



**Uri - II HE Project**

**NHPC Limited**

**Six Monthly Progress Report on Environmental Aspects**

*Progress for the period ending Nov. 2009*

1.	Name of the Project	Uri - II HE Project
2.	Type of the Project	Hydro-electric project
3.	Clearance Letter(s) OM No. & Date a) Environment clearance b) Forest clearance	J-12011/14/2004-IA-I dated 13.08.2004 No forest land is required for the construction of the project. NOC in this regard has been issued by the State Government vide letter No. PCCF/FC/292/1514-17 dated 29.07.2003.
4.	Locations a) District(s) b) State (s) c) Latitude d) Longitude	Baramulla Jammu & Kashmir 34° 5' 34" N to 34° 6' 27" N 73° 56' 23" E to 74° 1' 52" E
5.	Address for Correspondence a) Address of concerned Project Head (with pin code and telephone / fax nos.)  b) Address of concerned HOD in Corporate Office (with pin code & telephone/ fax no.)	General Manager, Uri-II HE Project, Rajarwani, P.O. Lagama, Baramulla (J&K)-193 123 Tel : 01956-210200 Fax : 01956-244395  Executive Director (Planning), Corporate Planning Division, NHPC Office Complex, Sector-33, Faridabad-121 003 Tel / Fax: 0129-2271425

6.	Details of environmental management plans	<p>Following Environmental Management plans are being implemented at the project:</p> <table border="1" data-bbox="802 275 1505 1394"> <thead> <tr> <th data-bbox="802 275 922 443">S.No.</th> <th data-bbox="922 275 1304 443">EMP</th> <th data-bbox="1304 275 1505 443">Cost (Rs. in lakhs)</th> </tr> </thead> <tbody> <tr> <td data-bbox="802 443 922 499">1.</td> <td data-bbox="922 443 1304 499">Catchment Area Treatment</td> <td data-bbox="1304 443 1505 499">1009.35</td> </tr> <tr> <td data-bbox="802 499 922 556">2.</td> <td data-bbox="922 499 1304 556">Biodiversity Conservation</td> <td data-bbox="1304 499 1505 556">50.92</td> </tr> <tr> <td data-bbox="802 556 922 613">3.</td> <td data-bbox="922 556 1304 613">Fisheries Development</td> <td data-bbox="1304 556 1505 613">211.60</td> </tr> <tr> <td data-bbox="802 613 922 669">4.</td> <td data-bbox="922 613 1304 669">Health Care</td> <td data-bbox="1304 613 1505 669">174.24</td> </tr> <tr> <td data-bbox="802 669 922 779">5.</td> <td data-bbox="922 669 1304 779">Energy Conservation Measures</td> <td data-bbox="1304 669 1505 779">75.00</td> </tr> <tr> <td data-bbox="802 779 922 835">6.</td> <td data-bbox="922 779 1304 835">Muck Disposal</td> <td data-bbox="1304 779 1505 835">200.00</td> </tr> <tr> <td data-bbox="802 835 922 945">7.</td> <td data-bbox="922 835 1304 945">Restoration of construction areas</td> <td data-bbox="1304 835 1505 945">100.00</td> </tr> <tr> <td data-bbox="802 945 922 1001">8.</td> <td data-bbox="922 945 1304 1001">Green Belt Development</td> <td data-bbox="1304 945 1505 1001">75.00</td> </tr> <tr> <td data-bbox="802 1001 922 1058">9.</td> <td data-bbox="922 1001 1304 1058">Solid Waste Management</td> <td data-bbox="1304 1001 1505 1058">90.00</td> </tr> <tr> <td data-bbox="802 1058 922 1115">10.</td> <td data-bbox="922 1058 1304 1115">Disaster Management Plan</td> <td data-bbox="1304 1058 1505 1115">110.00</td> </tr> <tr> <td data-bbox="802 1115 922 1224">11.</td> <td data-bbox="922 1115 1304 1224">Environmental studies/ monitoring programme</td> <td data-bbox="1304 1115 1505 1224">125.00</td> </tr> <tr> <td data-bbox="802 1224 922 1333">12.</td> <td data-bbox="922 1224 1304 1333">Resettlement &amp; Rehabilitation</td> <td data-bbox="1304 1224 1505 1333">149.93</td> </tr> <tr> <td colspan="2" data-bbox="802 1333 1304 1394" style="text-align: right;"><b>Total</b></td> <td data-bbox="1304 1333 1505 1394"><b>2371.04</b></td> </tr> </tbody> </table>	S.No.	EMP	Cost (Rs. in lakhs)	1.	Catchment Area Treatment	1009.35	2.	Biodiversity Conservation	50.92	3.	Fisheries Development	211.60	4.	Health Care	174.24	5.	Energy Conservation Measures	75.00	6.	Muck Disposal	200.00	7.	Restoration of construction areas	100.00	8.	Green Belt Development	75.00	9.	Solid Waste Management	90.00	10.	Disaster Management Plan	110.00	11.	Environmental studies/ monitoring programme	125.00	12.	Resettlement & Rehabilitation	149.93	<b>Total</b>		<b>2371.04</b>
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7.	<p>Break -up of the Project area (land details)</p> <p>a) Submergence area (forest &amp; non-forest)</p> <p>b) Others</p>	<p>Forest land - Nil  Government land - 50 ha.  Private land - 25 ha.  <b>Sub total (A) - 75.00 ha.</b></p> <p>Forest land - Nil  Government land - 73 ha.  Private land - 58 ha.  <b>Sub-total (B) - 131.00 ha.</b></p> <p><b>Grand Total (A+B) - 206 ha.</b></p>																																										

