, Nasik Irrigation Project Circle.

Rejasthan

- 1. Shri O.P.Mehca, Addl.Chief Engineer, Irrigation.
- 2. Shri H.G.Acharya, Director, Minor Trrigation Schemes.
- 3. Shri B.V.C.Ehandari, Agronomist, Irrigation Deptt.

Government of India Central Water Commission Project Appraisal Organisation

Sews Bhawan, R.K.Punan. New Delhi- 110066.

Subject: 45th Mesting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 16.11.89 in Shram Shakti Bhawan, New Delhi.

The Summary Record of the 45th Meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 16.11.89 at 3.00 F.M.in the Committee Room of Ministry of Labour, Shram Shakti Bhawan, New Delhi is circulated nerewith.

(Z.Hasan) Chief Engineer & Member Secretary.

- 1. Shri M.A.Chitale, Secretary, Min. of Water Resources, S.S. Bhawan, New Delhi.
- 2. Shri R.P.Shah, Chairman, Central Water Commission, Sewa Bhawan, R.K.Puram, New Delhi.
- 3. Secretary (Expenditure), Min. of Finance, North Block, N.Delhi.
- 4. Secretary, Deptt. of Power, S.S.Bhawan, Rafi Marg, New Delhi (Nominee Shri V.K.Khanna, Jt.Secretary).
- 5. Secretary, Min. of Environment & Forest, Paryavaran Bhawan, CGO Complex, New Delhi(Nominee Dr.A.C.Ray, Addl.Secretary).
- 6. Secretary, Min. of Welfare, Shastri Bhawan, New Delhi.
- 7. Secretary, Deptt. of Agriculture & Co-operation, Krishi Bhawan, New Dolhi (Nominee Shri T.Y.Sampath, Agricultural Commissioner).
- 8. Director General, INCAR, Krishi Bhawan, New Delhi(Nominee Dr. I.P.Abrol, Dy. Tirector General, SAE).
- 9. Chairman, Central Electricity Authority, Sewa Bhawan, R.K.Puram, New Delhi.
- 10. Chairman, Central Ground Water Eosrá, Jamnagut Madau, Thus Dolhi.
- 11. Adviser (I&CAD), Planning Commission, Yojana Bhawan, New Delhi.
- 12. Adviser (Energy), Planning Commission, Yojana Bhawan, New Delhi.
- 13. Financial Adviser, Ministry of Water Resources, Shram Shakti Bhawan, New Delhi.

CWC U.O.No. 16/27/89-PA(F)/2345 Dated 30-11-1989

Copy to:

Ministry of Water Resources

- 1. Additional Secretary, S.S. Thawan, New Delhi.
- 2. Joint Scoretary (FP), S.S.Bhawan, New Delhi.
- 3. Commissioner (PR), S.S.Bhawan.
- 4. Commissioner(I&F), 11th Block, 7th Floor, CGO Complex, Lodhi Road, New Delhi.
- 5. Commissioner(BAN), CGO Complex, New Delhi.
- 6. Joint Commissioner (PP), S.S.Bhawan.
- 7. Joint Commissioner (FR), S.S. Bhawan.
- 8. Joint Commissioner (Flood), S.S.Bhawan.

Central Water Commissioner, Sewa Bhawan, R. C. Puram, New Delhi

- 1. Member (P&P)
- 3. Member (RM).
- 5. Chief Engineer (PPO).

- 2. Momber (DSR).
- 4. Member (WP).
- Chief Engineer (Mon. North)

- 7. Chief Engineer (Mon-South).
- 8. Director(PA-N)/(PA-S)/(PA-C).
- 9. Director(PPO-N)/(PPO-S)/(PPO-C).
- 10. Director, Cost Engineering (I).

Department of Environment:

1. Dr.S.Maudgal, Adviser, Deptt. of Environment, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi.

Ganga Flood Control Commission, Sinchai Bhawan, Fatna, Bihar.

1. Chairman, Ganga Flood Control Commission, Sinchai Bhawan, Patna, Bihar.

To,

The S	Secretary,
Govt.	, of

(neseH.Z)

Chief Engineer & Member Secretary.

Summary Record of the 45th Meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 16.11.89 in the Committee Room of Ministry of Labour, 8.5.Bhawan, New Delhi.

List of Officers who attended the meeting is at

Advisory Committee considered the following projects and took decisions as under:-

I. New Medium Irrigation Projects

Annex-I.

1. Sutiapat Irrigation Project .- Madhya Pradesh

Estimated Cost: Rs.1560.00 Lakhs.

Chairman, Mivisory Committee, while discussing the project broadly pointed out that the project proposals did not contain the detailed rehabilitation and resettlement plan and the provisions of about Rs.11,33,500/- for 73 families (Rs.15500/family) mostly belonging to scheduled tribes did not appear to be adequate and this aspect needed to be looked into by the State in detail and necessary detailed RR Plans should be submitted. This might change the benefit cost ratio also which was required to be looked into. Chief Engineer, CEA indicated that there was possibility of some Hydropower generation, especially, considering the fact that there was a pick-up weir downstream of the proposed storage dam. This aspect also needed to be investigated and looked into.

In view of the above, the project was deferred for reconsideration by the Advisory Committee after fulfill-ing the above requirements.

(Action: State Govt.)

2. Kesho Reservoir Scheme-Bihar

Estimated Cost: Rs.1614.00 Lakhs

During discussions, the representative of Ministry of Agriculture pointed out that in the project, paddy had been adopted in Kharif season. He further observed that too much of stress was being laid on paddy which was a high duty crop and suggested that a low duty crop such as maize could be adopted to increase the intensity of irrigation. Chief Engineer of the project informed that maize was not grown in the area. As such it would not be possible to force the cultivators to grow maize by changing the cropping pattern.

After discussions, the project was found acceptable subject to specific concurrency of the State Finance Department.

(Action:State Govt./ Planning Commission) Contd..2/-

3. Rafiabad High Lift Irrigation Scheme-J&K Estimate Cost : Es. 1050.67 lakhs

A HOROTERIA

Chairman, Advisory Committee, observed that there were a number of orchards in the command and the existing khuls might be supplying water to them. He desired to know that why water requirements for these orchards had not been taken into account while calculating requirements for irrigation. CE(FAO) informed that these orchards were presently not getting water from the existing canal system. Therefore, no provision had been made for the same in the scheme. The scheme had been planned for kharif irrigation only.

After discussions the project was found acceptable subject to specific concurrence of the State Finance Department.

(Action: State Govt./Planning Commission)

4. Dolaithabi Barrage Project-Manipur Estimated Cost: Rs.1920.00 Lakhs

After discussions the project was accepted by the Advisory Committee.

(Action: Planning Commission)

- II. Revised Major Irrigation/Multipurpose Projects
- 1. Jakham : Irrigation Project-Rajasthan Estimated Cost: Rs.6546.00 Lakhs.

The project proposals were broadly examined by the Advi-sory Committee and the main points raised were:-

- i) Though the water availability was about 200 Mm³ the utilisation had been planned for only 133.98 Mm³. As such there was much scope to improve the intensity of irrigation by increasing the kharif crops. The State Engineer had replied that due to the limitations of the storage this should not be done at present. However, the State was planning to take up Jakham Stage-III project downstream and also to instal gates over the dam in the present Jakham Irrigation Project.
- ii) There was detailed discussion regarding the environmental and forest clearance for this project for which the State representative had replied that the original project was approved in 1961 and the first revised estimate was also approved in 1974. He informed the Committee that the forest land was handed over before the commencement of Forest Conservation Act in 80. He further informed that the State Irrigation Deptt.had planted number of trees as aforestation measures and the case had been submitted to the M/o Environment and Forests in compliance to their observations. As regards the rehabilitation and resettlement he said that as the dam was in a narrow gorge the people had shifted to the upper areas, due compensation was paid to them and the people were rehabilitated during 1974-76. He further informed that more than 85% of work had been completed and a potential

Contd...3/-

of about 21,000 habout of an ultimate potential of 21981 hab had already heen achieval.

After discussions the Advisory Committee accepted the project subject to the following:-

- (i) The State should review the aspects for improving the irrigation intensity by using the surplus waters available.
- (11) The feasibility of Power generation may be investigated and considered if feasible.
- (iii) A certificate from the State Forest Department to the effect that the denotification of the forest land had been done prior to 1980, may be submitted.
- (iv) Clearance from Deptt. of Environment may be obtained.

(Action: State Govt./Planning Commission)

General:

During general discussions, the representative of Ministry of Agriculture and Cooperation pointed out that in most of the projects the cropping pattern comprised mostly of paddy and the yields were not properly reflected. Chairman, Advisory Committee, suggested that the yields of the different crops could be compared with the actual production achieved in some of the existing schemes in the adjoining areas, if the data was available.

Chairman, Advisory Committee, desired to know if any of the State Govt.hed set up multi-disciplinary cells for project pre-paration as recommended by the State Irrigation and Water Resources Ministers Conference held in 1986. In reply Chairman, CMC, informed that so far no such cells were constituted by any of the States. Thereafter Chairman, Advisory Committee, suggested that the Planning Commission should write to all the State Planning Deptts, for getting such multi-disciplinary Cells established so that all the new projects of VIII Flan are properly formulated and approved by these cells before they are sent to the Centre for techno-economic appraisal.

(Action: Planning Commission)

Annex-I

List of Officers present in the 45th Merting of the Advisory Committee on Irrigation, Floo' Control and Multipurpose Projects held on 16th November, 1989.

Present

- 1. Shri M.A.Chitale, Secretary, Ministry of Water Resources.Chairman
- 2. Shri R.B.Shah, Chairman, CC Nember
- 3. Shri V.V.Rao, DFA, Ministry of Water Resources representing Financial Adviser Ministry of Water Resources.Member
- 4. Shri B.N.Navalvala, Jt.Adviser (I&CAD) repressenting Adviser (I&CAD), Planning Commission. Member
- 5. Dr.H.R.Sharma, Chief Engineer, Central
 Electricity Authority representing
 Chairman, CEA.Member
- 6. Shri S.M.H.Rizvi, Joint Commissioner (Food Crop) representing Secretary, Ministry of Agriculture & Co-operation. Member
- 7. Shri Z.Hasan, Chief Engineer (PAO), Central
 Water Commission.Member
 Secretary

Also Frement

Ministry of Water Resources

- 1. Dr.J.P.Singh, Addl.Secretary
- Shri K.S.Sharma, Commissioner (Indus)
- 3. Shri S.R.Sahasrabudhe, Commissioner(Projects)
- 4. Shri M.G.Joshi, Jt. Commissioner.

Central Water Commission

- 1. Shri T.S. Murthw, Director (PA-S)
- 2. Shri F.C.Lau, Director (PA-N)
- 3. Shri T.M. Sumi, Director (PA-C)
- 4. Shri C.Subbarat, Director(FCD)

(Present for relevant items only)

Bihar

- 1. Shri I.M.Sinha, Chiof Engineer, Water Resources Deptt., Ranchi.
- 2. Shri S.N.Jha, Superintending Engineer (Liason).

Manipur

1. Shri Md. Hassain Choudary, S.E., Irrigation & Food Control.

Rajasthan

Shri A.L.Mathur, S.E., Irrigation, Jhakham Circle.

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PROJECT APPRAISAL ORGANISATION

SEWA BRAWAN, R.K. PURAM, NEW DELHI410066

Subject:46th Meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 21-12-1999 in Shram Shakti Bhawan, New Delhi.

