Minutes of the 96th Meeting of the Expert Appraisal Committee (EAC) for River Valley and Hydroelectric Projects held on 11th and 12th August, 2016 at Teesta Hall, First Floor, Vayu Wing, Indira ParyavaranBhawan, JorBagh Road, New Delhi – 110 003.

The 96th Meeting of the EAC for River Valley and Hydroelectric Projects (RV & HEP) was held on 11th and 12thAugust,2016 at Teesta Hall, First Floor, Vayu Wing, Indira ParyavaranBhawan, JorBagh Road, New Delhi-110 003. Shri Alok Perti, Chairman, RV & HEP chaired the meeting. The list of EAC members and officials/consultants associated with various projects and who attended the meeting is at Appendix.

Agenda Item No.1: Confirmation of Minutes of the 95th Meeting of EAC held during11th and 12thJuly, 2016.

Thereafter, following agenda items were taken up:

Agenda item 2.1. MORAND-GANJAL IRRIGATION PROJECT IN HOSANGABAD DISTRICT OF MADHYA PRADESH BY M/s NARMADA VALLEY DEVELOPMENT AUTHORITY- FOR ENVIRONMENTAL CLEARANCE.

Morand and Ganjal Complex project is a major irrigation project included in the Narmada Master plan. The proposed project envisages construction of two dams, one across Morand river and another across Ganjal river to provide irrigation facility to 52,205 ha in Hoshangabad, Harda and Khandwa districts of Madhya Pradesh including drinking water supply for command villages and Seoni-Malwa Town.

Morand Dam is proposed near Morghat village of Seoni Malwa Tehsil of Hoshangabad District while Ganjal Dam is proposed near Jawardha Village of Rehatgaon Tehsil of Harda District. The co-ordinates of the proposed dam site are 22^0 19' 17.25" N & 77^0 28' 55.51" E and 22^0 13' 47.27"N & 77^0 19' 50.58" E, respectively.

The Catchment area of the Morand dam is 1031.99 $km^2$and that of Ganjal Dam is 413.49 km^2.

The project components are:

(i) A dam across Ganjal river, a tributary of Narmada River.
(ii) A dam across Morand river, a tributary of Ganjal River with a Saddle Dam.
(iii) Morand Right Bank Canal (MRBC) for irrigating an area of 3331.00 ha.
(iv) Morand Left Bank Canal (MLBC) for irrigating an area of 4867.562 ha.
(v) Ganjal Left Bank Canal (GLBC) is a feeder canal combining with MLBC and continuing as Contour Canal (Combined Canal) for irrigating an area of 44006.44 ha in tail portion of the canal. Out of 44006.44 ha, 10000 ha of area is proposed to be

irrigated by underground pipeline with pressure irrigation system by taking an advantage of natural head available.

Thus, the total Irrigable Command Area (ICA) area proposed for irrigation from Morand and Ganjal complex project is 52,205.00 ha. Proposed Annual irrigation is 70476 ha with irrigation intensity of 135%.

Water use allocated by NWDT for Morand-Ganjal Complex Project is 465.48 MCM (0.377MAF). 75% dependable yield approved by CWC for Morand and Ganjal Dam sites are 316.34 MCM & 126.75 MCM, respectively. Total yield of both the dams put together is 443.09 MCM against which, the proposed utilization is 404.605 MCM (0.328 MAF), 356.35 MCM of water for Irrigation,15.18 MCM for drinking water, 27.055 MCM as average evaporation losses and rest of the water is released as e-flow along with spills.

Morand Dam: it is an earthen dam whose maximum height is 47.28 m and Saddle dam is composite dam with concrete spillway, whose height is 21.51 m.
Ganjal Dam: It is a composite dam with concrete spillway at centre of the river, whose height is 38.43 m.

Morand reservoir submerges an area of 2200.68ha, which includes 6 revenue villages. Out of six, two villages will get submerged fully and rest four villages are partially getting submerged and forest area of 1437.65 ha will be submerged. Ganjal reservoir submerges an area of 833.24 ha of reserve forests which includes two forest villages. Out of two, one village is getting submerged partially and other village whose only land within the river bank is getting submerged.

Total land requirement for the project is 4100.37 ha out of which 2436.50 ha is forest land, 288.75 ha is government land and 1375.12 ha is Private land. Total submergence area is 3033.92 ha.No National park/Wildlife Sanctuary/Biosphere Reserve exist within 25 km radius of the project.

Earlier, the Environment Appraisal Committee (EAC) for River Valley and Hydro Electric Power Projects appraised this project in its meetings held on 10-11February, 2012; 1-2June, 2012 and 20-21 July, 2012. Committee has recommended the Terms of Reference (ToR) and Ministry of Environment, Forest and Climate Change (MoEFCC) has accorded the clearance for pre-construction activities at the proposed site as per provisions of EIA Notification, 2006 and its subsequent amendments along with ToR for preparation of EIA/EMP Report vide No. J-12011/43/2011-IA-I dated 17.10.2012. The validity period of the ToR was 2 years i.e. up to 16.10.2014.

As per the approved ToR, the base line data with respect to Environmental components viz., Air, Noise,Water, Soil and Biology & Biodiversity and Wildlife, etc. have been collected for three seasons (Pre-Monsoon, Monsoon & Post Monsoon for the project area within 10 km radius). It’s impact assessmenthas been carried out, suitable

mitigation measures have been ascertained and the draft EIA andEMP report prepared and submitted to State Pollution Control Board, Madhya Pradesh for conductingPublic Hearing vide CE's Memo No.W/152012/part-v/2014/06 Sanawad, dated 3.2.2014.

In the wake of the new Act "The Right to Fair Compensation and Transparency in Land Acquisition,Rehabilitation and Resettlement Act, 2013" Rules are to be made by the GoMP in accordance withClause 109 of the Act and also Multiplication Factor for related Rural Area after First Schedule (page37) of Act was not yet notified, due to which Public Hearing could not be carried out.

The issue was discussed in the 80th EAC meeting held during 11-12 December,2014. Post review EACmember recommended for extension. Accordingly MoEFCC extended the validity period for 1 yeari.e. from 7.10.2014 to 16.10.2015 vide Letter No. J-12011/43/2011-IA-I dated 11.02.2015.

Though, the first extension was accorded, issue of new LA Act, 2013 still prevailed The issuewas resolved in July, 2015 by the State Government. The R & R chapter was been revisedaccordingly and the Draft EIA & EMP report was submitted to Regional Officer, M.P. Pollution ControlBoard, Indore and Bhopal for conducting Public Hearing vide EE's Memo No. 2508 & 2510 /T.S/EE-23/2015-16 Bhopal, dated 7.9.2015.