8.	<p>Break up of the Project affected families with enumeration of those losing houses / dwelling units only, agricultural land only, both dwelling units and agricultural land and landless labourers / artisans.</p> <p>a) SC /ST /Adivasis b) Others</p>	<table border="1" data-bbox="802 243 1521 695"> <thead> <tr> <th>S. No</th> <th>Category</th> <th>No. of families</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Houseless &amp; Landless</td> <td>35</td> </tr> <tr> <td>2</td> <td>Houseless &amp; &lt;50% land acquired</td> <td>6</td> </tr> <tr> <td>3</td> <td>Houseless &amp; &gt;50% land acquired</td> <td>5</td> </tr> <tr> <td></td> <td><b>Subtotal Houseless (Displaced)</b></td> <td><b>46</b></td> </tr> <tr> <td>4</td> <td>Landless</td> <td>39</td> </tr> <tr> <td>5</td> <td>&gt;50% land acquired</td> <td>33</td> </tr> <tr> <td>6</td> <td>&lt;50% land acquired</td> <td>13</td> </tr> <tr> <td></td> <td><b>Subtotal (Partially affected)</b></td> <td><b>85</b></td> </tr> <tr> <td></td> <td><b>Grand Total</b></td> <td><b>131</b></td> </tr> </tbody> </table> <p>2 families (14 persons) 129 families (857 persons) <i>Note: -Figures likely to change as the same are under reconciliation with Revenue Department J&amp;K.</i></p>	S. No	Category	No. of families	1	Houseless & Landless	35	2	Houseless & <50% land acquired	6	3	Houseless & >50% land acquired	5		<b>Subtotal Houseless (Displaced)</b>	<b>46</b>	4	Landless	39	5	>50% land acquired	33	6	<50% land acquired	13		<b>Subtotal (Partially affected)</b>	<b>85</b>		<b>Grand Total</b>	<b>131</b>
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9.	<p>Financial details</p> <p>a) Project cost as originally planned and subsequent revised estimates and the years of price reference</p> <p>b) Allocations made for environmental management plans.</p> <p>c) Actual expenditure incurred on the Project so far.</p> <p>d) Actual expenditure incurred on the environmental management plans so far.</p>	<p>Rs. 1724.79 crores including IDC of Rs. 66.61 crores at September 2005 PL.</p> <p>Rs. 2371.04 lakhs</p> <p>Rs. 978.45 Crores (till November. - 2009)</p> <table border="1" data-bbox="802 1446 1521 1948"> <thead> <tr> <th>S.No.</th> <th>EMP</th> <th>Expenditure incurred (Rs. in lakhs)</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Catchment Area Treatment</td> <td>577.42</td> </tr> <tr> <td>2.</td> <td>Biodiversity Conservation</td> <td>47.60</td> </tr> <tr> <td>3.</td> <td>Fisheries Development</td> <td>--</td> </tr> <tr> <td>4.</td> <td>Health Care</td> <td>103.62</td> </tr> <tr> <td>5.</td> <td>Energy Conservation</td> <td>152.29</td> </tr> <tr> <td>6.</td> <td>Muck Disposal</td> <td>214.38</td> </tr> <tr> <td>7.</td> <td>Restoration of construction</td> <td>--</td> </tr> </tbody> </table>	S.No.	EMP	Expenditure incurred (Rs. in lakhs)	1.	Catchment Area Treatment	577.42	2.	Biodiversity Conservation	47.60	3.	Fisheries Development	--	4.	Health Care	103.62	5.	Energy Conservation	152.29	6.	Muck Disposal	214.38	7.	Restoration of construction	--						
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		areas	
		8. Green Belt Development	--
		9. Solid Waste Management	52.16
		10. Disaster Management Plan	--
		11. Environmental studies/ monitoring programme	199.15
		12. Resettlement & Rehabilitation	115.89
		<b>Total</b>	<b>1462.51</b>
10.	Forest Land requirements a) Status of approval for diversion of forest land for non -forestry use  The status of clear felling in forest land	No forest land is required for the construction of the project. NOC in this regard has been issued by the State Government vide letter No. PCCF/FC/292/1514-17 dated 29.07.2003.  Not Applicable	
11.	Status of construction a) Date of commencement (Actual and / or planned) b) Date of completion (actual and / or planned)	September 2005 (Actual)  February 2011 (Planned)	
12.	Reasons for the delay. If the project is yet to be started.	Not Applicable	
13.	Details of site visits a) By Monitoring Committee  By Regional Office	Ist Multidisciplinary committee visit - 24 April - 26 April 2007 2 <sup>nd</sup> Multidisciplinary committee visit - 04 May -06 May 2008 3 <sup>rd</sup> Multidisciplinary committee visit - 29 <sup>th</sup> July –31 <sup>st</sup> July 2009  --	
14.	Brief note on the status of compliance of the conditions stipulated by MOEF.	Refer <b>Annex-A.</b>	