The Summary Record of the 46th Meeting of the Savisory Committee on Irrigation, Flood Control and Multipurpose Projects hald on 21-12-1989 at 4.00 P.M. in the Committee Room of Ministry of Labour, Shram Shakti Bhawan, New Delhi is circulated herewith.

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CATER ENGINEER & MENBER SECRETARY

Encl:-As above

- 1. Shri M.A.Chitale, Secretary, Min.of Water Resources, S.S.Shawan, New Delhi.
- 2. Shri R.B.Shah, Chairman, Central Water Commission, Sawa Bhawan, R.K.Puram, New Delbi.
- Secretary (Expenditure), Min. of Finance, North Block, New Delhi.
- 4. Secretary, Deptt. of Power, S.S. Bhawan, Rafi Marg, New Delni (Nominee Shri V.K. Khanna, Jt. Secretary).
- 5. Secretary, Min.of Environment&Forest, Paryavaran Bhawan, CGO Complex, New Delhi (Nomines Dr.A.C.Ray, Addl. Secretary).
- 6. Secretary, Min.of Welfare, Shastri Bhawan, New Delhi.
- 7. Secretary, Deptt.of Agriculture&Co-operation, Krishi Bhawan, New Delhi(Nominee Shri T.V.Sampath, Agricultural Commissioner).
- 8. Director General, INC.R. Krishi Bhawan, New Delhi (Nominee-Dr.I.P. Abrol, Dy. Director General, S.E).
- 9. Chairman, Central Electricity Authority, Sewa Bhawan, R.K.Puran, New Delhi.
- 10. Chairman, Central Ground Water Board, Jamnagar House, New Delhi.
- 11. Adviser (I&CAD), Planning Commission, Yojana Bhawan, New Delhi.
- 12: Adviser (Energy), Planning Commission, Yojana Bhawan, New Delhi.
- (13.Financial Adviser, Min. of W.R., S.S. 3hawan, New Delhi.

CHC U.O.No,16/27/89-PA(N)/ 5 4/ dated // -2-199

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Ministry of Water Resources

- 1. Additional Secretary, S.S. Bhawan, New Delhi.
- 2. Joint Secretary (PP), S.S. Shawan, New Delhi.
- 3. Commissioner (PR), S.S.Bhawan, New Delhi.
- 4. Commissioner (I&F), 11th Blook, 7th Floor, CGO Complex, Lodhi Road, New Delhi.
- 5. Commissioner (B&N), CGO Complex, Lodhi Rozd, New Delhi.
- 6. Joint Commissioner (PP), S.S. Bhawan, New Delhi.
- 7. Joint Commissioner(PR), S.S. Bhawan, New Delhi.
- 8. Joint Commissioner (Flood), S.S. Bhawan, New Delhi.

Central Water Commission, Sewa Bhawan, R.K. Puram, New Delhi.

- 1. Member(P&P).
- 2. Member (RM).
- 3. Member (D&R) .
- 4. Member (WP).
- 5. Chief Engineer (PPO)/
- 6. Chief Engineer (Mon-south).
- 7. Chief Engineer (Mon-North).
- 8. Director(PA=N)/(PA=S)/(PA=C).
- 9. Director(PPO-N)/(PPO-S)/(PPO-C).
- 10.Director, Cost Engineering (I).

Department of Environment:

 Dr.S.Maudgal, Adviser, Department of Environment, Paryavaran Shawan, CGO Complex, Lodhi Road, New Delhi.

States:

To

The Secretary,	
Government of	
	* ** ***

CHIEF ENGINEER (PAO)&

MEMBER SECRETARY

Surmary Record of the 46th Meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 21.12.1989 in the Committee Room of Ministry of Labour, Shram Shakti Bhawan, New Delhi.

List of Officers who attended the meeting is at Annexure-I.

Advisory Committee considered the following projects and took decisions as under :-

New Major Inrigation/Multipurpose Projects

Tillari Irrigation Project - Maharashtra & Goa Satimated Cost Rs. 21722,00 James.

it the outset the representative of Planning Commission /survey inquired about the finalisation of inter-state agreement, detail/
of the command to make the project estimate more realistic and carrying out of various planning studies as per the guidelines of Planning Commission for optimum utilisation of potential created by the project,

> On the issue of the finalisation of the interstate agragments, the representative from the States (both Goa and Maha-rashtra) informed that the draft agreement has already been finalised (they handed over a copy of the draft) which is going to be signed by the appropriate authorities shortly. The Chairman directed them to send the signed agreement to CWC s∞n.

On the issue of detailed survey of the command, the Deputy Director, Cost Engineering Directorate informed that as per the guidelines in vague, 10% detailed survey of the command is to be done. The requirement is met with in this case. After some discussions, the position was accepted.

As regards the issues of various planning studies, Director PPO(C) informed that the detail studies in respect of soil survey, ground water modelling, and environmental aspects etc. have been carried out already. The Chairman directed that the detailed position on these issues may be conveyed to Planning Commission for information.

Representative from CEA pointed out that the cost of the project apportioned to the generation of the hydro-power is on a high side; He observed that the cost of pick-up weir which has been included in the joint cost is not in order. It was, therefore, decided that the joint dost and irrigition vis-a-vis power cost be reviewed.

The representative of CEA also pointed out that gost of Rs. 819.64 lakes on account of utilisation of 60 mm of tail water of Tillari H. H. Project has been charged to this project which may not be proper since that project has already been constructed and has been functioning. On inquiry with the Goa's representative whether the cost as indicated was acceptable to them, the Goa representative answered in affirmative. After discussions, it was decided that this cost be not taken into account for working out the economic viability of the new project. ...2.

Representative from CGWB raised the issue of drainage and conjunctive use of ground water with surface water. He pointed out that the observed water levels in the dug wells in the command indicated risk of water logging. Charifying the position Director PPO(C) explained that water table in the command was not high except in few patches of low land which has been defineated and necessary drainage provided. Water levels of the dug wells indicated in the report were near perenial nallahs, which were being utilised for localised irrigation. As such water levels of the command.

Further eleborating the position, the State Representative stated that the land scape slopes steeply towards the river and the command is traversed with many natural nallahs. Besides the soils of the command were of laterite origin and highly pervious as was evident from the fact that the standing crops never got damaged due to heavy rainfall of over 4000 mm. The canal and distribution system is going to be fully lined.

Representative from the Ministry of Agriculture pointed out that irrigation intensity has been revised from 165% (as agreed upon by them earlier) to 145%. To this the representative of the State explained that crop like pulses which are cultivated after the harvesting of kharif paddy, do not need any water. They grow on the residual moisture available in the soil. As such the irrigation intensity has been revised subsequently.

On environmental aspects, the state engineers informed that additional information asked for is being supplied to the Deptt. of Environment.

Finally the committee found the project acceptable subject to modification of the costs on the above lines, approval under the environment and forest acts and finalisation of the formal interstate agreement.

(Action : CWC/State)

II. New Medium Irrigation Project

1. <u>Modernisation of Zaingir Canal-Jammu & Kashmir</u> Esti<u>mated cost Rs.642.50 lakhs</u>

Chairman of the Advisory Committee enquired if the new areas being proposed to be irrigated/and been properly identified by the State Government. On being informed that the new areas were not yet finally identified. Chairman of the Advisory Committee decided that the project be deferred to the next meeting before which all the necessary clarifications may be obtained from the project officers. Deputy Secretary (Indus), Ministry of Water Resources informed the Committee that a hydro-electric project named "Abbwatce"

was also proposed on the same nadla and it would have to be ensured that the additional areas being irrigated would not adversely affect. The power generation.

It was decided that CWC would invite the project officers and get all the necessary clarifications before the project was put up again to the livingry Committee in its next meeting.

(Action : CWC)

III. Revised Major/Multipurpose Project

1. Modernisation of Periver-Velgai Irrigation System
() steg = 1 & II - Tamil Nach.

Estimated Cost Rs. 9972.00 lakhs Advisory Committee

Chairman, Z enquired about the balance works which remained to be completed. Director PPO(S), CWC indicated that an expenditure of Rs.86.16 Crores was incurred on this scheme upto March, 1988 out of the total estimated cost of Rs.99.72 Crores. It was also explained that the Revised Estimate was put up as almost all expenditure on works stood committed.

State representatives explained that this were mainly on rehabilitation of Perannai Regulator which includes works like construction of flushing arrangement, settling basin, installation of shutters were in progress and to be completed.

During discussions, State representatives handed over material on the watch being kept on the ground water fluctuations and the conjunctive use being developed. It was explained that tanks and wells in the area are providing water in a complementary fashion.

Regarding Environmental clearance, it was indicated that this scheme was being considered for clearance by Department of Environment and Forest.

The Committee considered the revised estimate and the project acceptable subjects the environmental and forest clearance from Department of Environment and Forest.

(Action : State/Planning Cummission)

IV. General.

1. The representative of the Planning Commission informed the Committee that Planning Commission was of the view that the projects should be processed by the Advisory Committee such that single window clearance is accorded.

. . . <u>1</u>. .

He suggested that the projects should not be given acceptance by the idvisory Committee subject to outstanding observations. If the ideas is as decided that the suggested procedure would be adopted for all the new projects of VIIIth Plan which would be taken up after 1.4.1990. However, the clear the back log for the ongoing unapproved projects of earlier Plans for which plan funds had already been provided, the present procedure would have to be continued to provide some sort of a legitimacy for these projects at the earliest.

- 2. Chief Engineer (PiO) informed the Committee that there were 65 unapproved ongoing major projects which will enter VIII Five Year Plan. 36 of these projects have been appraised and put up to Advisory Committee, 16 projects have been returned to States, 3 projects were put up as short notes, 1 project was not even received in CWC. Only 9 projects were at present under appraisal for which efforts were being made to finalise their techno-economic viability and put them up to the Advisory Committee before 31st March, 1990.
- 3. Similarly there are 68 unapproved ongoing medium projects, 27 of these have been appraised and put up to advisory Committee, 20 projects have been returned to States, 1 project put up as short note. 19 projects have not been even received in CWC. Only one project is at present under appraisal. This position on appraisal of the ongoing Major and Medium projects was noted by the Advisory Committee.
- 4. It was also decided that CWC should put up on similar lines a note in the next meeting of the idvisory Committee, regarding the status of clearance of revised estimates of the approved ongoing projects of VIIth Plan.

(Action : CWC)

List of Officers present in the 46th meding of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 21.12.1989.

PROGENT

- 1. Shri M.... Chitale, Sceretary,
 Ministry of Weber Resources. ... Chairman
- Shri R.B.Shah, Chairman, Central Water Commission.
 ... Member
- 3. Shri B.N.Navalwala, Deputy Advisor, representing Advisor (IAC.D), Planning Commission. ... Member
- 4. Dr.H.R. Sharma, Chief Engineer, representing Chairman, Ca... ... Member
- 5. Shri S.S.Chhibbar, Director (DF)
 representing Secretary, Ministry
 of Agriculture (Doptt. of Agriculture and Cooperation). Member

6. Shri B.P.C.binha, Chief Hydrogeologist, representing Chairman, CGWB. Member

7. Shri Z. Hasan, Chief Engineer (PAO),
Central Water Commission. ... Member
Secretary

Also Present

Ministry of Water Resources

- 1. Shri J.P. Singh, A.S.
- 2. Shri S.R. Sahasrabudhe, Commissioner(P)
- 3. Shri M.G.Jushi, JC(Project)
 4. Shri M.Sekhar, Dy.Secretary(I)

Central water Commission

- 1. Shri B.B. Karajagi, Chief Engineer (IM)
- 2. Shri Y. V. Dharma Rao, Direct or (PPO-5)
- 3. Shri A.K. Mahana, Director (PPO-C)
 4. Shri P.C. Lau, Director (P--N)
- 5. Shri V.P. Vohra, Director (IP)

Planning Commission

1. Shri J.N. Nanda, Dy. ...dviser (Irrigation)

(Present for relevant items only)

922

1. Shri M.S. Ohsuban, Executive Engineer

Maharashtra

1. Shri S.S.Shinde, Superintending Engineer, Konlean Irrigation Circle, Ratnagiri, Maharashtra.

Tamilnadu

- 1. Shri R.O.S. Mana, Superintending Engineer, PWD.
- 2. Shri K. Venugupal, Sanior Deputy Chief Engineer, River Vaigai Project, Madurai-2.