Project affected and benefited districts in this project are Harda, Betul, Hoshangabad and Khandwa. Datesfor the Public hearing were finalized between Sep-Oct, 2015, but the Public Hearing dates were beyondthe 1stextension validity period i.e. after 16.10.2015.

The status of the Public hearing and Forest Diversion case of this project was appraised in the88th EAC meeting held during 26-27 October,2015. After review,. EAC member recommended for furtherextension of the validity period for 1 year i.e.up to 16.10.2016 in the minutes of 88thEACmeeting.

Public hearing was conducted in the Project affected and benefited districts of the Project area, in accordance with EIA Notification, 2006 at the following venues and dates under the auspices of State Pollution Control Board (M.P.).

S. No.	Village	District	Dates
1.	Bothi	Harda	3.11.2015
2.	Jhiriyadoh	Betul	5.11.2015
3.	Morghat	Hoshangabad	18.11.2015
4.	Dagarkhedi	Khandwa	27.11.2015

Final EIA & EMP report was prepared after incorporating the issues raised in the Public Hearing. The total amount for implementation of various measures under Environmental Management and Monitoring Plan is Rs 606.44 Crores. The details are given in below Table:

S.No.	Item	Cost (Rs in Lakhs)	Remarks
1.	Fisheries Management	428.99	
2.	Environmental Management in labour camp	370.00	
3.	Public health delivery system	360.00	
4.	Air, Noise, Water and Land Management plan	58.00	
5.	Compensatory Afforestation	18000.00	
6.	Forest & Wildlife Conservation Plan	500.00	
	[GB development Plan (including dam site restoration, Canal bank plantations, GB around colonies and avenue plantations), Adoption of species, Reservoir Rim Treatment Plan, CAD Plan (Agro-forestry)]		
7	Energy Conservation measures	50.00	
8	Public Awareness Programmes	30.00	
9	Resettlement and Rehabilitation Plan	27827.00	
10	Catchment Area Treatment Plan	1944.26	
11	Command Area Development Plan	10357.71	
12	Local Area Development Plan	215.00	
13	Dam Break Analysis and Disaster Management Plan	95.00	
15	Environmental Impact and Assessment studies	300.00	
16	Environmental Monitoring Programme	108.02	
	Total	**60643.98**	**(Say 606.44 Crores)**

The total estimated cost of the project is **Rs. 2585.76 Crores** which includes land development cost (Rs.20,000/= per ha) of Rs.104.41 Crores.

After detailed deliberation, the EAC observed that the presentation made by the PP on EIA/EMP report was totally not in agreement with the contents of the EIA/EMP report. Thus, the EAC suggested that the EIA/EMP report should be modified with the following observation:

1. As the total land acquired for the project comprises 90% land belonging to the tribals, thus, the R & R plan is to be modified which should include a long term livelihood plan for the tribals. The plan should conform to the provisions of National Tribal Policy of Government of India.

2. Skill mapping inventorization of the human resources available around the project area is to be undertaken and on the basis of the data base generated, various provisions of their livelihood be prepared based on the need based market.
3. The data base on status of wildlife species and their habitats of the project area and adjoining tiger habitats generated under the All India Tiger Monitoring Programme for the years 2006, 2010, and 2014by the State Forest/Wildlife Department should be incorporated in the report.
4. The documents pertaining to the Narmada Water Tribunal Award regarding sharing of water with the concerned States should be also included in the report.
5. The e-flow recommendation for the project should be site specific to the area.
6. Water quality data mentioned in the report requires recheck.

Agenda item 2.2. SINDH (SEONDHA) BARRAGE PROJECT IN DATIA DISTRICT OF MADHYA PRADESH BY M/S. WATER RESOURCES DEPARTMENT, GOVERNMENT OF MADHYA PRADESH – FOR FRESH SCOPING/ TOR.

The project had informed the Member Secretary (Hydropower Projects) on 10.08.2016 that there would be major changes are anticipated in the detailed survey for the proposed project. Therefore, deferment of the project for discussion in the EAC was requested. Thus, the project deferred for next EAC meeting.

Agenda item 2.3. INSTALLATION OF 5 NOS. OF MATERIAL ROPEWAYS FOR THE CONSTRUCTION OF DEOTHAL CHANJU HEP (30 MW) IN CHAMBA DISTRICT OF HIMACHAL PRADESH BY M/S. HIMACHAL PRADESH POWER CORPORATION LTD – FOR FRESH SCOPING/TOR.

The project did not attend the EAC meeting. Thus, the project deferred for next EAC meeting.

Agenda item 2.4.INSTALLATION OF 6 NOS. OF MATERIAL ROPEWAYS FOR THE CONSTRUCTION OF CHANJU-III 30 MW HEP IN CHAMBA DISTRICT OF HIMACHAL PRADESH BY M/S. HIMACHAL PRADESH POWER CORPORATION LTD – FOR SCOPING/TOR.

The project did not attend the EAC meeting. Thus, the project deferred for next EAC meeting.

Agenda item 2.5. ADDITIONAL STUDIES FOR CIA& CCS OF SUBANSIRI RIVER BASIN IN ARUNACHAL PRADESH – APPROVAL OF TOR.

ToR for Additional Studies for Cumulative Impact Assessment and Carrying Capacity Study (CIA and CCS) of Subansiri River Basin in Arunachal Pradesh was considered in the EAC meeting.

The CIA and CCS of Subansiri River Basin of Arunachal Pradesh was approved by EAC/MoEFCC in March, 2016. The total IC of proposed 28 HEPs in Subansiri basin (including more than 25 MW and less than 25 MW HEPs) is 11282.7 MW. Tammu HEP (55 MW) was recommended in the CIA& CCS study to be dropped.

Subsequently, Government of Arunachal Pradesh brought to the knowledge of MoEFCC that certain proposed HEPs in Dikrong river and Panyor river of Subansiri basin were not included in the report. It was then decided that those projects viz., 21 HEPs should also be considered for CIA & CCS studies. List of such HEPs having total IC of 706.5 MW in Subansiri river, Panyor river and Dikrong river as provided by Government of Arunachal Pradesh is given below:

S.No.	Name of proposed HEP	Proposed IC (MW)
A. On Subansiri River		
1.	Pein HEP	10
2.	Siken HEP	8
3.	Palin HEP	15
4.	Panyi HEP	24
5.	Sichi	24
6.	Pei HEP	5
7.	Phurchi HEP	5
Sub-total		91
B. On Panyor River		
8.	Adum Panyor HEP	25
9.	Panyor Lepa Middle HEP	21
10.	Pareng HEP	14.5
11.	Keyi HEP	23
12.	Panyor HEP	80
13.	Pith HEP	5
Sub-total		168.5
C. On Dikrong River		
14.	Pare HEP	110
15.	Turu HEP	90
16.	Dardu	60
17.	Par HEP	65
18.	Papumpare HEP	25
19.	Senki HEP	2
20.	Papum HEP	15
21.	Doimukh HEP	80
Sub-total		447
Total (A+B+C)		706.5

MoEFCC presented the draft ToR (based on the approved TOR of the previous CIA & CCS) study). Based on the discussions and deliberations, EAC suggested the following additional ToR for consideration in the additional study.