**Brief status of Environmental works (July 2009 – Nov 2009)**

1. **Catchment Area Treatment Plan:**

(i) a) **Afforestation:**

Uri-II HE Project does not involve any forestland and, as such, no compensatory afforestation is involved. A budget of Rs. 1.95 crores has been submitted by the J&K Forest Department for afforestation of 1525 ha land, under CAT plan. Plantation works are being carried out in five sub-watersheds i.e. Hapathkhai (Buniyar) Nalla, Islamabad (Gujjar) Nalla, Maidan (Kallas) Nalla, Hajipeer (Namla Nalla, Uri and Salamabad (Jabla) Nalla, Isham Chakra and Dardkot. An expenditure of Rs 76.52 lakhs has been incurred on plantation, fencing of area and on other miscellaneous works related to afforestation.

**b) Nursery / Infrastructure Development:**

Project nursery has been developed in 2.5 ha in compartment No. 58 Hapthkhai (Buniyar) & a new nursery developed in compartment no. 04 Khadnayar (Buniyar) over an area of 1.70 ha for production of plant saplings for afforestation. About 5 lakh plants of various species of Conifer/ Rubinia / Apple / Kikker / Nut etc. have been raised for plantation in degraded areas. An expenditure of Rs. 22.49 lakhs has been incurred till May 09 for development of nursery and production of plant saplings. No major works are executed on development of nursery and production of plant saplings in the nursery, hence the expenditure remains same.

**c) Plant Distribution:**

About 19,600 fruit bearing plants have been distributed among project beneficiaries, against which an expenditure of Rs.4.9 lakhs has been incurred till May 09. Since no plantation distribution works are carried out, hence the expenditure incurred remains same.

(ii) **Implementation of CAT:**

An amount of Rs. 1009.35 lakhs is earmarked for the implementation of CAT Plan. An expenditure detail of Rs. 577.42 lakhs has been submitted by J&K Forest Department till November 2009. The implementation of balance CAT works is in progress.

**Physical Progress of CAT works**

Following physical works have been completed by Forest Department in various sub-watersheds:

(i) **Engineering Works:**

**a) DRSM Works**

DRSM works have been carried out in six sub-watersheds namely Hapatkhai (Buniyar) Nalla, Isalamabad (Gujjar) nalla, Maidan (Kallas) nalla, Hajipeer (Namla) nalla, Salamabad (Jabla) nalla and Parthi (Rewand) nalla. Construction of concrete check dams has been carried out in Salamabad nalla. 15538 Cu m of DRSM works have been completed.