PROJECT APPRAISAL ORGANISATION

SEWA BHAWAN, R.K. PURAM, NEW DEBHI410066

Subject: 45th Meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 21-12-1989 in Shram Shakti Shawan, New Delhi.

The Summary Record of the 46th Mesting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Frojects held on 21-12-1989 at 4.00 P.M. in the Committee Room of Ministry of Debour, Shram Shakti Bhawan, New Delhi is circulated herewith.

(2 MASAN)
CHIEF ENGINEER &
MEMBER SECRETARY

Encl:-As above

- Shri M.A.Chitale, Secretary, Min.of Water Resources, S.S.Shawan, New Delhi.
- Shri R.B.Shah, Chairman, Central Water Commission, Sewa Bhawan, R.K.Puram, New Delhi.
- Secretary (Expenditure), Min.of Finance, North Block, New Delhi.
- 4. Secretary, Deptt.of Power, S.S.Bhawan, Rafi Mang, New Delhi (Nominee Spri V.K.Khanna, Ja.Secretary).
- 5. Secretary, Min.of Environment&Forest, Paryavaran Bhawan, CGO Complex, New Delhi (Nominea Dr.A.C.Ray, Addl. Secretary).
- 6. Secretary, Min.of Welfare, Shastri Bhawan, New Delhi.
- 7. Secretary, Deptt.of Agriculture&Co-operation, Krishi Bhawan, New Delhi(Nominee Shri T.V.Sampath, Agricultural Commissioner).
- Director General, I&C-R, Krishi Bhawan, New Delhi (Nominee-Dr.I.P. Abrol, Dy. Director General, S.E).
- 9. Chairman, Central Electricity Authority, Sewa Bhawan, R.K.Puran, New Delhi.
- 10.Chairman, Central Ground Water Board, Jamnagar House, New Delhi.
- 11. Adviser (I&CAD), Planning Commission, Yojana Bhawan, New Delhi,
- 12: Adviser (Energy), Planning Commission, Yojana Bhawan, New Delhi.
 - Ni3.Finandial Adviser, Min. of W.R., S.S. Bhawan, New Delhi.

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He suggested that the projects should not be given acceptance by the Advisory Committee subject to outstanding observations. After discussions it was decided that the suggested procedure would be adopted for all the new projects of VIIIth Plan which would be taken up after 1.4.1990. However, to clear the back log for the ongoing unapproved projects of earlier Plans for which plan funds had already been provided, the present procedure would have to be continued to provide some sort of a legitimacy for these projects at the earliest.

- 2. Chief Engineer(PAO) informed the Committee that there were 65 unapproved ongoing major projects which will enter VIII Five Year Plan. 36 of these projects have been appraised and put up to Advisory Committee, 16 projects have been returned to States, 3 projects were put up as short notes, 1 project was not even received in CWC. Only 9 projects were at present under appraisal for which efforts were being made to finalise their techno-economic viability and put them up to the Advisory Committee before 31st March, 1990.
- 3. Similarly there are 68 unapproved ongoing medium projects, 27 of these have been appraised and put up to advisory Committee, 20 projects have been returned to States, 1 project put up as short note. 19 projects have not been even received in CWC. Only one project is at present under appraisal. This position on appraisal of the ongoing Major and Medium projects was noted by the Advisory Committee.
- 4. It was also decided that CWC should put up on similar lines a note in the next meeting of the advisory Committee, regarding the status of clearance of revised estimates of the approved ongoing projects of VIIth Plan.

(Action * CWC)

List of Officers present in the 46th meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 21.12.1989.

PRODEN'I

- Shri M. .. . Chitale, Secretary, 1. Ministry of Water Resources. Chairman
- Shri R.B.Shah, Chairman, Central Water Commission. 2. Member
- 3. Shri B.N.Navalwala, Deputy Wiviscr, representing adviser (I&C.D), Planning Commission. Member
- 4. Dr.H.R. Sharma, Chief Engineer, representing Chairman, Ca. ... Member
- Shri S.S. Chhibbar, Director (DF) 5. representing Secretary, Ministry of agriculture (Deptt, of Agriculture) and Cooperation). ML mb or
- Shri B.P.C. Sinha, Chief Hydrogepla-6. gist, representing Chairman, CGWB. Momber
- Shri Z. Hasan, Chief Engineer (PAO), Central Water Commission. 7. ... Member Secretary

Also Present

Ministry of Water Resources

- Shri J. P. Singh, A.S. 1..
- Shri S.R. Sahasrabudhe, Commissioner (P), 2.
- Shri M.G.Jushi, JC(Project)
- Shri A.Sekhar, Dy.Secretury(I)

Central water Commission

- Shri B.B. Karajagi, Chief Engineer (IM) Shri Y.V. Dharma Rao, Director (PPO-5) 1.
- 2.
- Shri A.K. Mahana, Director (PPO-C) Shri P.C. Lau, Director (P--N) 3.
- Shri V.P. Vohra, Director (IP)

Planning Commission

Shri J.N.Nanda, Dy. ...dviser (Irrigation)

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ssary clarifications from the State Cover was considered was consi-Advisory Committee and it was decided that the project was consi-* Rered adde pthyde Subject to the formal concurrence of the State Finance Department and State Agriculture Deptt. being received by CWG - A - Transfer - Commence - C

Actions the secretary of the second of the s

/ III. Revised Major Irrigation Projects Educate usa Gair tou

1. Salauli Irrigation Project, Goa

Estimated Cost Rs.8830 lakhs

The Committee was informed that it was the second Revised estimate which was put up for consileration of the Committee. Chairman, Advisory Committee enquired regarding the present status of construction and it was informed that around Rs. 60 crores had ralready been spent against the revised cost of Rs.88.30 crores. The physical progress of the works included main dam, main canal and part of the canal distribution system. It was also informed that out of 21244 ha. of annual irrigation envisaged in the project 6700 hathad already been provided irrigation upto June, 1989. The balance amount of Rs.28:30 crores was required to complete the canal itstribution system and was considered necessary to create the the Full potential of 21244 has of annual irrigation. On enquiry from the Chairman, Advisory Committee, if the Project component nent included sugarcase which was more profitable in that region, the State Govt representative informed that around 2270 har of land had been earmarked for sugarcane and sufficient water was available for such perennial crops.

Regarding the environmental obearance the Committee was informed that the requisite information had been submitted to the Ministry of Environment and Forest Juring Dec., 1989. Further a the original project was approved in 1971 and the first Revised Proposal was sanctioned by the Planning Commission in 1982, the State Govt. representative informed the Committee that there might not be any necessity for forest clearance as most of the works were completed before the Forest (Conservation) Act came into force. However, State representative informed that denotification of the forest land was being pursued with the State Forest Deptt., and the same would be submitted in lug course. Contd..3/-

There was some discussion on the design of dam and the Committee was informed that CWC had been associated with the design of the project, and there was a Dam Safety Review Panel which had been examining the dam safety aspects from time to time.

After discussions the Advisory Committee considered the project acceptable subject to the clearance from the environment and forest angles and implementation of the recommendations of the Dam Safety Review Panel with regard to the spillway, adequacy and free board provisions.

(Action: State Govt./Planning Commission)

IV- Flood Control Scheme

1. Harang Drainage Development Scheme, Assam

Estimated Cost Rs. 490 lakhs

The project proposals were introduced by Chief Engineer (FM) CWC describing the general topography of Barak valley and Harang the pro- sub-basin/and necessity of thedrainage development scheme. The Committee was also informed about the major component of the scheme am of: rainage alongwith the salient features of the areas benefitted, at various ongostionlevels of depletion. Chairman, Advisory Committee, expressed his ı the doubt regarding silting of the channels proposed to be improved by arang the scheme. Member (RM), CWC explained that the sluice gates propo-ab-basin sed in the scheme would be kept closed for a short duration till river Surma was higher than a level of 15 m. As soon as the river levels were lower the waters flooding in the depression of Harang sub-basin would be released by opening the sluice gates. However, a regular annual maintenance of the proposed works would be essentiäl.

Chairman, Advisory Committee, further enquired about the benefits of the scheme from kharif and rabi. It was explained that the area of 9300 ha between 15.6 m and 16.2 m during kharif and additional area of 7150 harbetween elevation of 13m to 15.6 m during rabi would be made free for drainage congestion. Member (RM), CWC, also informed that by implementation of the scheme a large number of villages would also be benefitted, which were otherwise suffering from drainage congestion.

The representative of the Ministry of Environment and Forest informed the Committee that there might be possibilities of creation of marshy land in the Harang sub-basin due to prolonged stagnation of water. He also informed the Committee that a study was being made in the Region by their representative and the study—was likely to be completed by March, 1990. Thereupon Chairman, Advisory Committee, enquired from the representative of Brahamputral Board regarding the status of implementation of the scheme. On being informed that the scheme was not likely to be taken up during the current financial year the Committee decided that the same might be deferred upto March, 1990 by which time the studies being conducted by the Ministry of Environment & Forest/CWC) (Action:Ministry of Environment & Forest/CWC)

Item No.II- Clearance of 7th plan Unapproved Projects which are in advanced stage of construction.

· Chief Engineer (PAO), CWC and Member Secretary of the Committee, informed the Committee regarding the decision taken by it during its 30th meeting held on 19.7.85, in respect of such projects which were in advanced stage of construction but remained unapproved and were put up to the Advisory Committee at a very late stage when no real examination was possible. In conformity to this decision a number of projects received from different States and which were in advanced stage of execution were put up to the Advisory Committee as short notes from time to time. Subsequently, in a meeting held on 23.5.89 under the Chairmanship of Dr.Y.K.Alag, then Member Planning Commission to review the performance of the irrigation during 7th Five Year Plan, it was suggested by Adviser, I&CAD, Planning Commission that even such projects which were in advanced stage of construction should be techno-economically appraised and cleared by CWC before they are put up to the Advisory Committee for acceptance and recommendation for investment clearance by the Planning Commission. The Committee was informed that the State Govt. were once again addressed with the request that necessary action might be initiated by them for getting such projects technoeconomically appraised in CWC before end of October, 1989. However, it was seen that there had been very little response from any of the State Govts. In view of the above, the Advisory Committee was requested to consider the matter and give its decision regarding processing of such unapproved projects in an advanced stage of construction.

After prolonged discussions the Committee decided that the decision taken by the Advisory Committee in 1985 should be of tinued to be followed in case of such projects and the same may be put up to the Advisory Committee as short notes.

. (Action: CWC/Planning Commission)

Item No.III: Status of techno-economic appraisal of Revised Estimates of on-going Major Irrigation/Multipurpose Projects of 8th Plan.