1. Inclusion of sites of archaeological importance in the study area and its impact assessment.
2. Inventory of avifauna, migratory routes/corridors of species and impact assessment
3. Biodiversity studies to be conducted using latest tools (camera traps) and methodologies.

Agenda item 2.6. Cumulative Impact Assessment & Carrying capacity Studies of Teesta River Basin in West Bengal-Discussion on the draft Report.

During presentation of the study, it was noticed that the Study of Teesta Basin for West Bengal portion was initiated at the instance of Ministry of Environment & Forests, Government of India while according prior Environmental Clearance to Teesta Low Dam-V HEP in May, 2013. The HEPs in the study area and their current status is given in Table-1 and Table-2 respectively.

Table-1: HEP proposed in the Study Area

S. No.	Project Name	Proposed IC (MW)	Name of PP
1.	Teesta HEP Stage-VI	500	LANCO
2.	Teesta Intermediate	84	Handed over to NHPC by West Bengal State Electricity Distribution Corporation Limited (WBSEDCL)
3.	Teesta Low Dam -I and II	81	
4.	Teesta Low Dam –III	132	NHPC
5.	Teesta Low Dam –IV	160	NHPC
6.	Teesta Low Dam –V	80	Handed over to NHPC by WBSEDCL
7.	Jorthang Loop	96	Dans Energy Private Limited (DEPL)
Total		1133	

Table-2: Current Status of HEP in the Study Area

S. No.	Project Name	Proposed IC (MW)	Current Status
1.	Teesta HEP Stage-VI	500	Under Construction
2.	Teesta Intermediate	84	Scoping Clearance accorded in Oct., 2013
3.	Teesta Low Dam –I and II	81	Scoping Clearance accorded in Dec., 2013
4.	Teesta Low Dam –III	132	Commissioned
5.	Teesta Low Dam –IV	160	Commissioned
6.	Teesta Low Dam –V	80	Scoping Clearance accorded May, 2013
7.	Jorthang Loop	96	Commissioned
Total		1133	

The Teesta sub-basin in West Bengal covers an area of 3,225 km^2 which comprises of hilly terrain of Darjeeling district (approximately 1,121 km^2) and plains of Jalpaiguri district (2,104 km^2). The study was carried out in Teesta river and its tributaries flowing in the hilly terrain of West Bengal. Monitoring samplings were located at 15 sites of Teesta, Rangit and Riyang Khola rivers. All the samplings were carried out on monthly interval from April, 2014 to March, 2015.

The discharges for 90% dependable year for hydroelectric projects being covered under the present study are given in Table-3.

Table-3: 90% Dependable Year for HEPs river Teesta and Great Rangit

Month		Teesta Intermediate HEP	Teesta Low Dam –I and II HEP	Teesta Low Dam –III HEP	Teesta Low Dam –IV HEP	Teesta Low Dam –V HEP	Jorthang Loop HEP
June	I	656.09	79.26	416.09	341.20	440.5	111.4
	II	925.97	130.44	699.31	410.08	740.3	189.3
	III	823.73	274.99	657.65	735.26	696.2	163.9
July	I	1187.40	594.87	745.70	833.39	789.5	221.7
	II	785.20	480.05	808.17	808.08	855.6	197.1
	III	663.99	382.00	981.79	967.24	1039.4	150.1
August	I	669.65	258.83	772.33	798.59	817.6	170.8
	II	651.29	520.54	867.84	684.34	918.8	246.6
	III	804.86	332.21	854.72	723.44	904.9	214.5
September	I	547.50	240.51	648.70	649.03	686.8	170.8
	II	493.27	197.06	471.16	879.92	498.8	122.4
	III	644.40	207.63	583.07	673.76	617.3	214.5
October	I	371.00	196.58	515.41	608.68	545.7	103.4
	II	396.64	154.89	518.05	510.59	548.4	84.9
	III	350.08	120.96	488.15	430.61	516.8	65.6
November	I	294.64	88.84	284.85	242.42	301.6	50.8
	II	278.71	64.98	159.07	221.51	168.4	47.8
	III	239.18	49.25	135.53	196.92	143.5	39.9
December	I	204.83	43.79	192.12	178.92	203.4	31.1
	II	187.43	39.04	176.95	171.99	187.3	27.3
	III	206.73	36.92	126.22	154.91	133.6	24.3
January	I	177.22	35.57	177.76	141.25	188.2	24.3
	II	105.50	28.33	164.43	134.40	174.1	24.9
	III	107.97	26.98	157.45	127.96	166.7	24.6
February	I	94.53	30.95	132.62	156.72	140.4	24.3
	II	93.18	34.21	131.44	151.28	139.2	24.0
	III	89.09	9.35	128.49	151.11	136.0	23.7
March	I	106.94	4.79	160.94	126.81	170.4	22.7
	II	175.82	7.97	168.79	137.64	178.7	27.5
	III	231.53	15.85	179.37	160.48	189.9	24.7
April	I	215.38	24.00	151.19	223.07	160.1	43.6
	II	275.14	15.15	190.90	215.28	202.1	44.7
	III	314.46	33.65	316.33	244.11	334.9	41.1
May	I	491.19	30.87	226.82	423.01	240.1	70.2
	II	724.76	78.18	231.66	281.28	245.3	45.6
	III	745.81	156.18	400.69	312.90	424.2	51.8

The detailed presentation on the findings of terrestrial ecology, aquatic ecology, fauna and avifauna has been revealed. The design flow series for the various hydroelectric projects on Teesta River along with its tributaries were also presented. The results of HEC-RAS model for various scenarios as outlined in Table-4 were also covered in EAC meeting

Table-4: various scenarios covered as a part of HEC-RAS modeling

S. No.	Season	Flow Release (average of months)	Months
1	Monsoon Season	100%	June-September
2	Monsoon Season	30% to 15% at 1% interval	June-September
3	Non-Monsoon non lean season-1	100%	October-November
4	Non-Monsoon non lean season-1	30% to 15% at 1% interval	October-November
5	Lean Season	100%	December-March
6	Lean Season	30% to 15% at 1% interval	December-March
7	Non-Monsoon non lean season-2	100%	April-May
8	Non-Monsoon non lean season-2	30% to 15% at 1% interval	April-May

The details of free stretch between various projects with and without Teesta Low Dam V HEP is given in Table-5 and 6, respectively.