**b). Mesh Wire Crates**

Mesh wire crate works have been carried out in five sub-watersheds namely Hapatkhai (Buniyar) nalla, Isalamabad (Gujjar) nalla, Maidan (Kallas) nalla, Hajieer (Namla) nalla and Salamabad (Jabla) nalla. About 105.80 MT of mesh wire crate works have been executed.

**c). Brush Wood Check Dams**

499 No. Brush wood check dams have been constructed in Trikanjan, Bagna Salamabad, Teethmulla & Banali (Buniyar) nalla subwatersheds and Nambala, Dardkot & Uri (Salamabad) nalla subwatersheds.

**d). Barbed wire fencing**

Barbed wire fencing has been done in five sub-watersheds namely Hapatkhai (Buniyar) Nalla, Isalamabad (Gujjar) Nalla, Maidan (Kallas) Nalla, Hajipeer (Namla) Nalla and Salamabad (Jabla) Nalla. About 1121 ha area has been covered/ fenced.

**e) Catch water drains**

Catch water drains have been constructed in six subwatersheds namely Hapatkhai (Buniyar) nalla, Isalamabad (Gujjar) nalla, Maidan (Kallas) nalla, Hajipeer (Namla) nalla, Salamabad (Jabla) nalla and Parthi (Rewand) nalla. Total lengths of 4186 Rmt of catch water drains have been constructed.

**f). Over head & miscellaneous Charges**

The Forest Department has engaged people for watch & ward to tackle an area of 19 ha fenced area. The department has spent on signboards, stairs and other miscellaneous works. An amount of Rs. 2.26 Lacs has been incurred under this head.

**2 Biodiversity Conservation Plan:**

As per EMP two core areas in Hapthkhai and Salamabad water sub shed are already taken up for implementation of Bio-conservation measures. During the year 2007-08, J&K forest department through DFO (CAT-Uri II) took up the works. About 22950 m length of barbed fencing covering 279 ha area and plantation of 112966 no. of plants, 28010 no. of medicinal plants and 33325 no. of fruit bearing plants have been undertaken in above two subwatersheds. An expenditure of Rs. 47.60 lacs has been incurred under biodiversity

conservation plan. No major works are executed during this period on biodiversity hence the expenditure incurred remains same.

### 3. **Free Fuel Supply:**

Details of LPG cylinders supplied and expenditure incurred till November 2009 are as follows:

<b>Name of Contractor Engaged</b>	<b>No. Of LPG Cylinders Consumed/ supplied</b>	<b>Expenditure Incurred</b>
M/s Hindustan Construction Company Limited	(i) 14.2 Kg. Cylinder = 4120 Nos. (ii) 19 Kg Cylinder = 4002 Nos. (iii) 5 Kg Cylinder = 22 Nos.  Expenditure (i)+(ii)+(iii) = Rs. 63.31 Supply of electricity through DG sets = Rs. 88.98 lakhs (approx.)	Rs. 152.29 Lakhs

### 4. **Resettlement & Rehabilitation:**

The Govt. of J&K has accorded the approval for R&R plan for Rs. 149 lakhs and against this an amount of Rs. 100 lakhs has been deposited with the Collector Land Acquisition for further disbursement. Collector Land Acquisition has disbursed houseless and transportation grant of Rs. 80.08 Lacs to PAP falling under houseless category.

The list of land oustees whose 100%, more than 50% or less than 50% land has been acquired is under reconciliation with revenue department and the due payment shall be released on receipt of verified list from the said deptt. Accordingly additional amount shall be released as per requirement of the collector.

The NGO "SAVE" has successfully completed the extension-training programme on computer training and vocational training of handicraft for 40 Students. Mobile training for PAPs also completed. The examinations are conducted by NGO, SAVE, Organisation in the last week of November 2009, results are awaited.

### 5. **Fisheries Development:**

The matter regarding fisheries development was put up to the Multidisciplinary Committee during its 3<sup>rd</sup> visit to the project from 29<sup>th</sup> July to 31<sup>st</sup> July 09. The Multidisciplinary Committee discussed the matter in detail and observed that participation of Fisheries Deptt. is important for timely implementation of fisheries development. It was advised by the Multidisciplinary Committee that project may take up the matter again with Fisheries

Deptt. J&K Govt. Additional Director, MOEF said that the matter would also be taken up by them with the Chief Secretary, J&K Government.