Chief Engineer (PAO), CWC and Member Secretary of the Committee drew the attention of the Committee to the Agenda item circulated to all Members which included 89 on-going projects for which revised estimates were required to be techno-economically appraised in CWC for obtaining approval of the Planning Commission. The Committee was informed that out of 89 such projects, 16 Revised Estimates had already been put up to the Advisory Committee and were found acceptable subject to certain observations, 22 Revised Estimates were in the process of appraisal in CWC, 18 Revised Estimates were returned to the State Govt. and deleted from the pending list of CWC due to various reasons and 33 Revised Estimates were yet to be received in CWC.

On the request of the representative of the Planning Commission that the item regarding Revised Estimates be deferred to the next meeting, the Chairman Advisory Committee suggested that Contd...5/-

the Planning Commission should put up an Agenda note for consideration of the Committee so that the Committee would have an idea about the thinking of the Planning Commission in such cases.

2230

(Action: Planning Commission)

Item No.IV: Environmental clearance of on-going unapproved Projects

During discussions Chairman, Advisory Committee invited suggestions from the Members regarding mechanism to be evolved for according environmental clearance to the on-going unapproved projects. The representative of the Ministry of Environment & Forest suggested that the projects could be categorised into three groups namely; (1) where there was no change in the scope and the project was mearing completion, (2) the projects where major change in the scope were envisaged; and (3) which were under preparation/investigation.

He suggested that in the case of the first category of projects the clearance of Ministry of Environment & Forest need not be insisted upon by the Planning Commission. While in the case of second category of projects detailed plans as per requirements should be prepared by the State Govt. and submitted. In the case of third category of projects all requirements as per the guidelines of Ministry of Environment & Forest are required to be fulfilled.

Chairman, Advisory Committee, suggested that a review may be carried out to find out the number of such projects for which environmental rlearance was required to be obtained. The Committee desided that a list of on-going projects which have not been given rlearance by the Ministry of Environment & Forest may be prepared by the CWC and furnished to the Plantage Committee Concerned Chief Secretary of the State should also be about such projects concerning his State.

(Action: CWC/Planning, Country

Annex-I

List of Officers present in the 47th Meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 30th January, 1990 in the Ministry of Water Resources, New Delhi.

PRESENT

 Shri M.A.Chitale, Secretary, Ministry of Water Resources.

...Chairman

Shri R.B.Shah, Chairman, Central Water Commission

...Member

3. Shri S.S.Chhibbar, Director (DF), representing Secretary, Ministry of Agriculture.

- ...Membor
- 4. Dr.S. Mandgal, Advisor representing Secretary, Ministry of Environment and Forests.
- ..Member
- 5. Shri V.V.Rao, Dy.Financial Advisor, representing Financial Advisor, Ministry of Water Resources.
- .. Mamber
- 6. Shri Hemant Kumar, S.R.O. representing Adviser(I&CAD), Planning Commission
- ..Memo≘r
- 7. Shri Z.Hasan, Chief Engineer (PAO), Central Water Commission.
- ...Member
 Secretary.

Also Present

Ministry of Water Resources

- 1. Shri K.S.Sharma, Commissioner (Indus)
- Shri S.R.Sahasrabudhe, Commissioner (Projects)
- Shri M.G.Joshi, Jt.Commissioner(Projects).

Central Water Commission

- 1. Shri C.Sudhindra, Member (RM)
- Shri B.B.Karajagi, Chief Engineer (IM)
- Shri P.C.Jain, Chief Engineer (FM)
- 4. Shri V.P. Vohra, Director (IF)
- 5. Shri S.S.Sohani, Director(FCD-E)
- 6. Shri T.M.Suri, Director (PA-C)
- 7. Shri P.C.Lau, Director (PA-N)
- 8. Shri T.S.Murthy, Director(PA-S)

Ministry of Environment and Forests

1. Mrs. Meenakshi Kakkar, Scientist S.E.

(Present for relevant items only)

Brahamputra Board

- 1. Shri S.K. Nath, General Manager.
- 2. Shri H.K.Seth, Deputy Chief Engineer.

Goa

1. Shri S.D.Sayanak, Superintending Engineer, Circle-III(ID)

Uttar Pradesh

- 1. Shri R.S.Aggarwal, Chief Engineer (Ram Ganga), Irrigation Deptt. Kanpur.
- 2. Shri Roop Chand, Superintending Engineer, IWC, Irrigation Department, Aligarh, U.P.

Government of India Central Water Commission Project Appraisal Directorate-North

> Sewa Bhawan, R.K. Puram, New Delhi.

Sub: 48th Meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 5.7.90 in Shram Shakti Bhawan, New Delhi.

The Summary Record of the 48th Meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Project held on 5.7.1990 at 3.00 PM in the Committee Room of Ministry of Water Resources, Shram Shakti Bhawan, New Delhi is circulated herewith.

Encl.: As above.

(T.S.Murthy) Chief Engineer & Member Secretary

1. Shri M.A.Chitale, Secretary, Min. of Water Resources, S.S.Bhawan, New Delhi.

Shri V.B. Patel, Chairman, Central Water Commission, 2. Sewa Bhawan, R.K.Puram, New Delhi.

Secretary (Expenditure), Min. of Finance, North Block, 3. New Delhi.

Secretary, Deptt. of Power, S.S.Bhawan, Rafi Marg, New Delhi. (Nominee Shri V.K.Khanna, Jt.Secretary).

Secretary, Min. of Environment & Forest, Paryavaran Bhawan, CGO Complex, New Delhi. Secretary, Min. of Welfare, Shastri Bhawan, New Delhi.

Secretary, Deptt. of Agriculture & Co-operation, Krishi Bhawan, New Delhi. (Nominee Shri T'V. Sampath, Agricultural Commissioner).

Director General, I&CAR, Krishi Bhawan, New Delhi. (Nominee Dr. 1.P. Abrol, Dy. Director General SAE).

Chairman, Central Electricity Authority, Sewa Bhawan, R.K.Puram, New Delhi. Chairman, Central Ground Water Board, Jamnagar House,

10. New Delhi.

WI. Adviser (I&CAD), Planning Commission, Yojna Bhawan, New Delt 12. Adviser (Energy), Planning Commission, Yojna Bhawan,

New Delhi.

13. Financial Adviser, Ministry of Water Resources, S.S. Bhawan, New Delhi.

CWC W.O.No.: 16/27/90-PA(N)/1997 dated 30 August, 1990.

Copy to:

Ministry of Water Resources:

- Additional Secretary, S.S.Bhawan, New Delhi. Joint Secretary (PP), S.S.Bhawan, New Delhi.

Commissioner (PR), S.S.Bhawan, New Delhi. DVISER (I & CAD)'S OFFICE Commissioner (Indus), 11th Block, 8th Floor, CGO Complex, Lodhi Road New Delhi. IARY NO....821

...2. ATE 61.9.1.4.0.

- Commissioner (B&N), CGO Complex, Lodhi Road, New Delhi
- 6.
- Joint Commissioner(PP), S.S.Bhawan, New Delhi. Joint Commissioner(PR), S.S.Bhawan, New Delhi. 7.
- 8. Joint Commissioner (Flood), S.S. Bhawan, New Delhi.

Central Water Commission, Sewa Bhawan, R.K.Puram, New Delhi

- 2. Member (RM) 3. Member (D&R). Member (P&P).
- Member (WP). 5. Chief Engineer (PPO) 4. 6. Chief Engineer (Mon.South)
- Chief Engineer (Mon. North) 8. Director (PA-N)/(PA-S)/(PA-C)
- Director(PPO_N)/(PPO_S)/(PPO_C).
- Director, Cost Engineering (Irrigation).

Department of Environment

Dr.S.Maudgal, Adviser, Department of Environment, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi.

Stat	ces			
To				
The	Secreta	ary,		
			•	
Gove	ernment	of _		 _
				 _

(T.S.MURTHY) CHIEF ENGINEER (PAO) & MEMBER SECRETARY

Summary Record of the 48th meeting of the Advisory Committee on irrigation, flood control and multipurpose projects held on 5.7.1990 in the Committee Room of Ministry of Water Resources, Shram 5 akti Bhawan, New Dolhi.

- the Members of the Committee to the 48th meeting which was the first meeting to take place after the commencement of the 8th plan period. He also informed the Committee that so far the projects were being appraised for their economic viability on the basis of Benefit Cost Ratio on annual basis. This did not take into account the time period of Construction and hence, did not reflect the correct economic viability. To have a better assessment of the economic viability taking into account the period of construction, internal rate of return was considered to be a preferable index and the same would be strictly adopted while appraising and accepting the projects during 8th plan as already decided, earlier.
- 2.0 List of Officers who attended the meeting is at Annexure-I.
- 3.0 Item No.1: Advisory Committee considered the following projects and took decisions as under:
 - I- New Major inside tion/multipurpose projects
 - 1. Bansagar Canal Project, U.P.

Estimated Cost Rs.190.27 Crores (excluding share cost of dam and other common works)

Rs.190.19 Crores (including share cost of dam and other common works)

of the State Government and he also informed that the common water carrier of length of 22 kms and common feeder 16 kms had already been constructed by Government of M.P.

Regarding environment clearance the State Government representative informed the Committee that all the relevant information had been furnished to Ministry of Environment & Forest while in the case of forest clearance the case had been finalised by the State Govt.and was likely to be referred to the Ministry of Environment and Forest were present. However, they had sent in their representations as under:

tative from the Min. of Env.& Forest.

"For this component of Bansagar Project, the detailed Environmental Action Plans are still not available with us for scrutiny! We have requested the project authorities to submit these details and come for discussions in the 3rd week of July or a mutually convenient date. The project will be put up for discussion in the Environmental Appraisal Committee on receipt of detailed Environmental Management Plans."

The State representative was requested to comply with the requirements of Ministry of Environment & Forests, so as to expedite clearance.

Contd....2/-

Commissioner (Projects), Ministry of Water Resources informed the Committee regarding the inter-state issue which was to be resolved before the project could be accepted by the Committee. He info med that if consumptive use of water by the Thermal Projects in Rihand Basin was to be accounted for from out of the share of U.P of Sone Waters the balance water available was not sufficient to meet the requirements of the present project. Chairman, Advisory Committee suggested that pending decision regarding the report of the Sone River Commission and the overall re-allocation of the waters of Sone Basin, as assessed by Sone River Commission, utilisation ex-Bansagar Dam might be considered independently if Govt. of Bihar being the lower riparian State had no objection. The State representative informed that at an informal meeting held between the Chief Ministers of UP and Bihar recently, Bihar had agreed to UP Govt.taking up this project. The State Govt. representative was requested to take up the matter with Bihar Govt. inviting reference to the informal talks between the Chief Ministers of UP and Bihar, and get their concurrence, so as to facilitate clearance of the project.

Representative of ICAR observed that the crop water requirements as indicated in the note were considered to be on the high side considering that the command areas were located in Allahabad and Mirzapur districts. He was informed that the Crop Water requirements were worked out on the basis of Modified Penman method and the same were examined and accepted by the Water Management Division of Ministry of Water Resources. A copy of the above calculations, which was readily available with the state representative was handed over to the representative of ICAR and he was requested to scrutinise the same and, in case, any discrepancies are noticed the same could be communicated to CWC/State Govt. for reconcilations.

After discussions the Committee decided that the project be put up again to the Advisory Committee in its next meeting in Sept. 1990 after resolving the issues as discussed above.