Table-5: Details of length of free flow of river with Teesta Low Dam V HEP

S. No.	Projects	Length of free flow of river (km)
A.	River Teesta	
1.	TWL of Teesta VI HEP & FRL Teesta Intermediate HEP	1.40
2.	TWL of Teesta intermediate HEP and FRL of Teesta Low Dam III HEP	6.00
3.	TWL of Low Dam III HEP and FRL of Teesta IV Low Dam HEP	4.47
4.	TWL of Teesta IV Low Dam HEP and FRL of Teesta V Low Dam HEP	1.10
5.	TWL of Teesta V HEP and FRL of Teesta Barrage	15.0
B.	River Great Rangit	
6.	TWL of Jorthang Loop HEP & FRL of Teesta-Low Dam I & II HEP	3.0

Table-6: Details of length of free flow of river without Teesta Low Dam V HEP

S. No.	Projects	Length of free flow of river (km)
A. River Teesta		
1.	TWL of Teesta VI HEP & FRL Teesta Intermediate HEP	1.40
2.	TWL of Teesta intermediate HEP and FRL of Teesta Low Dam III HEP	6.00
3.	TWL of Low Dam III HEP and FRL of Teesta IV Low Dam HEP	4.47
4.	TWL of Teesta IV Low Dam HEP and FRL of Teesta Barrage	20.77
B. River Great Rangit		
5.	TWL of Jorthang Loop HEP & FRL of Teesta low Dam – I&II HEP	3.0

After the detailed deliberation on the recommendations of the study report, the following observations/comments were raised by the EAC and suggested to incorporate these observations/comments in the Final Basin Report:

- 23% of average of Non-Monsoon non lean season (October-November) shall be released as environmental flows for Teesta Low Dam (I&II) HEP & Teesta Intermediate HEP
- A chapter on the environmental audit of the commissioned projects based on the environmental management plan implemented for the environmental clearance for all these projects shall be added in the Final Report.
- The hydrological data of releases from the commissioned project shall be collected alongwith the cross section of river for assessing the Environmental Flows. A meeting in this regards shall be held with the PP.
- The projects on the tributaries of the Teesta river e.g. Ramam river are to be included in the basin study report.

Agenda item 2.7. Any other items

a. ATTAPPADY VALLEY IRRIGATION PROJECT IN PALLAKKAD DISTRICT, KERALA.

The proposal of above mentioned project was discussed on 28.03.2016 inthe 92nd meeting of EAC for River Valley & HEP projects for obtaining ToR. The proposal was discussed at length with the committee and it was informed to the committee that the reservoir of dam falls within the radius of 5 km from interstate boundary of Kerala and Tamil Nadu. After detailed deliberation in the 92ndEAC, the EAC directed the project proponent to obtain comments on the project from the state of Tamilnadu in view of the Kerala-Tamilnadu Interstate boundary coming within 10 km periphery from the project component.

It was submitted that in this regard, Government of Kerala had written to Tamilnadu government vide its D.O. Letter No 507038/ISWC2/2016/WRD dated 04.05.2016 addressed to the Additional Chief Secretary to Government, Tamilnadu PWD, Govt. of Tamilnadu, by the Additional Chief Secretary to Government, WRD, Govt. of Kerala for obtaining their comments as suggested in the EAC meeting held in March, 2016.But no reply was givenby the State of Tamilnadu till date.

The Attappady Valley Irrigation Project (AVIP), a medium irrigation project, envisages the construction of a Concrete gravity dam across Siruvani river, a tributary of Bhavani river at Chittur in Agali Village of Mannarkkad Taluk in Palakkad district of Kerala state. The dam will impound 65 million m^3 (2.29 TMC) of the awarded share of water from Bhavani river basin as against the award of 2.87 TMC as per the Final Order of Cauvery Water Dispute Tribunal (CWDT). There is also a proposal for small power generation of 3 MW.

The Full Reservoir Level (F.R.L) of the dam is fixed at +611.00m and Maximum Water Level (MWL) at +612.00 m. A free board of 1.50 m is provided for wave action and the dam top level is +613.50 m. The length of the dam is 450m and the height of the dam from the deepest point is 51.50m. The Spillway openings are provided to discharge the design flood of 3,622 cumec by means of 4 shutters of size12x12.50 m. The canal distribution system is proposed to irrigate a command area of 4,900 ha of land in Sholayur, Agali and Kottathara villages of the Attappady region. Pipes are proposed, so as to reduce land acquisition and also to increase efficiency. The submergible area of the dam is 302 ha, out of which 76 ha is forest land and 226 ha is private land. The total project cost is about Rs. 797 Crores.

As the proposed project has only 4,900 ha of CCA, the project should have come under Category B. But due to presence of Kerala-Tamilnadu interstate boundary within 10 km periphery from the project component the project is now listed as Category A as per amendment in EIA Notification 2006 dated 25.06.2014 and hence the proposed project was in the EAC.

The EAC took note of no responsesfrom the Tamilnadu state instead of several letters sent from the Government of Kerala and MoEF&CC to the Government of Tamilnadu and thus, recommended grant of Standard ToR with the following additional conditions:

1. As the total land acquired for the project involves Tribals, the R & R plan be prepared should include a long term livelihood plan for the Tribals.
2. Skill mapping inventorization of the human resources available around the project area is to be undertaken and on the basis of the data base generated, various provisions of their livelihood be prepared based on need based market.
3. The Baseline studies should consist of three seasons i.e. Monsoon: September-November, Winter: December-February and Pre-Monsoon: March-May.

b. CUMULATIVE IMPACT ASSESSMENT & CARRYING CAPACITY STUDIES OF LOHIT RIVER BASIN IN ARUNACHAL PRADESH – INCLUSION OF ANJAW HEP.

The project proponent of Anjaw HEP has informed the EAC that Anjaw HEP has not been included in the Draft Lohit Basin Report as brought out in MoM of 95thEAC meeting.

280 MW Anjaw HEP had been earlier accorded Scoping approval along with ToRs by MoEF & CC in November, 2011 and validity of same was extended by MoEF&CC from time to time and the last extension was granted on 25th February, 2016. The EIA/EMP studies for Anjaw HEP have been awarded to M/s RS Envirolink Technologies Pvt. Ltd and the study is in progress.

Initially, Anjaw HEP (270 MW), proposed on main River Lohit had been studied as a part of the Lohit River Basin Study and was covered in Final draft report of Main Lohit RBS report and was reflected in 53rdand 65th EAC minutes of meeting held during 11-12 November, 2011 and 22-23 March, 2013, respectively.

However, the consultant had missed out the project, which had been reflected in 95th EAC meeting held on 11and 12July, 2016.

EAC took a serious note on casual approach of the Consultant on an important matter and after detailed deliberations directed the Consultant to withdraw all the earlier comments and recommendations pertaining to the Lohit river basin study and to prepare afresh Basin study report of Lohit river basin after including the Anjaw HEP.