The project approached the Minister (Fisheries) J&K Government. The Minister (Fisheries) called a meeting wherein Commissioner Secretary (Forests) and Director (Fisheries) and other department Officials participated and the issue was discussed. After detail discussions the Minister (Fisheries) has agreed for taking up the work for execution by the department of Fisheries and assigned the work to Joint Director (Fisheries) for execution of the work. Joint Director (Fisheries) has also undertaken two visits of the project and held discussions and visited the site.

## 6. Muck Disposal:

The excavation works in the project are in full swing. Special care for proper disposal of muck is being taken. It is being ensured that already earmarked sites for muck disposal are utilized. Wire crates/Gabion structures are being provided for stabilization of muck dumping slopes. Till November 2009, about 89116.62 M<sup>2</sup> of gabion structures have been constructed, against which, an expenditure of Rs. 214.38 lakhs has been incurred. The reclamation aspects and the vegetation of slopes shall be undertaken at later stages, when the excavation activities are completed.

Till November 2009, about 34.13 lakhs m<sup>3</sup> of muck has been generated and out of which about 3.975 lakhs m<sup>3</sup> muck /boulders have been reused. Details are as under:

S.No.	Dumping Site	Capacity (Lakh cum)	Muck Disposed (Lakhs cum)	Muck reused (Lakhs cum)
1	S-1	22.00	3.10	Coffer Dam = 1.47
2	S-3	4.90	5.10	TRT Out Let = 0.63
3	S-4	16.80	17.80	
4	S-5	6.90	3.62	Wire Creates = 0.24
5	S-7	2.70	1.97	R.R Masonry = 0.12
	Total	53.30	31.59	Aggregate prod. = 1.515
	Used for coffer dam And Embankments Construction	1.47		
	Total muck generated	34.13		
	Total muck reused	3.975		

Note: - Dumping site S-2 &S-6 are not acquired due to inaccessibility or problem in land acquisition.

**7 Health & Hygiene**

Presently, mainly civil contractors M/s H.C.C. are engaged in construction works. The contractor has been advised to conduct medical check-up of the entire labour force. The contractor has established its own dispensary. It has been reported that all 2605 nos. labourers & Workers engaged by M/s H.C.C. have been thoroughly checked by their Medical Officers. No case of any communicable/ contagious disease has been detected. Eye tests, Hepatitis vaccination was also administered to labour engaged at crushing/ batching plants and under ground works. Total expenditure incurred for construction of dispensary, salary of Doctor, Paramedical Staff, periodical medical check-ups, vaccination and cost of medicines / surgical items etc as reported by M/S HCC is Rs. 103.62 lakhs.

**8. Sewage and Solid waste disposal**

For sewage disposal, septic tanks with soak pits have been provided in all the colonies. Dustbins have been provided in colonies / camps, and, for collection and safe disposal of solid waste, labourers have been engaged. An expenditure of Rs. 52.16 lakhs has been incurred on the construction of septic tanks/soak pits, dustbins, collection of waste through labourers and for construction of sedimentation tanks at tunnel faces reported by M/S HCC.

**9. Blasting Operation/Ventilation:**

Contractor is ensuring controlled blasting. Licensed blasters undertake the blasting operations. Due care is being taken by site in-charges for implementation of the blasting operation under strict supervision. Barriers have been erected and warning (through sirens) is given to workers at site & to the public before blasting. Delay detonators are being used in under ground excavation to control the ground vibrations. Contractor has installed high power ventilation fans for expelling the obnoxious gases and human beings are not allowed inside the blast area during defusing time after the blast. M/s HCC have incurred an expenditure of Rs. 0.36 lakhs on air sampling reports (noxious gases) and providing of warning signboards etc. at blasting sites. No major expenditure has been incurred during the period, hence the expenditure incurred remains same.

**10. Concentration of Fine Dust:**

M/s H.C.C. has installed sprinkler systems, which are being used at Crushing plant areas, and 6 nos. water tankers are engaged for sprinkling of water on various haul roads in order to control the fine dust. A total expenditure of Rs 115.68 lakhs has been incurred on above. Workers are provided Nose Masks, Ear Plugs etc. for keeping them safe from fine dust & sound. M/s HCC has conducted Monitoring test like Air, Water & Noise Monitoring tests through M/s Spectro Analytical Labs Ltd private, New Delhi. Total expenditure incurred amounts to Rs 198.33 lakhs.

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