(Action: State Govt./ICAR)

2. Pagladiya Dam Project, Assam Estimated Cost Rs. 287.86 Crores

The project proposals were introduced by the representative of Brahmaputra Board.

The representative of the Ministry of Welfare observed that around 64% of the population affected due to the project belonged to SC/ST and wanted to have the following clarifications.

(i) Whether any detailed surveys were carried out to assess (a) extent of SC/ST population in the command to be benefited and (b) extent of SC/ST population affected to be rehabilitated in the command area.

(ii) The displaced populations were being rehabilitated as far as 10 to 25 kms. away. The mechanism being adopted for ensuring their smooth movement and settlement.

(iii) The adequacy of provision of Rs.25.81 crores for rehabilitation.

The representative of Brahmaputra Board informed the Committee that two specific areas for re-settlement of the oustee had been identified and the final provision of Rs.24.77 crores had been made for their re-settlement. Regarding the details of the SC/ST population affected it was informed that the information we not readily available and the same would be submitted soon. The representative of the Ministry of Welfare informed the Committee that the tribals affected are mostly Bodos and the issues being sensitive, it would be desirable and necessary to associate their representative also in all Committees while finalising the proposals for rehabilitation and re-settlement.

The representative of CTB observed that ground water levels in the command were 1 to 2m below the ground level and as such water logging conditions might develop after introduction of surface irrigation. Further, he informed that the locations and design aspects of the tubewells proposed in the project had not been indicated. He suggested that conjunctive use of ground water alongwith lining of canal distribution system wherever necessary might be adopted in the project. On enquiry by the Chairman, Advisory Committee the representative of Brahmaputra Board informed that around 32 percent of recoverable recharge of the ground water available was being utilised in the project proposals. However, Chairman, Advisory Committee suggested that after necessary investigations/identification of tubewells/design with their economic evaluations, conjunctive use of ground water and surface water might be planned so that a proper water balance is maintained. This may/done in consultation with CGWB.

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Out that the crops proposed in the project were likely to suffer due to existing ground water conditions and application of surface irrigation in the area. Therefore, he was doubtful whether the targetted cropping intensity could be achieved. As such the compunctive use of water was required to be carefully planned and the ground water table was to be continuously monitored. He suggested that to avoid adverse conditions developing after few years of the completion of the project lining of canal distribution system with effective on-farm management technique should be adopted. Chairman, Advisory Committee also suggested that the ground water monitoring should be made a part of the project proposals.

Regarding the environment and forest clearance the Committee was informed that it was still to be obtained from Ministry of Environment and Forest. The Ministry of Environment and Forest had intimated that the Environmental Action Plans submitted by the Project Authorities in June 1990 had been examined and detailed discussions were also held with them in June 1990 wherein it was agreed that necessarydetails/complete Action Plans/were received, the same would be put up for discussion in the Environmental Apparaisal Committee meeting for taking a view on the scheme.

lable by end of Aug. 90. As soon as action Plan

Contd..4/-

Planning Commission representative pointed out that before the project was cleared all theplanning studies needed should be completed and environment clearance obtained. He observed that in the E.C.Ratio calculations there were some under estimation such as provision for land levelling @ Rs.1000/- ha., and provision of O&M charges @ Rs.100/ha and also towards cost of tubewells. Chairman, Advisory Committee suggested that O&M charges should be adopted as recommended in the 9th Finance Commission Report. Planning Commission representative also pointed out that the total expenditure during the five year plan for the entire State was of the order of Rs.150 crores and hence it might not be possible to accommodate this project of Rs.287 crores to be completed within seven year rs. The representative of Brahmaputra Board informed that the project was to be taken up by NEC. Chairman, Advisory Committee suggested that the copy of the Project Report be furnished to NEC for their concurrence regarding the funding as proposed by the Project Authorities. He also pointed out that the construction programme as well as span of construction had a vital bearing on the internal rate of return and as such the provisions for this project should

The representative of ICAR pointed out that the water rates adopted for different crops were not in proportion to the consumptive use of these crops and hence they were required to be reviewed and adopted as per the present rates accepted by the Govt. of Assam.

The representative of CEA informed the Committee that as per the earlier proposals power generation to an extent of 2 MWs was found to be viable, as per the studies carried out in CEA. In the present proposals the height of the dam had been increased, more power generation would be feasible. He suggested that this aspect should also be taken into account before the project is finalise.

After the above deliberations, the Committee decided that the project might be put up for consideration of the Advisory Committee in September, 1990 after compliance to the various points raised during the discussions and after obtaining clearance from all the concerned Departments.

(Action: Brahmaputra Board)

4.0 Item No.2: Status of techno-economic appraisal of on-going major irrigation/multipurpose and medium irrigation projects likely to spillover to 8th plan.

The status of techno-economic appraisal of all on-going projects as given in the agenda note was taken note of by the Comittee. Chief Engineer (PAO) CWC informed that out of all projects techno-economically appraised by CWC and put up to the Advisory Committee, 36 major irrigation/multipurpose and 18 medium irrigation projects were still awaiting environmental and forest clear ance. It was also informed that the list of these projects had already been furnished to the Planning Commission.

Adviser, I&CAD, Planning Commission informed the Committee that as per decisions taken in the meeting held on 30.3.90, under the Chairmanship of Member (Irrigation), Planning Commission Contd...5/-

letters were being addressed to the Chief Secretaries of all the States regarding the modified procedure for clearance of on-going unapproved projects. They were also being informed that in case the projects were not clear 1 by the Advisory Committee before the end of March, 1991, the projects would not be funded from 1991-92, onwards. It was decided that CWC would furnish list of unapproved on-going projects statewise and under different categories in respect of their status of techno-economic appraisal to the Planning Commission so that the same could be enclosed with the letters being sent to the State Governments.

(Action: CWC/Planning Commission)

5.0 Item No.3: Delay in clearance of projects by Advisory Committee and approval by Planning Commission for investment clearance.

The Committee noted the information provided in the agenda note under this item.

6.0 General:

Chairman of the Advisory Committee suggested that while putting up the projects to the Advisory Committee in the subsequent meetings, the following informations should be furnished and these should form a part of TAC Note.

(i) An Ahnexure giving the spillover cost of the on-going projects of the State and the annual allocations made for the State during the last few years.

This was considered necessary for the Advisory Committee to assess if the project under consideration could be accommodated within the resources of that particular State.

(ii) The position in respect of all the planning studies required to be carried out for each project, as has already been circulated by the Planning Commission (See Annexure II) together with a time bound programme (to be obtained from the State Government) for the studies yet to be carried out.

(Action: CWC)

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ANNEXURE-I

List of Officers present in the 48th meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 5.7.1990.

PRE	CSENI	
1.	Shri M.A.Chitale, Secretary Ministry of Water Resources	Chairman
	Military of Water Researces	
2.	Shri B.N.Navalavala, Adviser (I&CAD), Planning Commission	Member
3.	Shri Rajendra Singh, Chief Engineer, representing Chairman, CEA.	Member
4.	Dr.M.K.Mathur, Joint Commissioner (CC) representing Secretary, Ministry of Agriculture (Deptt.of Agriculture and Cooperation).	Member
5.	Shri B.R. Sharma, ADG(IWM), representing Director General, I&CAR	Member
6.	Shri B.K.Misra, Joint Secretary, representing Secretary, Min. of Welfare	Member
7.	Shri Baldev Mahajan, Financial Adviser, Ministry of Water Resources.	Member
8.	Shri B.P.C. Sinha, Chief Hydrogeologist representing Chairman, CGWB	Member
9.	Shri T.S.Murthy, Chief Engineer (PAO) Central Water Commission	Member Secretary

Ministry of Water Rescurces

- 1. Dr.J.P.Singh, Addl.Secretary.
- 2. Shri ~. R. Sahasrabudhe, Commissioner (PR).
- 3. Shri K.J. Sharma, Commissioner (Indus).
- 4. Shri V.P. Vohra, Jt. Commissioner (BM).
- 5. Shri S.K.Agarwal, Jt.Commissioner(PR).

Central Water Commission

- 1. Dr.C.D. Thate, Member (P&P).
- 2. Shri P.C. Jain, Chief Engineer (FM).
- 3. Shri N.Sathyamurty, Chief Engineer (CPM).
- 4. Shri P.C.Lau, Director PA(N).
- 5. Shri K.C.Manchanda, Director PA(S).
- 6. Shri C.D.Khoche, Director (IP & ISM).
- 7. Shri Y.R. Vaidya, Director, Cost Engineering(I).
- 8. Shri T.M.Suri, Director PA(C).
- 9. Shri S.S.Sohani, Director(FCD-E).

(Present for relevant items only)

Brahmaputra Board

- 1. Shri S.K.Nath, G.M.
- 2. Sh.S.C.Nath, Superintending Engineer.
- 3. Sh.S.Neogy, Asstt.General Manager, Agri.&Fin.Consultant.
- 4. Sh.S.N. Upadhyaya, AGM, AFC Ltd.

Uttar Pradesh

- 1. Shri Harish Chandra, Chief Engineer, Irrigation Department, Lucknow.
- 2. Shri C.B.Rai, Superintending Engineer, Irrigation, Mirzapur, Uttar Pradesh.
- 3. Shri M.L.Yadav, Superintending Engineer, I&P Circle, Mirzapur.

List of Planning Studies

- 1. Benc. Mark Surveys
- 2. Soil Surveys:
 - a) Available Reconnaissance & Semi-detailed surveys
 - b) Semi-detailed Surveys in remaining areas.
- 3. Regionalisation of the Total Command Area.
 - 4. Hydrological/Meteorological Studies.
 - 5. Groundwater Studies (Generation of Basic Hydrogeological data)
 - 6. Crop Yield Study.
 - 7. Conveyance loss and other Engineering Studies of Conveyance System.
 - 8. Groundwater Aquifer Modelling & Conjunctive use studies.
 - 9. Drainage Studies(possibility of ponding depressions with canal water)
 - 10. Cropping Pattern & Crop Water Demand Studies.
 - 11. Pilot Scheme on Sewan Grass for Scientific Development of Animal Husbandry (if applicable).
- 12. Afforestation & Ecological Studies.
- 13. Inter-regional water Allocation Policy (Agri. & non-Agri.).
 - 14. Operation & Maintenance Study (Water Management in particular).
 - 15. Conveyance System Design Parameters.
 - 16. Integration of all planning studies and preparation of a detailed project report to be posed to the world Bank.

GOVERNMENT OF INDIA CENTRAL WATER COMMISSION PROJECT APPRAISAL DIRECTORATE (NORTH)

Sewa Bhawan, R.K. PURAM New Delhi.

Subject: 49th Reeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 11.9.90 in Shram Shakti Bhawan, New Delhi.

The Summary Record of the 49th Meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 11.9.90 in the Committee Room of Ministry of Labour, Ist Floor Annexe, Shram Shakti Bhawan, New Delhi is circulated herewith.

7.No. 2552/[SeAD190 12/11/90 Encl: As above

(T.S.Murthy)
Chief Engineer(PAO)&
Member Secretary

 Shri M.A.Chitale, Secretary, Min.of Water Resources, S.S.Bhawan, New Delhi.

 Shri V.B.Patel, Chairman, Central Water Commission, Sewa Bhawan, R.K.Puram, New Delhi.

 Secretary (Expenditure), Min. of Finance, North Block, New Delhi.

