

## Six Monthly Progress on Environmental Aspects

*Progress for the period ending March' 2024*

1.	Name of the Project	Kishanganga Power Station (330 MW)																								
2.	Type of the Project	Hydroelectric project																								
3.	Clearance Letter(s) OM No. & Date a) Environment clearance  b) Forest clearance	J-12011/36/2003-IA-I dated 09.03.2006.  Order No. 219-FST of 2008 dated 27.05.2008 (Forest Department, Govt. of J&K)																								
4.	Locations a) District(s) b) State (s) c) Latitude d) Longitude	Bandipora Jammu & Kashmir 34°39'00'N (dam site) 74°45'08'E (dam site)																								
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.)	Head of Power Station, Kishanganga Power Station, NHPC Office cum Residential Complex Karalpura, Bandipora, J&K - 193 502. Tele: 01957-225008; Fax: 01957-225011  Executive Director, Environment& DM Division, NHPC Office Complex, Sector-33, Faridabad-121 003 Email: envdivmgn-co@nhpc.nic.in																								
6.	Details of Environmental Management Plans:	Following Environmental Management plans are being implemented at the project: <table><tr><th>S. No</th><th>EMP</th></tr><tr><td>1.</td><td>Biodiversity Conservation Plan</td></tr><tr><td>2.</td><td>Catchment Area Treatment</td></tr><tr><td>3.</td><td>Fisheries Development</td></tr><tr><td>4.</td><td>Public Health Delivery System</td></tr><tr><td>5.</td><td>Solid Waste Management</td></tr><tr><td>6.</td><td>Energy Conservation Measures</td></tr><tr><td>7.</td><td>Rehabilitation of Dumping sites</td></tr><tr><td>8.</td><td>Landscaping &amp; restoration of construction areas</td></tr><tr><td>9.</td><td>Creation of Green Belt around reservoir</td></tr><tr><td>10.</td><td>Disaster Management Plan</td></tr><tr><td>11.</td><td>Resettlement &amp; Rehabilitation Plan</td></tr></table>	S. No	EMP	1.	Biodiversity Conservation Plan	2.	Catchment Area Treatment	3.	Fisheries Development	4.	Public Health Delivery System	5.	Solid Waste Management	6.	Energy Conservation Measures	7.	Rehabilitation of Dumping sites	8.	Landscaping & restoration of construction areas	9.	Creation of Green Belt around reservoir	10.	Disaster Management Plan	11.	Resettlement & Rehabilitation Plan
S. No	EMP																									
1.	Biodiversity Conservation Plan																									
2.	Catchment Area Treatment																									
3.	Fisheries Development																									
4.	Public Health Delivery System																									
5.	Solid Waste Management																									
6.	Energy Conservation Measures																									
7.	Rehabilitation of Dumping sites																									
8.	Landscaping & restoration of construction areas																									
9.	Creation of Green Belt around reservoir																									
10.	Disaster Management Plan																									
11.	Resettlement & Rehabilitation Plan																									

7.	Break -up of the Project area (land details) a) Submergence area (forest & non-forest)  b) Others	<div>Submergence area (in ha): i. Forest land 70.00 ii. Non-forest land 214.05 A Sub-total 284.05  Others: i. Forest land 55.00 ii. Non-forest land 42.56 B Sub-total 97.56 <b>(a) Total: 381.61 ha</b> <b>(b)Additional non-forest land acquired at Bandipora 03 Marla</b> <b>(c) Additional forest land at Gurez 0.9574 ha</b> <b>Grand Total (A+B+C) = 382.57 ha</b> <i>(3 Marla of land &amp; structure has been acquired at main gate of NHPC office cum residential complex in September 2018 and 0.9574 hectare of forest land at Gurez has been diverted by in principal approval from Govt. of J&amp;K dated 31.03.2021).</i></div>																																								
8.	Breakup of the Project affected population with enumeration of those losing houses / dwelling units only, agricultural land only, both dwelling units and agricultural land and landless labourers / artisans.  a) SC /ST /Adivasis b) Others	<div>Details of Project Affected Families (PAFs):<table><tr><th rowspan="2">Location</th><th colspan="3">Categories</th></tr><tr><th>Fully Affected</th><th>Partially Affected</th><th>Total PAFs</th></tr><tr><td>Powerhouse area (Bandipora)</td><td>05</td><td>166</td><td>171</td></tr><tr><td>Dam area(Gurez)</td><td>143 + 15</td><td>487</td><td>645</td></tr><tr><td>Sub total</td><td>163</td><td>653</td><td>816</td></tr></table> Category-wise classification:<table><tr><th>Location</th><th>Gen.</th><th>SC</th><th>ST</th><th>OBC</th><th>RBA</th><th>Total</th></tr><tr><td>Power house</td><td>114</td><td>02</td><td>53</td><td>01</td><td>01</td><td>171</td></tr><tr><td>Dam area</td><td>-</td><td>-</td><td>*645</td><td>-</td><td>-</td><td>645</td></tr></table> <i>(RBA- Reserved Backward Area)</i> Note:* Confirmation not received yet.</div>	Location	Categories			Fully Affected	Partially Affected	Total PAFs	Powerhouse area (Bandipora)	05	166	171	Dam area(Gurez)	143 + 15	487	645	Sub total	163	653	816	Location	Gen.	SC	ST	OBC	RBA	Total	Power house	114	02	53	01	01	171	Dam area	-	-	*645	-	-	645
Location	Categories																																									
	Fully Affected	Partially Affected	Total PAFs																																							
Powerhouse area (Bandipora)	05	166	171																																							
Dam area(Gurez)	143 + 15	487	645																																							
Sub total	163	653	816																																							
Location	Gen.	SC	ST	OBC	RBA	Total																																				
Power house	114	02	53	01	01	171																																				
Dam area	-	-	*645	-	-	645																																				
9.	Financial details a) Project cost as originally planned and subsequent revised estimates and the years of price reference. b) Actual expenditure incurred on the project so far. c) Allocations made for environmental management plans. d) Actual expenditure incurred on the environmental management plansso far.	<div>₹ 3642.04 Cr. at Sep-2007 PL (CCEA approved).  ₹ 5658.82 Cr. at completion cost.  ₹ 5387.84 crores (as per auditor balance sheet)  ₹58.95 crores (EMP) + ₹171.22crores(R&amp;R plan) +4.42 crores (Financial assistance to retrenched land owners) = ₹234.59crores</div> <table><tr><th>S. No</th><th>EMP</th><th>Funds allocated</th><th>Expenditure incurred</th></tr></table>	S. No	EMP	Funds allocated	Expenditure incurred																																				
S. No	EMP	Funds allocated	Expenditure incurred																																							