Agenda item 3.1. UPPER KRISHNA IRRIGATION PROJECT DISTRICT BIJAPUR IN KARNATAK BY M/s KRISHNA BHAGYA JALA NIGAM LIMITED (KBJNL) – FOR ENVIRONMENTAL CLEARANCE.

The project proponent made a detailed presentation on the project and explained that Upper Krishna irrigation project across Krishna river provides irrigation facility for drought prone areas of Bijapur, Bagalkot, Kalaburgi, Yadagir and Raichur districts in northern Karnataka. The project involves construction of two major dams near Almatti and Narayanapur to facilitate the irrigation. The Upper Krishna project was executed in two stages. Stage-I of the project is irrigating 4,24,903 ha and Stage-II is irrigating 1,97,120 ha. Both Stage-I & II were given Environmental Clearance from MoEF vide letter Nos. J-12011/41/86-IA dated 05.04.1989, J-12011/31/96-IA.I dated 18.07.2000 and J-12011/30/96-IA.I dated 04.10.2000, respectively.

Due to the demand of farmers, KBJNL has taken up modernization works within the gross command area of Upper Krishna Project Stage-I and II. These modernization works are in line with the 'National Water Mission (NWM)' program as a part of National Action Plan for Climate Change. The main objective of NWM is conservation of water and minimizing wastage and ensuring its more equitable distribution both across and

within states through 'Integrated Water Resource Development and Management (IWRM)'.

The modernization proposal involves lifting of water from Krishna River directly at three places Viz., Budihaal-Peerapur LIS, Nandawadagi LIS and for Ramthal (Marol) LIS and whereas for Thimmapur LIS and 9(A) distributary, water will be drawn from existing Almatti Right Bank Canal and Narayanpur Right Bank Canal, respectively to provide irrigation facilities for the drought prone areas. The water required to irrigate the additional command area is achieved by reducing the irrigation intensity of Upper Krishna Project from 108%, 115% to 100%.

The additional lifting of water neither involves submergence nor Rehabilitation & Resettlement. Further, there are no ecologically sensitive area, national parks, wildlife sanctuaries in the command area and no forestland is required to implement the above schemes except 9(A) distributary for which 6.6 ha of forest land is required. Forest Clearance for the same has already been obtained. The modernization proposal allows a greater area of land to be used for crops in areas where rain fed production is impossible or marginal. By adopting drip irrigation in 60,100 ha, there will be considerable saving in water and water use efficiency will be increased. The entire command area and the modernization works will be automated by using Telemetry and SCADA and GIS tool for effective water management. The salient features of the project are as follows:

Particulars	Thimmapur LIS	Budihaal-Peerapur LIS	Ramthal (Marol) LIS	Nandawadagi LIS	9(A) Distributory	Total
Lift point	5 + 386 KM of ARBC	Fore shore of N'pur dam	Back water of N'pur dam	Back water of N'pur dam	54 + 12 KM of NRBC	--
ICA (ha)	20,100	20,243	38,000	36,100	15,200	1,29,643
Water allocation (TMC)	4.41	3.78	5.84	3.75	3.46	21
Cropping pattern	Khariff, Rabi and Bi-seasonal					--
Type of irrigation	Gravity flow	Gravity flow	Gravity flow & Drip	Drip	Gravity flow	--
Benefitting villages	36, Bagalkot and HungundTaluks of Bagalkot District	42, Muddebihal and SindagiTaluks of Bijapur District	83, Hungund Taluk of Bagalkot District	86, Hungund Taluk of Bagalkot District and Lingasugur Taluk of Raichur District	44, Devadurga and Manvitaluk of Raichur District	291 villages of Bagalkot, Raichur and Vijayapura Districts
Cost of the project (Cr)	133.3	840	1,004	1,530	203	3,710
B.C Ratio	1.3	1.2	1.18	1.62	1.5	
Land requirement (ha)	558	737	763	195	150	2,403
Submergence	Nil					Nil
R& R	Nil					Nil
Power requirement (MW)	7.45	12	16.5	12	--	47.95
Protected areas	Nil					Nil
RF diversion	Nil	Nil	Nil	Nil	6.6 ha	Forest Clearance obtained

Project proponent sought amendment to already issued Environmental Clearance for the project. However, EAC in its meeting held on 08.02.2016 informed that the modernization works are within the gross command area of Upper Krishna Project Stage-I & II which was accorded Environmental Clearance by MoEF previously and doesn't envisage construction of any major structures. However, involves construction of intake canal, Jack well-cum-pump house, raising main and distributary network only. Hence, additional ToR for the project was issued on 10.05.2016.

As per the ToR granted, the draft EIA/EMP report was prepared. The annual average rainfall in the area is less than the state average. Therefore, providing irrigation to these areas is very much important to improve the crop yield. The proposed project is planning to utilize water in two seasons based on the crop water requirement. The project is designed keeping in view of the demand of downstream flow (e-flow). As per the water yield calculations, sufficient flow is available for ecosystem services. The entire water distribution is automated and controlled by SCADA system.

There are 291 villages benefitting under the proposed scheme. The proposed modernization works requires 2,403 ha for implementation of the project. Out of which, 822 ha of land was already acquired and remaining 1,581 ha will be acquired as per Right to Fair Compensation and Transparency in Land Acquisition Act, 2014. The land required is only for construction of Jack well cum pump house, Intake canal and Delivery chambers.

The environmental aspects covering command area and 10 km radius from the main project components within the gross command area have been considered. The baseline data has been collected covering physico-chemical, biological and Socio-economic aspects. One season baseline data has been collected for air, noise, water, soil and ecological aspects. Impacts during construction and operation phases have been assessed and mitigation measures suggested to minimize the anticipated impacts.

As per the additional ToR, the Public Consultation was conducted at Nandawadagi Village, Hunagund Taluk, Bagalkot District on 25.07.2016, Salwadagi Village, Muddebihal Taluk, Vijayapura District on 26.07.2016 and Tondihal Village, Lingasugur Taluk, Raichur District on 27.07.2016. The major concern expressed during the public consultation was to expand the irrigation facilities for the adjacent areas. All the issues discussed during the public consultation were considered in the EIA/EMP report. Some of the important project benefits expressed during the meeting are:

- Agricultural linkages will be considerably improved.
- The project improves total farm output and hence raises farm income.
- Project improves yields through reduced crop loss due to erratic, unreliable or insufficient rainfall.
- No new structure is proposed across the river.
- It allows a larger area of land to be used for crops where rain fed production is impossible or marginal.
- Extensive agricultural production supplies raw materials to the nearby small scale industries thereby increasing the economy in the region.