4. Secretary, Deptt.of Power, S.S. Bhawan, Rafi Marg, New Delhi. (Nominee Shri V.K. Khanna, Jt. Secretary).

5. Secretary, Min.of Environment&Forest, Paryavaran Bhawan, CGO Complex, New Delhi.

Scretary, Min.of Welfare, Shastri Bhawan, New Delhi. Secretary, Deptt.of Agriculture&Co-operation, Krishi Bhawan, New Delhi. (Nominee Shri F.V.Sampath, Agricultural Commissioner).

Dy No 2015 Commissioner).

Director General, I&CAR, Krishi Bhawan, New Delhi.

Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Belhi.

Chairman, Central Ground Water Board, Jamnagar House, New Delhi.

11. Adviser (I&CAD), Planning Commission, Yojna Bhawan, New Delhi.

12. Adviser(Energy), Planning Commission, Yojana Bhawan, New Delhi.

Financial Adviser, Ministry of Water Resources, S.S.Bhawan, C. (CAD)'S OFFICE Delhi.

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Copy to:

Ministry of Water Resources:

- 1. Additional Secretary, S.S.Bhawan, New Delhi.
- 2. Joint Secretary (PP), S.S.Bhawan, New Delhi.
- 3. Commissioner (PR), S.S.Bhawan, New Delhi.
- 4. Commissioner(Indus), 11th Block, 8th Floor, CGO Complex, Lodhi Road, New Delhi.
- 5. Commissioner (B&N), CGO Complex, Lodhi Road, New Delhi.
- 6. Joint Commissioner (PP), S.S.Bhawan, New Delhi.
- 7. Joint Commissioner (PR), S.S. Bhawan, New Delhi.
- 8. Joint Commissioner (Flood), S.S. Bhawan, New Delhi.

Central Water Commission, Sewa Bhawan, R. K. Puram, New Delhi.

- 1. Member(P&P). 2. Member(RM). 3. Member(D&R).
- 4. Member (WR) . 5. Chief Engineer (PPO). 6. Chief Engineer (Mon. South).
- 7. Chief Engineer (Mon. North) .
- 8. Director(PA-N)/(PA-S)/(PA-C).
- 9. Director(PPO-N)/(PPO-S)/(PPO-C).
- 10. Director, Cost Engineering (Irrigation).

Department of Environment

1. Dr.S.Maudgal, Adviser, Department of Environment, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi.

The Secretary,

States

Government	of

3.

(T.S.Murthy)
Chief Engineer(P-0)&
Member Secretary

Summary Record of the 49th meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 11.9.1990 in the Committee Room of Ministry of Labour, Shram Shakti Bhawan, New Delhi.

List of Officers who attended the meeting is at Annexure- $\mathcal I$

Item No.1: Advisory Committee considered the following projects and took decisions as under:

I- Revised major Irrigation/Multipurpose Projects

1. Revised estimate for modernisation of Upper Ganga Canal Phase-I-Rs.375 crores and Madhya Ganga Canal-Rs.345 crores, U.P.

Introducing the proposal Engineer-in-Chief of U.P.State explained that it consisted of two components viz., Modernisation of Upper Ganga Canal, Ph.I and Madhya Ganga Canal, Stage-I.

The Modernisation of Upper Ganga Canal had been conceived for rehabilitating a very important old irrigation system in the Northern India. Out of this, as a first time slice, Phase-I of the project estimated to cost Rs.251 crores (at 1984 price level) was found acceptable by the Advisory Committee at its meeting held in October, 1986 subject to certain observations. These proposals were subsequently taken up through the world Bank's assistance. He indicated that taking into consideration an expenditure of Rs.151 crores incurred upto March, 1990 and balance amount for remaining works estimated at Rs.224 crores, the Advisory Committee may give concurrence to the revised cost of Rs.375 crores as proposed in the agenda note, to enable continuing World Bank funding.

The representative of the Department of Environment observed that the conditions stipulated in the environmental clearance issued by their Department in December, 1986 had not been acted upon by the State Government except in respect of constitution of a Monitoring Committee.

Chief Engineer (PAO) CWC pointed out that the Planning Commission were yet to give investment clearance to the Phase I project for Rs.251 crores who were of the view that the Upper Ganga Canal Modernisation should be finalised as a whole and its benefit cost ratio worked out for justifying the project proposals. The revised estimate for Rs.375 crores was also yet to be submitted by the U.P. State Govt.

Thereaft#, Engineer-in-Chief, U.P.State Government indicated that the Madhya Ganga Canal Project was earlier approved by the Planning Commission in 1976 for Rs.66 crores and in 1985 the estimate was revised to Rs.206 crores due to change in location of the barrage and consequent change of alignment of the canals. However, there was no major change in the scope of the project. The present cost of the project was estimated at Rs.345 crores, out of which expenditure of Rs.236 crores had already been incurred. It was proposed to

include remaining works excert remodelling works in the IDA credit agreement for the Modernisation of Upper Ganga Canal Ph.I. to enable utilisation of full grant available.

At this stage it was clarified that objection of CWC regarding the availability of unlined UGC below 118 m for passing MGC discharge had not been responded. Earlier it had been indicated by the UGC authorities that the existing Upper Ganga channel was being set aside for passing monsoon drainage. Therefore, simultaneously this could not serve for carrying supplies to MGC during kharif period.

It was pointed out by the Advisor , Planning Commission that in this case also the estimate for Rs.345 crores was yet to be submitted by the U.P.State Govt. The benefit cost ratio calculation also required to be looked into as for instance a rate of Rs.400 per quintal for paddy adopted, in the calculations was very much on the higher side.

Summing up the discussions the Chairman of the Committee observed that issues of funding from World Bank Assistance and acceptance by Advisory Committee for investment clearance should not be mixed up in the case of advanced projects. These two Projects were ongoing projects and substantial expenditure had already been incurred. Modernisation of UGC Phase I was also being funded from World Bank Assistance. These should therefore be processed as per relaxed procedure prescribed by Planning Commission for such ongoing projects, Subject to expeditious actions required for the formal acceptance of the revised estimates, being taken by "P State & other age cis concerned, the question of inclusion of a component of Madnya Ganga Canal Project in the World Bank assistance package will be dealt with separately in the Ministry.

(Action: U.P. State Govt.)

2(119)/90 2. Modernisation of Periyar Vagai Irrigation System-St. I&II-T. Nadu Estimated Cost Rs. 124.72 crores

Special Chief Engineer, Periyar Vaigai Modernisation Project, Tamil Nadu brought out that there had been considerable aggradation upstream and downstream of the Paranai regulator. is silting had led the project authorities to propose a link channel from the Vagai Reservoir upto the main canal of the system. The silt emanated from intervening tributaries of river Vaigai & got carried to the regulator at Paranai by the periyar releases in the Vaigai river course. Carrying the periyar releases through the link channel was expected to prevent the blocking of the regulator.

It was further brought out that the original project cleared by the Planning Commission in June, 1976 had included a link channel(below Vaigai dam to beyond Peranai regulator) as also modernisation of the canal system. However, the works executed as Stage-I&II of the Modernisation programme included increased lining & canal's extensions. Hence the link canal proposed earlier Contd.3/-

was not implemented and instead a silt ejector was introduced on the canal downstream of regulator. The modernisation of Periyar Vagai for St.I&II was considered by Advisory Committee for Rs.99.72 crores in its meeting held in 12/89, subject to environmental clearance. Environmental clearance has also since been received in June, 1990.

State Government have reported that regulator was likely to have problems, in flushing, in periods when surplus flows would not be available as also due to non-availability of space for the flushed silt. The State therefore, proposed to provide a link channel(as envisaged in 1976) at a cost of Rs.25.00 crores.

Members & Chairman of the Committee were of the view that hydraulics of pushing water into the irrigation channels, the possibilities of arresting movement of silt by check structures across the river & the planning and design of the silt ejector needed a review before the proposal for link channel could be considered. The Chairman suggested that a CWC team comprising appropriate design engineers from Barrage and Canal design Dte., etc. could visit site and submit a report bringing out alternatives to tackle the problem and give recommendations.

This report may be made out within a fortnight's time so that the same could form a basis for a decision in the ensuing TAC meeting, on the proposal as submitted in the agenda.

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(Action: State/CWC)

3. Karjan Reservoir Project-Gujarat

Estimated Tost Rs.186.37 crors

The project was introduced to the Committee by the Superintending Engineer representing the Gujarat State. Advisor, Planning Commission was of the view that though the project was nearing completion and about 80% of population affected are stated to have been rehabilitated, since the oustees mostly belonged to schedule tribes, it was necessary that R&R plan should be drawn up and got vetted by the Ministry of Welfare for implementation.

The Adviser, Ministry of Environment indicated that this project had not been referred to his Ministry. It was clarified by the State representative that since the project was approved by the Planning Commission prior to the introduction of Environment & Forests Conservation Act 1980 and construction started, clearance from the environmental angle was not considered necessary. However, the representative of Ministry of Environment opined that since there was a change in scope of the project, clearance of the project from environmental angle was necessary.

The project was accepted by the Advisory Committee Subject to the following:-

i) Clearance from the environmental angle;

ii) Submission of R&R plan to Ministry of Welfare to get their concurrence.

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The Committee desired that the State Govt. should take action so that both the above requirements are fulfilled by Dec., 1990, and the matt r placed before the Advisory Committee.

20(19) 190

(Action: Planning Commission/State)

II- Revised Medium Irrigation Projects

1. Dholbaha Dam Project-Punjab

Estimated Cost Rs.21.13 crores.

Introducing the project, the Chief Engineer, KAD Govt. of Punjab stated that this project was earlier approved by Planning Commission for Rs.3.49 crores in Sept., 1977 and was one of the components of Kandi Water Shed Development Plan, under execution with World Bank funding. The project underwent changes necessitated due to increased spillway discharge as a result of World Bank advice. Consequently, the height of the dam, storage behind the dam, length of the spillway, spillway crest level etc.were increased. This resulted in the current revised cost. Most of the expenditure had already been incurred.

To an enquiry from the representative from Department of Agriculture, it was indicated that out of 1100 hasm only 990 hasms of runoff was accounted for use and 110 hasm in a 75% dependable year would be available for taking care of any water shortage, in a kharif/Rabi season etc. Thus it was explained that the dam would be beneficial and suitable operating policies could be devised by GOPB.

The Revised estimate of the project was recommended for acceptance by the Planning Commission for investment clearance.

(Action: Planning Commission)

12(1) 10 90 III- Flood Control Projects

1. Construction of Priority works under Ghaggar Flood Control Scheme, Rajasthan-Estt.Cost Rs. 7.05 crores.

Commissioner (Indus), Ministry of Water Resources presented the scheme before the members of Advisory Committee. He stated that Ghaggar Flood Control Scheme was prepared and executed by State Govt. in order to reduce the fury of flood in river Ghaggar and to save the affected areas in Rajasthan from consequent losses. Under this scheme water of river Ghaggar diversion channel. Due to presence of impervious layer, the absorption losses in the depressions were observed to be much less than envisaged at the time of preparation of report. Stored waters in the depressions caused water logging in the adjoining areas viz.villages Baropal, Manaktheri and Kishanpura, Adequate storage capacity to absorb the floods was also not available. Water logging problem was now spreading to Suratgarh town. The construction of priority works had therefore, been necessitated to deplete these depressions which would not only solve the water logging problem but also would make available the capacity of depressions for moderating the next floods and e tra water would be available for irrigation.

* Ghaggar was diverted to 18 Nos.depressions by

Contd ... 5/-

The representative from ICAR pointed out that before the scheme is taken up it may be ensured that the quality of water from . depressions is fit for irrigation purposes. Commissioner (Indus) clarified that water from these depressions is suitable for drinking purposes and is already being used for irrigation purposes and does not have any adverse effects on crops. The representative from Planning Commission stated that while working out benefit cost ratio the area banefitted had been taken for the whole scheme of Ghaghar Flood Control whereas cost of only priority works had been considered. Chief Engineer, Irrigation, Rajasthan clarified that benefits from depletion of depressions had been considered and not the benefits from whole scheme of Ghaghar Flood Control. Chairman of the Advisory Committee requested representative from Ministry of Environment to offer comments on the scheme, if any. The representative from Ministry of Environment indicated that he did not have copy of scheme at present. C.E., Irrigation, Rajasthan informed that the project had already bean examined by the Ministry of Environment and Forest and their observations had been clarified. The project was infact for the improvement of environment of the region.

After discussions, the scheme was accepted by the Committee.

(Action: Planning Commission)

(Action: Planning Commission)

12(1) | 25 | 90 2. Beel Balli Drainage Scheme, West Bengal

Estimated Cost Rs.2.148 crores.

The Project was accepted by the Advisory Committee.

12(1)/3/90

3. Harang Dr inage Development S heme, Assam Estimated Cost Rs.4.90 crores

Chairman of the Committee, requested Dr. Maudgal from the Department of Environment to offer his comments. Dr. Maudgal mentioned that eight drainage congested areas have been identified in the Barak Sub-basin. This scheme was cleared by the Department of Environment as a pilot scheme which should be carefully monitored for its environmental impact in the area so that the other schemes when prepared could be considered by the Committee in the light of the experience gained on this project. He also mentioned that a comprehensive catchment treatment plan should be prepared to arrest the problem at source.

Commissioner (B&N), Ministry of Water Resources enquired about the magnitude of the treatment that should be included in the comprehensive catchment plan, if it is proposed to be a part of this project.

Adviser (I&CAD) opined that this being a pilot study scheme, all required studies be identified and a time frame be worked out so that the results of this study can be available for future planning.

Conntd ... 6/-

After detailed discussions it was decided that the North-Eastern Council and the Brahmaputra Board should examine as to what type of treatment would be required and the area to be covered out of the total catchment area of the drainage channels under the scheme.

The catchment treatment plan could thereafter be prepared as a separate supplementary scheme.

After discussions the scheme as presented was accepted by the Advisory Committee.

(Action: Planning Commission)

ANNEXURE-I

List of Officers present in the 49th Meeting of the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 11-9-1990.

- Shri M.A.Chitale, Secretary Ministry of Water Resources
- Shri V.B.Patel, Chairman, Central Water Commission. 2.
- Shri B.N.Navalavala, Adviser(I&CAD) ... Member Planning Commission.
- Dr.S.Maudgal, Adviser, Ministry of Environment & Forest representing Secretary, Min. of Environment & Forest.
- Shri V.V.R.K.Rao, Director(HEP) representing Chairman, CEA
- Shri S.S.Chibbar, Dy.Commissioner(DF) representing ecretary, Ministry of Agriculture (Deptt. of Agriculture & Cooperation).
- Dr.B.R.Sharma, ADG(IWM), representing Director General, ICAR
- Shri R.K.Chakrabarti, F.A., Ministry of Water Resources. ... Member
- Shri T.S. Murthy, Chief Engineer (PAO) Central Water Commission. Member Secretary

Ministry of Water Resources

- Shri S.R. Saha srabudhe, Cormissioner (PR)
- Shri K.S.Sharma, Commissioner (Indus) 2.
- 3. Shri Ramesh Chandra, Commissioner (B&N)

Central Water Commission

- Shri Rajeshwar Verma, Member (P&P)
- Shri H.V.Kumar, Chief Engineer (PPO) Shri P.C.Jain, Chief Engineer (FM) Shri P.C.Lau, Director (PA-N) 2.
- 3.
- Shri K.C.Manchanda, Director (PA-S)
- Shri Y.V. Dharma Rao, Director (PPO_S)
- Shri A.K.Mahana, Director (PPO-G)
 Shri J.C.Joshi, Director (FCD-N)
- Shri M.P. Gupta, Director (Eco.) PPO.

(Present for relevant items only)

Gujarat

- Shri J.B.Patel, Superintending Engineer, Karjan Project, Karjan Canal Circle, Bharuch, Gujarat.
- 2. Shri A.M.Mashhadi, Karjan Reservoir Project, Rajpapla, Gujarat.

Punjab

 Shri S.K.Bali, Chief Engineer, Punjab Irrigation, SCO 39/17 E, Chandigarh.

Rajasthan

- 1. Shri N.B. Moriya, Chief Engineer, Rajasthan.
- 2. Shri J.P.Bhatia, Superintending Engineer, Irrigation, Bhakra Irrigation Circle, Hanumangarh, Rajasthan.

Tamil Nadu

- Shri K.Pandy, Chief Engineer, PWD, Pariar Vagai Project, Madurai-2.
- 2. Shri R.Osmund, Superintending Engineer, PWD, Pariar Improvements Circle, Madurai-2.
- Shri N. Vaidyanathan, Officer Technical, Office of the * Spl. Chief Engineer, Periyar Vagai, Madurai.

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- Shri R.P.Goel, Engineer-in-Chief, Irrigation Deptt., Canal Colony, W.F. - Lucknow.
- Shri S.C.Arora, Chief Engineer, I&P(WP), Irrigation Deptt., Canal Colony, Lucknow-UP.
- Shri S.C. Gupta, Chief Engineer (Madhya Ganga), Madhya Ganga, Meerut.

BY SPEC AL MESSENGER

GOVERNMENT OF INDIA CENTRAL WATER COMMISSION

PROJECT APPRAISAL ORGANISATION

SEWA BHAWAN, R.K. PURAM, NEW DELHI-110066

Subject: Summary Record of discussions of the 50th meeting of theAdvisory Committee on Irrigation, Flood Control and Multipurpose Projects held on 20-3-1991.

The Summary Record of the 50th Meeting of the Advisory Committee on Irrigation and Multipurpose Projects held on 20.3.91 in the Committee Room of Ministry of Labour, Ist Floor Annexe, Shram Shakti Shawan, New Delhi is circulated herewith.

Summary Record of discussions on Flood Control Projects has already been circulated vide this office letter of even number, dated 1-4-1991.

(P.S.Murthy)
Chief Engineer (PAO) and
Member Secretary.

Encl:-As above

Telephone No.603561

- 1. Shri M.A. Chitale, Secretary, Ministry of Water Resources, Shram Shakti Bhawan, New Delhi.
- 2.Shri V.B.Patel, Chairman, Central Water Commission, Sewa Bhawan, R.K.Puram, New Delhi.
- 3. Secretary (Expenditure), Ministry of Finance, North Block,
- 4. Secretary, Deptt.of Power, S.S. Bhawan, Rafi Marg, New Delhi (Nominee Shri V.K. Khanna, Jt. Secretary).
- 5. Secretary, Ministry of Environment and Forest, Paryavaran Bhawan, CGO Complex, New Delhi.
- 6. Shri J.M. Qureshi, Secretary, Ministry of Welfare, Shashtri Bhawan, New Delhi.
- 7.Secretar, Deptt.of Agriculture&Co-operation, Krishi Bhawan, New Delhi (Hominee Shri T.V.Sampath, Agricultural Commissioner),
- 8.Director General, I&CAR, Krishi Shawan, New Delhi (Nominee Dr. I.P. Abrol, Dy. Director General SAE).
- 9. Chairman, Central Electricity Authority, Sawa Bhawan, R.K. Puran, New Delhi.
- 10. Chairman, Central Ground Water Board, Jamnagar House, New Delhi.
- 11. Adviser (I&CAD), Planning Commission, Yojana Shawan, New Delhi 12. Adviser (Energy), Planning Commission, Yojana Shawan, NeDelhi.
- 13. Financial Adviser, Ministry of Wate Resources, S.S. Bhawen,

CWC U.O.Nc.16/27/91-PA(N)/ dated -4-1993

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Ministry of Water Resources

- 1. Additional Secretary, S. B. Bhawan, New Delhi. 2.Jo nt Secretary (PP) ? S. Bhawan, New Delhi.
- 3.Commissioner (PR), S.S. Bhawan, New Delhi.
- 4.Commissioner (Indus), 11th Block, 8th Floor, CGO Complex, Lodi Road, New Delhi.
- 5. Commissioner (B&N), CGO Complex, LodhiRoad, New Delhi.
- 6. Joint Commissioner (PP), S.S. Bhawan, New Delhi. 7. Joint Commissioner (PR), S.S. Bhawan, New Delhi.
- 8. Joint Commissioner (P&M), S.S. Bhawan, New Delhi.

Central Water Commission, Sewa Bhawn, R.K. Puram, New Delhi

- 1. Hember (P&P)
- 2. Member (RM).
- 3. Member (D&R).
- 4. Member (WP).
- 5. Chief Engineer (PPO).
- 6. Chief Engineer (Mon-South).
 7. Chief Engineer (Mon-North)
- 8. Director(PA-N)/PA-S)/(PA-C).
- 9. Director(PPO-N)/(PPO-S)/(PPO-C).
- 10. Director, Cost Engineering.

Central Electricity Authority

1. Director(HEP), CEA, New Delhi.

Department of Environment

1. Dr.S. Maudgal, Agviser, Department of Engironment, Przyavaran Bhawan, CGr Complex, Lodii Road, New Delhi.

Department of Agriculture

1. Jt. Secretary (S.C. & LKC), Ministry of Agriculture, Department of Agriculture & Coop. 3-111, Shastri Bhawan, New Dolhi.

(T.S. Murthy) Chief Engineer PAO) Member Secretary.

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SUMMARY RECORD OF THE 50TH MEETING OF THE ADVISORY COMMITTEE ON IRRIGATION FLOOD CONTROL AND MULTIPURPOSE PROJECTS HELD ON 20.3.1991, IN THE COMMITTEE ROCH OF MINISTRY OF LABOUR, SHRAM SHAKTI BHAWAN, NEW DELIH.

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At the 50th Meeting of the Advisory Committee on Irrigation Flood Control and Multipurpose Projects held on 20th March, 1991, three flood control projects and 11 irrigation/multipurpose projects were discussed during the meeting. Summary record of discussions of the three flood control projects were issued vide C/C U.O.No. 16/27/91-PA(N), dated 1st April, 1991.

The 11 irrigation/multipurpose projects were discussed as under:

I. NEW MAJOR IRRIGATION/MULTIFURPOSE PROJECTS

1. Hathnikund Barrage Project., Harrana (S1.No.4 of 1991) Estimated Cost Rs.72.89 Crores

The Hatinikund Darrage Project was earlier considered by the Advisory Committee in its 38th Meeting hold on 27th January, 1938. This is a replacement work of age old existing Tajewala weir. Since an amicable solution on the capacities of the head regulators had not been reached amongst the States of Harvana and U.P. At as decided that the construction of the Mathnikund Barrage Project be restricted to barrage portion only and construction of head reculators may be kept in abeyance till an agreement is reached between the two states regarding their capacities including therein a reasonable provision for Delhi Water Sup ly. At a meeting hold at the level of Secretaries to the Governments of Harvana and MP held at Chandigerh on 24th April, 1990, it was concluded that the capacities of the headregulators for the Western Yamuna Canal (Haryona side) and Eastern Yamuna Canal (UP side) could be fixed as 566.4 cumecs (20,000 cusecs) and 186.9 cumecs (6600 cuseds) respectively (including 20% for silt excluder). The project estim-te has also been updated at December, 1988 price level for Rs.72.09 erores.