- Altogether, population of 291 villages belongs to 5 talukas will be benefitted directly under the scheme.
- Direct employment opportunities for 300 members during construction phase and 50 members during operation phase of the project have been ensured. Further, indirect labor opportunities will be substantially improved since larger area will be brought under irrigation.
- It improves fodder crops and in turn dairy farming in the command area.
- Increased benefits of water conservation through adoption of drip irrigation in the 60,100 ha of command area.
- Zero water logging and salinity problems. Weed and disease reduction due to adoption of micro irrigation.
- Labor requirements will be considerably reduced.
- No rehabilitation and resettlement.

Effective EMP is proposed to mitigate the impacts during construction and operation phase of the project on various environmental components such as air, water, noise, soil, solid and hazardous waste, biological and social environment. Catchment area treatment plan, command area development plan, green belt development plan, muck disposal plan and fisheries development plan is also proposed for implementation. A total EMP cost of Rs. 497.70 Crores is estimated for implementation of mitigation measures during construction phase and Rs. 81 Crores is estimated for operation phase of the project.

After detailed deliberation, the EAC recommended the project for issuance of environmental clearance for the project with the following conditions:

- Six monthly compliance reports shall be submitted to Regional Office, MoEFCC, Bengaluru without fail until completion of the modernization works.
- Land acquired for the project shall be suitably compensated with the prevailing guidelines and all commitments made during the public hearing shall be fulfilled.
- Periodical soil health shall be tested in command area during operation phase to ensure the maintenance of the soil fertility.

Agenda item 3.2. TUBACHI – BABALESHWARA LIFT IRRIGATION SCHEME BAGALKOT DISTRICT, KARNATAKA BY M/s.KARNATAKA NEERAVARI NIGAM LTD., GOVT. OF KARNATAKA – FOR ENVIRONMENTAL CLEARANCE.

The project proponent made a detailed presentation on the project and explained that proposed Tubachi-Bableshwara Lift Irrigation Scheme envisages diversion of 107.57 MCum (3.8 TMC) of water from Krishna River near Kavatagi village of Jamakhandi Taluk by lift and providing Drip Irrigation facility for 42,500 ha of dry lands of 36 villages belongs to Jamakhandi, Athani and VijayapuraTalukas. The proposed irrigation is only during Khariff season and the intensity of irrigation is kept at 100%. According to EIA

Notification, 2006 and its subsequent amendments in 2014, the proposed project is categorized as 'A' and requires EC from MoEFCC, New Delhi. The salient feature of the project is as follows:

1.	Name of the Scheme	Tubachi-Bableshwara LIS
2.	Name of the river	Krishna
3.	Geographical Location of Lift point	Latitude – $16^0$32′07″N, Longitude –$75^0$25′23″E
4.	Location of the Lift point	Kavatagi, Jamakhandi Taluk, Bagalkot,Karnataka
5.	Type of the project	Drip Irrigation
6.	Estimated cost of the project	Rs. 2488.97 Cr
7.	Command Area	42,500 ha
8.	No. of villages benefitting	36
9.	Allocated water	107.60M.Cum (3.8 TMC)
10.	Cropping pattern	Kharif (June - October)
11.	Irrigation intensity	100%
12.	Submergence area	Nil
13.	Rehabilitation and Resettlement	Nil
14.	Total Land required	105 ha
15.	Total forest land required	0.73 ha, Application for FC submitted and is inprocess
16.	Power Requirement	9 MW, Source – Hubli Electricity Supply Company Limited (HESCOM).

The ToR for the project was accorded on 22.05.2015 and as per the ToR, the draft EIA/EMP report has been prepared. The command area is experiencing severe drought stations in the last 15 years and uncertainty within a year causes the agriculture a risky venture. Therefore, providing irrigation to these areas is very much essential to improve the crop yield. The proposed project has been planned to utilize water only during July-December based on the crop water requirement. The project is designed keeping in view of the demand of downstream flow (e-flow). As per the water yield calculations, sufficient flow is available for ecosystem services.

An intake channel (1,300 m) is proposed to lift the water from Krishna River. A Jack Well cum pump house will be constructed to pump the water to the Delivery chambers through a MS rising main of 30.3 Km length (3.5 m dia.). The intake level is kept at RL 525 m. The RL of Delivery Chamber-1 (DC-1) is kept at RL 682 m and the elevation of Delivery Chamber-2 (DC-2) is kept at RL 670 m. DC-1 is supplying water for 19,600 ha and from DC-1 a gravity MS rising main of 13.3 km (2.63 m dia.) will be channelized to supply water to DC-2 to cater 22,900 ha of command area. The entire 42,500 ha command area will be irrigating in 2 stages.The entire water distribution is automated and controlled by SCADA system.

There are 36 villages benefitting under the scheme. Altogether, 25,509 households and 1,47,501 population is benefitting under the scheme. The proposed project requires 105 ha area, of which 0.73 ha area is the forestland, for implementation of the project. The land required is only for construction of Jack well cum pump house, Intake canal and Delivery chambers. The land will be acquired as per the Right to Fair Compensation and Transparency in Land Acquisition Act, 2014. The process of obtaining Forest

Clearance as per Forest (Conservation) Act, 1986 is under process. The benefit cost ratio has been worked out to be 1.51 considering the annual administrative expenses, depreciation charges and electrical energy charges.

The environmental aspects covering command area and 10 km radius from the main project components have been considered. The baseline data has been collected covering physico-chemical, biological and socio-economic aspects. The 3 seasons data have been collected for air, noise, water, soil and ecological aspects. Impacts during construction and operation phases have been assessed and mitigation measures suggested minimizing the anticipated impacts.

The Environmental Public Consultation was conducted at Tikota Village, Vijayapura Taluk & District on 12.07.2016, Aratal Village, Athani Taluk, Belagavi District on 13.07.2016 and Kavatagi Village, Jamakhandi Taluk, Bagalkot District on 20.07.2016. The major concerns expressed during the public consultation was to upgrade the existing link road in Kavatagi Village, Water supply and continuous electricity supply to Kavatagi village and provide suitable compensation for the land losers. All the issues discussed during the public consultation were considered in the EIA/EMP report. Some of the important project benefits expressed during the meeting are;

- Project improves yields through reduced crop loss due to erratic, unreliable or insufficient rainfall.
- It allows a greater area of land to be used for crops where rain fed production is impossible or marginal. Presently, 10,625 ha practicing rainfedagriculture and due to the implementation of the scheme 42,500 ha will be under irrigation.
- Extensive agricultural production supplies raw materials to the nearby small scale industries thereby increasing the economy in the region.
- Increased benefits from flood control, soil erosion, etc.
- Altogether, population of 1,47,501 belongs to 25,509 families in the command area will be benefitted directly under the scheme.
- Direct employment opportunities for 300 members during construction phase and 30 members during operation phase of the project. Further, indirectly labor opportunities will be substantially improved since larger area will be brought under irrigation.
- It improves fodder crops and in turn dairy farming in the command area.
- Increased benefits of water conservation through adoption of drip irrigation for the entire 42,500 ha of command area.
- Zero water logging and salinity problems. Weed and disease reduction due to adoption of micro irrigation.
- The project requires only 105 ha for implementation of the scheme and does not envisage rehabilitation and resettlement.