During discussions, the $W\cdot P\cdot$ representative stated that the capacities of the head regulators were yet to be ratified by his State. The Maryana representative reiterated the urgency of

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constructing the barrage as the Tajewala head works could give wry anytime in case of high glood and this would result in catactrophic flood downstream and also disruption of supplies to the imigation systems and drinking water distribution system of Dolhi. A sugrestion was, therefore, made by the Chairman, CMC and the Secretary, WR, to construct the head regulators for the existing depactties as at Tajew-lo, with provision for enhancement of such apposities. However, there was difference of opinion by UP and Faryana on the existing cas cities, of the regulators at Tajowels. Scoret ry, MR, therefore, desired thet the Chrisman, CFC, who is already having discussions with the States of UP and Maryana on the sharing of Yamuna Waters, could try to resolve this issue of sizing of herd regulators " with the States of CP and Garyana. After an agreement was and reached, the matter could be brought before the Advisory Committee for its consideration.

(Action: Govt. of Heryana/Covt. of UP)
Central Water Commission

2. Noture Irrigation Project, Gujarat (S) No. 9 of 1991) - Estim ted Cost Rs.43.705 Crores

This project was earlier considered by the Advisory (Committee in December, 1983 and found acceptable subject to certain observations and later as a sort note (as the project was in advance stige of construction) in January, 1969. The project has now been appraised under "FAST TRACK" procedure on proferma basis as ap licable to Wedium Irrigation Projects as per Planning Commission Circular letter dated 10th July, '90.

The observicions of the Advisory Committee on the review of hydrology and inter-state espects have been complied with. The project has thready been cleared from the environmental angle and also from Forest (Conservation) Act, angle. The RR Plans as submitted by the State Government have also been cleared by the Ministry of Welfrie. It was also noted that out of an estimated cost of Rs.43.705 crores, an expenditure of Rs.43.24 crores had already been incurred till March, 1990. The project was, therefore, found adaptable.

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The represent tive from the Ministry of Agriculture stated that in the proposed ero dim pattern instead of wheat, or moruld be included even though wheat was stated to be preferred in the project area. The Secretary, MR, observed that since the irrigation in the project area had commenced since 1984, a cropping pattern would evolve on its own and could be reviewed based on the past experience and farmers preference. The measures for preventing possible water logging due to introduction of irrigation in the area should also be considered. The State Gove, should prepare a socio economic evaluation report of the project.

(Action: Planning Commission, State Govt. of Gujarat

3. Thenwar Irric tion Project, Madhya Fradesh (Sl.No.10 of 1991) - Estimated Cost Rs.24.384 Crores.

This project was earlier put up to the Advisory Committee in June, 1988 as a short note as the project was in advanced stage of construction. However, as per the Planning Commission's Circular letter of 10th July, 1990, this project has been appraised under fast track procedure on a proforma basis as in the case of a medium irrigation project.

heugh earlier the P partment of Environment was not willing to consider the project as it was under advanced stace of construction, the Ministry of Environment and Forests have now suggested to the State Govt. to carry out studies on the catchment areas treatment plans and other details which are under compliance by the State Govt. As regards forest land required for the project, the representative of the State Govt. informed that in 6 ha. of forest land coming under submergence and 9.3 ha. of forest land required for construction of canals, roads, felling of trees had already been done by the State Forest Department much before the Forest (Conservation), Act of 1980 came into force. The State Forest Department had also placed Rs.3.074 labbs towards afforestation. The Advisor, Planning Commission, was of the view that the logal status in this regard needs to be looked into.

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The representative of Ministry of Welfare observed that more than 50% of the population affected belonged to Scheduled Castes and Scheduled Tribes and the State Govt. had merely stated that after giving compensation for land and property the affected population had migrated to the places of their choice. He, therefore, desired details of compensation and the rehabilitation measures by the State Govt. to be furnished. The State representative informed that out of the effected population, 56 families opted for rehabilitation in the hearby villages within one and a half ICM and the rest had shifted to higher elevations. For resettlement, plots of size 50 'x60' had been provided by the State Govt. The compensation paid towards properties and land was Rs.35.2 labbs and 55.9 lakbs respectively. It was, agreed that a team comprising of representatives from CVC, Deptt. of Social Welfare and the State Govt, would visit the Project for socio-economic evaluation including rehabilitation and resettlement aspects and make additional provisions for R&R if found necessary. The Secretary, MR, observed that since the project was nearing completion, any additional provicions required towards Rd could form a supplementary estimate severately.

The representative from the Ministry of Agriculture suggested that the propping pattern be reviewed especially for replacing local paddy with high violating variety.

The project was found acceptable.

(Action: Planning Commission/CTC/)
State Govt. of M.P.

4. Gyangur Pump Canal, Uttar Pradesh (Sl. Jo.11 of 1991) - Estimated Cost Rs.110.51 crores.

This project was earlier considered by the Advisory Committee in its 33rd meeting held on 21st March, 1986 for Rs.73.39 crores. Exring discussions the Committee had raised certain observations and it was decided that the project may be out up again for consideration of the Committee after complying with the observations.

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The observations of the Committee have been complied with and found acceptable. The project has also been updated to Rs.110.61 Crores at 1989; sice level. After discussions the project was found acceptable.

(Action: Planning Commission)

II. NIW MEDIUM IRRIGATION PROJECTS

1. Walan Medium Irrigation Scheme, Gujarat.
(S1.No.5 of 1991) - Estimated Cost Rs. 22.156 Crores.

The project was discussed and it was observed that:

- (a) The project involves submergence of forest land to an extent of about 433 ha. Clearance by the Ministry of Environment and Forests is yet to be obtained.
- (b) A population of 780 persons (all belonging to Scheduled Tribes) are affected. The RR plans which have been furnished to the Ministry of Welfare needs to be approved by them.
 - (c) The command lies in a rainfall sone of 1900 mm.
 Cropping pattern and the irrigation planning needs
 to be reviewed in consultation with the State
 Adricultural Department taking into consideration,
 the soil condition/éte.
- (d) Though the project is a medium irrigation project are is to be examined in a proforma basis, as the project was in initial stade of construction, the status of the planning studies required to be carried out for properation of Project report (as prescribed by the Planning Commission) need to be furnished by the State Govt.

The Committee was, therefore, of the view that the project may be put up to the Advisory Committee again after attending to the above observations.

{Action: State Covt. of Gujarat}

2. Then Medium Irrigation Project, Gujarat (S1.No.6 of 1991) - Estimated Cost Rs. 12.485 Crores.

The project was earlier considered by the Advisory Committee at its meeting held in 1/63 and 12/83 for Rs.504.80 lakhs. Since 87% of the cost of the project had already been incurred upto June, 1983, the Committee decided that no useful jurpose would be served in considering this project

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to the State Government by the Flanning Commission in March, 1984.

Subsequently, in the light of the Planning Commission's directive that all angular projects should be appraised by March, 1991, this project has been appraised and pit up. It was noted that about 92% of the expenditure had already been incurred upto March, 1990 and the Project was nearing completion. No forest land was involved and certificate to this effect has been furnished by the State Forest Department.

After discussions the project was found acceptable. {Action : Planning Commission}

3. Dep Irrigation Project, Orissa (S1.No.8 of 1991) - Estimated Cost Rs.52.227 Crores

The project was last considered by the Advisory Committee at its meeting held on 25th October, 1988. It was decided that the project could be considered after the State Govt. submitted the proposal to the Centre for release of forest land and reviewed the design flood based on observed data as suggested by the Advisory Committee earlier.

The observations hav been complied with the State Govt. Approval of the Ministry of Environment and Forests for diversion of forest land required for this project has also been issued.

During discussions the representative of the Din. of Welfare indicated that a number of tribal families were likely to be affected by this project, but no detailed RR Plan had been drawn up by the State Govt. The State Govt. was, therefore, requested to prepare detailed RR Plan and obtain clearance from Deptt. of Social Welfare. The Adviser, Planning Commission observed that this being a new medium project of the8th Five Year Plan it was necessary that the State Govt. should indicate the status of the planning studies required to be carried out (as prescribed by the Planning Commission).

After discussions it was decided that the project may come up before the deviations Committee after complying with the above observations.

(Action: State Govt. of Orissa)

conveyed in March,

FILL REVISED MAJOR I GRATION/MULTITURPOSE PROJECTS

1. Hodernkeation of Periyar Valent Arrhetion System (Stage - I & II), Tamil Nadu. (£ .No. 2 of 1991) - E timated Cost Rs. 124.72 Crares.

The above project for a revised estimated cost of Rs.124.72 Crores was discussed at the last meeting (49th) held on 11th September, 1990. In this there is a proposal to construct a link canal. The Chairman of the Committee had suggested that before the proposal could be considered a team of afficers of DAR Wing of CMC should visit the site and submit a report giving the recommendations.

In pursuance of thisthe DER Wing had submitted a technical medmorandum on the design studies on the siltation problem in connection with modernisation of Periyar Vaigai Irrigation System, In this they had concluded that the proposal for construction of a Link canal downstream of Periyar Vaigai Dam to join Periyar main canal on the downstream of Poranai anicut appears to be most effective solution for the operational and maintenance problem faced by the Periyar Irrigation System.

After discussions, the Committee found the project acceptable for a revised estimate of Rs.124.72 Crores. {Action: Planning Commission}

2. Sutlej Yamuna Link Canal-Part I, Punjab (St. No.3 of 1991) - Estimated Cost Rs. 499.12 Crores.

The above project was last considered by the Advisory Committee at its meeting held in August, 1988, and was found acceptable for a revised estimated cost of Rs. 429.77 Crores. The project has since been updated to Rs.499.12 Crores at March, 1990 price level. An overall economic assessment of the SYL Project has also been worked out and was found to be viable.

After discussions the Committee found the project acceptable for a revised estimated cost of Rs.499.12 Crores.

Cation: Planning Commission (

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IV. REVISED HADIUM IRRIGITION PROJECTS

1. Dachhu-II Medium Irrication Project, Gujaret (St.No. 1 of 1991) - Estimated cost Rs.37.76 Crores.

The first revised estimate was approved by the Plannin Commission in Movember, 1978, for Rs.3.25 crows to irrigate area of 7402 ha, annually. The estimate had to be further provided due to renovation and restoration of the head works necrosiated after emprecedented flood of August, 1979. In this second revised estimate the indictentity of irrigation has a enhanced from 79.3% to 95.3% by replicing high water consuming crops like paddy and sugarcane with low water consuming crops and by liming of canal system. Annual Irrigation has been increased to 9522 ha. The representative of Ministry of Agriculture pointed out that the irrigation intensity of 95% was on the low side. It was clarified that earlier intensity proposed was only 79% and this has been anhanced to 95% by deleting high vater consuming crops are replacing them by gramut, bejue, jower.

After dicussions, the Committee found the project acceptable.

Action: Planning Commission

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2. Meja Modernis tion and Meja Fueder Project, Rajasthan (Sl. Mo. 7 of 1991) - Estimated Cost Rs.31.62 crores)

The above project was earlier considered by the Advisory Consisted in Movember, 1985 for a revised estimated cost of Rs.24.22 Crores are found acceptable. The estimate has since been updated to Rs.31.62 Clores at 1989-90 price level. There is no change in the scope of the project. An expenditure of Rs.26.35 Crores has been incurred upto March, 1989.

After discussions, the Committee found the project acceptable.

Action: Planning Commission