- No tree cutting involved and only 0.73 ha of forestland required for implementation of the scheme. Agro forestry shall be taken up in command area and it improves the ecosystem services.

Effective EMP is proposed to mitigate the impacts during construction and operation phase of the project on various environmental components such as air, water, noise, soil, solid and hazardous waste, biological and social environment. Catchment area treatment plan, command area development plan, green belt development plan, muck disposal plan and fisheries development plan is also proposed for implementation. A total EMP cost of Rs. 38.83 Crores is estimated for implementation of mitigation measures during construction phase and operation phase of the project.

After detailed deliberation, the EAC made the following observations:

1. Orders from Government of Karnataka in respect of 1 TMC of water allocation for the project shall be submitted.No objection from the lower riparian State i.e. Andhra Pradesh shall be submitted by the Project Proponent.
2. Permission for firm power linkage from the concerned authorities be obtained and submitted to MoEF&CC.

On submission of the aboveinformation, the matter may be placed before the EAC for further consideration

Agenda item 3.3. DR. B. R. AMBEDKAR PRANAHITA PROJECT IN ADILABAD (CONSTRUCTION OF BARRAGE & CANAL AT TUMMIDI HETTI) DISTRICT OF TELANGANA BY M/s IRRIGATION DEPARTMENT, GOVERNMENT OF TELENGANA – FOR FRESH SCOPING/TOR.

An inter-state agreement for construction of barrage has been signed between the Chief Ministers of the two states of erstwhile Andhra Pradesh and Maharashtra on 05th May 2012. As there will be a submergence of 1456.86 ha (3600 acres) of their land, Maharashtra government raised concerned over fixing of the proposed FRL of + 152.00 m for the construction of barrage near Tummidihetti and requested to reduce the FRL to reduce the submergence in their territory. Since then it was pending.

After formation of Telangana State, some of the on-going major irrigation projects taken up by the erstwhile Government of Andhra Pradesh in Telangana were reviewed. An inter-state agreement for construction of barrage near Tummidihetti village on Pranahitha riverhas been signed between the Chief Ministers of both States Telangana and Maharashtra on 08th March, 2016 with revised scope.

In the revised scope the Chief Ministers of both States agreed to reduce FRL from +152m to +148m which reduces submergence area to 209 ha (516.45 acres) as per the concern of Maharashtra State.

It is proposed to construct barrage on the river Pranahitha, just near the confluence of the rivers Wardha and Wainganga near Tummidihetti Village, Koutala

Mandal, Adilabad District of Telangana on right flank and Kungadamal village, Gadchiroli District, Maharashtra State on left flank.

The Barrage is proposed to draw 566.4 Million Cubic Meters (20.00 TMC) of water to provide irrigation facilities of about 80,937.128 ha (2,00,000 acres).

After detailed deliberation, the EAC made the following observations:

1. There is a canal of 24 km long constructed for which ToR has been issued but no EC has been issued by the MoEFCC and now in the proposed proposal, the same has been included. Status of project for which ToR has been issued be informed to the MoEFCC. The detailed of the project viz. location, start of construction of the canal, cost of the project, expenditure made for the canal, reason of the abandonment of the project, funds arranged for the same, etc. should be submitted to the MoEFCC. The project proponent must explain why this construction of 24 km canal should not be treated as acase of violation.The project proponent is to submitexplanation to the Ministry before the matter is considered by the EAC for issue of TOR.
2. The PP should submit NOCs/ Agreements between Maharashtra & Andhra Pradesh (1978 GWDT award), between Telangana & Maharashtra and between Telangana & Andhra Pradesh states/ Godavari River Management Board as per provisios of Andhra Pradesh Reorganization Act, 2014 / Management and development of Water Resources, Para 84 of Part IX .

Agenda item 3.4. KOSI-MOECHI INTRASTATE LINK PROJECT (CONSTRUCTION OF 76.20 KM LONG CANAL (76.20 KM) ON THE EXISTING BARRAGE BEYOND EASTERN KOSI MAIN CANAL (41.30 KM) FOR IRRIGATION PURPOSE UNDER KOSI- MECHI INTRSTATE LINK PROJECT IN THE STATE OF BIHAR BY M/S. WATER RESOURCES DEPARTMENT, GOVT. OF BIHAR- FOR FRESH SCOPING/ TOR.

Ministry of Water Resources, Government of India in the year 2004 decided toundertake comprehensive assessment of feasibility of linking of the rivers of thecountry starting with southern rivers in a fully consultative manner and to explorethe feasibility of intrastate river links of the country.

- Accordingly, inclusion of prefeasibility / feasibility studies of intrastate links aspectin NWDA's mandate was put up for consideration in Special General Meeting ofNWDA Society held in June 28, 2006 and it was decided to incorporate thisfunction in NWDA's mandate. Finally, MoWR vide resolution dated 30 November,2006 modified the functions of NWDA Society.

- The functions of NWDA were further modified vide MoWR resolution dated 19 May, 2011 to undertake the work of preparation of Detailed Project Report (DPR)of intrastate links also by NWDA. Further, the Gazette Notification of theenhanced mandate was issued in June, 2011.

- In the meantime, on the basis of approval conveyed by MoWR in June 2005,NWDA requested all the State Governments to identify the intrastate linkproposals in their States and send details to NWDA for their prefeasibility /feasibility studies.

- Bihar responded to NWDA's request vide letter No. PMC-5(IS)-01/2006-427,Patna dated 15 May, 2008 and submitted their proposals. Subsequently, ameeting was held between the officers of the Water Resources Department(WRD), Govt. of Bihar and NWDA on 16 June, 2008 in Patna. In the saidmeeting, Govt. of Bihar requested NWDA to prepare the prefeasibility report ofsix intrastate links out of which two were irrigation schemes. The Kosi-Mechiintrastate link is one of them.

- The Kosi-Mechi intrastate link project proposed by Government of Bihar is anirrigation project. The proposed gross command area of the project andculturable command area are 2.75 lakh ha and 2,14,812 ha (CCA 2.15 ha), respectively spread over in the districts of Araria, Kishanganj, Purnea and Katiharin the state of Bihar.

- Under Kosi-Mechi intrastate link project, it is proposed to construct New canalof length 76.20 km on the existing constructed barrage on river Kosi beyond theexisting eastern main Kosi main canal (41.30 km) to irrigate 2,10,516 hacommand area with a total water requirement of 2050.15 MCM for irrigation inKharif season.

- The aim of extension of Eastern Kosi Main Canal (EKMC) upto Mechi river ismainly to provide irrigation benefits to the water scarce Mahananda basincommand in the districts of Araria, Kishanganj, Purnea and Katihar during kharifseason depending upon the pondage available in Hanuman Nagar barrage.

- The proposed link canal traverses towards Lat. 260 14′ 27″ N & Long. 87º 22' 00"to Lat. 26º 21' 47"N & Long. 870 57′ 23″ E. The link canal forms its northernboundary while river Parman and river Mahananda form the western and easternboundaries. In south, it is spread upto river Ganga.

- The Kosi-Mechi Link Project envisages diversion of part of surplus water of Kosiriver through existing Hanuman Nagar barrage to Mahananda basin. Maincomponents of the project involve remodelling of existing EKMC upto 41.30 kmand construction of a new canal from RD 41.30 km to 117.50 km long. The FSLof link canal at head is 74.371 m and at tail end is 54.238 m.

- The water available at Hanuman Nagar barrage will be diverted through linkcanal to Mahananda basin and for enroute utilization. In this entire length of thecanal, 14 syphon aqueduct, 9 canal syphon, 9 cross regulator, 28 head regulator,9 pipe culverts and 42 road bridges and 3 escapes are required to be constructed.

- The capital cost of proposed project is estimated as Rs. 4900.00 crore.

After detailed deliberation, the EAC recommended the project for issuance of standard TOR for the project with the following additional conditions to be submitted at the time of final appraisal of EC.

1. The base line data shall be for one season.
2. The old data available for the existing project shall be used in preparation of EIA/EMP report for the proposed project.

Agenda Item 3.5: BOWALA NAND PRAYAG HYDRO-ELECTRIC PROJECT (300 MW) in Alaknanda River in Chamoli District of Himachal Pradesh – for Scoping / ToR.

Bowala Nandprayag Hydro-Electric Project is a run-of-the-river scheme on river Alaknanda. The project is situated in Tehsil Chamoli, District Chamoli of Uttarakhand state. The Bowala Nandprayag HEP envisages to install 300 MW HEP and a total average annual energy production of 1343.1 GWh or Million Units for 90% dependable year. The plant will comprising a concrete barrage, an intake structure, desilting basin, a headrace tunnel, a restricted orifice type surge tank, pressure shaft, underground penstocks, a surfaced powerhouse. The design discharge is 239.4m^3/s. The catchment area of river Alaknanda at Bowala is 5,590 km^2 out of which the snow bound area is 2,740 km^2 and rain fed area is 2,850 km^2. The barrage will be gated type with crest length of 121m. Head race tunnel will be horse shoe type of 10.05 km length. The power house will be a surface type of 300MW installed capacity.

Intake of this scheme is located near Birahi village on Rishikesh Badrinath road on N.H-58 at a distance of 208 km. for Rishikesh. The nearest airport is at Jolly grant, Dehradun and the nearest railhead is Rishikesh. Longitude and Latitude of the project area are 79^0 22'40" E to 30^0 24'30" N, respectively.

Further, the project proponent informed that ToR was issued for revised capacity of BNP (300 MW) vide letter No. J-12011/11/2003-IA.I dated: 09.09.2008 with the direction to submit EIA/EMP studies before conducting Public Hearing at site. A detailed EIA/EMP report was prepared by M/s RITES in April, 2011 and report was submitted to MoEF & CC in April 2011 i.e. within the 3 years time frame with a request to allow UJVNL to conduct Public Hearing. Public Hearing was conducted at site on 23.08.2012 through UEPPCB, wherein it was decided by the DM (Chamoli) & UEPPCB official that Public Hearing is to be conducted again incorporating R&R issues. The project proponent informed that the Public Hearing was delayed because of poor logistics after severe flood in Uttarakhand in June, 2013. 2^{nd} Public hearing was conducted on 18

October, 2014 and minutes of the same was also submitted by UEPPCB to MoEF in November, 2014.

During the presentation, PP informed that Hon'ble Supreme Court vide orders dated 14.08.2014 and dated 12.10.2015 clarified that ban imposed on hydropower projects was applicable to 24 hydropower projects mentioned in the report of Wildlife Institute of India, Dehradun and Bowla Nand Prayag HEP is not included in the list of 24 projects. Therefore, this project can be considered for Scoping/ToR clearance.

Project proponent informed that repeated communications were made with MoEF after conducting public hearing in October,2014 to issue environmental clearance for this project. However, UJVNL has received communication from MoEF & CC for issuance of fresh ToR. Project proponent also informed that earlier field data collected for the EIA/EMP studies of the project is older than 3 years which requires to be updated and the same can be done through a rapid EIA/EMP study. Project proponent also informed that DPR of the project is at the verge of TEC from CEA as clearance from all 24 directorates of CEA/CWC/GSI/CSMRS has been issued and under such circumstances extensive studies will delay the project implementation unnecessarily. Additional studies required as per model ToR can be carried out in a short duration of 6 months. Project proponent also requested for allowing exemption from fresh public hearing as the same has already been conducted twice to satisfy the need of the local people and the last one was conducted on 18.10.2014.

EAC after detailed deliberation recommended for issuance of the standard TOR with the following additional studies:

i) Biodiversity study shall be carried out by associating a reputed organization as per the list of institutes available on MoEF & CC website.
ii) Camera trapping to be used for assessment of presence of wildlife in the project area.
iii) Skill mapping of project affected families shall be carried out and suitable provisions shall be made in R&R plan.
iv) Efforts to be made to the extent possible, so that no PAF loses their entire land holding on account of acquisition of land for the project.
v) PAF, whose 25% land will be acquired, must be empowered by providing suitable livelihood opportunity on a long term basis.
vi) ToR is granted subjected to the out come of Hon'ble Supreme Court Order in W.P. No. 68 0f 2008 (PIL), Anuj Joshi & another Vs Union of India & Others and policy of Central Government.

As, there being no agenda item left, the meeting ended with a vote of thanks to the Chair.

****

Annexure

96th Meeting of the Expert Appraisal Committee for River Valley and Hydroelectric Power Project

Date & Time : 11 -12 August, 2016 & 10.30 a.m. onwards

Venue: Teesta Meeting Hall, Vayu Wing, Ground Floor, Indira Paryavaran Bhawan, New Delhi

EAC members

ATTENDANCE SHEET

Sl. No.	Name of Member	Contact No
1	Shri Alok Perti, Chairman	+91-9868120880
	Shri Hardip S. Kingra	+91-9810194320
2	Shri Vinay Kumar, Central Water Commission Sewa Bhawan New Delhi-110066	+91-9868123768
3	Dr Satyakumar Wildlife Institute of India,P. O. Box No. 18,Chandrbani,Dehradun-248001	+91-9412901529
4	Dr S. Kerketta Member Secretary, MoEFCC	+91-9937167512