			(₹ in lakhs)	(₹ in lakhs)
	1.	Biodiversity Conservation Plan	102.06	27.50
	2.	Catchment Area Treatment	1024.0	997.43+GST 26.55
	3.	Fisheries Development	630.78	505.00
	4.	Public Health Delivery System	186.27	80.20
	5.	Solid Waste Management	91.40	8.998
	6.	Energy Conservation Measures	63.79	54.05 + 9.74 (GST)
	7.	Relocation & Rehabilitation of Dumping sites	1770.66	1693.69 + 240.35 (GST)
	8.	Landscaping & Restoration of Construction areas	191.37	18.26
	9.	Creation of Green Belt around reservoir	58.69	29.19
	10.	Disaster Management Plan	154.12	0.00
		<b>sub-total (a)</b>	<b>4273.14</b>	<b>3414.318 + 276.64 (GST)</b>
	11.	Resettlement & Rehabilitation Plan	17122.00	16335.46
		Financial Assistance to Retrenched Land Owners	442.75 (Revised on 24/11/17)	399.32+ 0.61 (GST)
		<b>sub-total (b)</b>	<b>17564.75</b>	<b>16734.78 + 0.61 (GST)</b>
	12.	Compensatory afforestation	95.69	75.00
	13.	Compensation for forest land	327.58	257.00
	14.	NPV of forest land	1198.23	939.00
	15.	NPA, CA etc of forest land acquired at Gurez on 31.03.2022	12.27	12.27
		<b>sub-total (c)</b>	<b>1633.77</b>	<b>1283.27</b>
		<b>Grand-Total (a+b+c)</b>	<b>23459.39</b>	<b>21432.368+ 277.25 (GST)</b>
10.	<p>Forest Land requirements</p> <p>a) Status of approval for diversion of forest land for non -forestry use.</p> <p>b) The status of clear felling in forest land</p>		<p>Forest clearance for 125 ha forest land was accorded by Forest Department vide order dated 27.05.2008.</p> <p>In- principal Forest Clearance for 0.9574 ha forest land in Gurez by Govt. of J&amp;K on 31.03.2021. This land is devoid of forest cover.</p> <p>Total trees involved: 11215 nos.</p> <p>Approval for clear felling= 1460nos.trees + 842nos. saplings</p> <p>Clear felling undertaken – 1402 nos. trees</p>	
11.	<p>Status of construction</p> <p>a) Date of commencement</p> <p>b) Date of completion</p>		<p>Jan. 2009 (Actual)</p> <p>March 2018 (Actual)</p>	

12.	Reasons for the delay. If, project is yet to be started.	Not Applicable
13.	<p>Details of site visits</p> <p>a) By Monitoring Committee</p> <p>b) By Regional Office</p>	<p>1<sup>st</sup> visit and meeting of Multidisciplinary Environmental Monitoring Committee (EMC) held on 1<sup>st</sup> June 2011.</p> <p>2<sup>nd</sup> visit and meeting of EMC held on 16-17 Nov. 2012.</p> <p>3<sup>rd</sup> visit and meeting of EMC held on 11-12 Dec 2013.</p> <p>4<sup>th</sup> visit and meeting of MDMC held on 10-13 Aug. 2015.</p> <p>5<sup>th</sup> visit and meeting of MDMC held on 26-29 Oct. 2017.</p> <p>6<sup>th</sup> visit and meeting of MDMC held on 6-7th June, 2023.</p> <ul style="list-style-type: none"> <li>• Visit by representative of Northern Regional Office of MOEF&amp;CC, Chandigarh with EMC visits.</li> <li>• Review meeting by Principal Secretary Govt of J&amp;K held on 11.09.2019, 02.11.2019 and 07.01.2020 for various ongoing development works including R&amp;R issue of KGHEP.</li> <li>• Site inspection was conducted by officials of J&amp;K State Pollution Control Board on September 2023.</li> <li>• Consent to operate order under Section 25/26 of the Water (prevention &amp; control pollution) Act, 1974 and under section 21 of the Air (prevention &amp; control pollution) Act, 1981, as applied in J&amp; K Govt Portal for Kishanganga Hydroelectric project, NHPC Office Complex, Kralpora, Bandipora issued by J&amp;K PCC on 21.02.2024 till August-2024 for RED category as per revised classification of industrial sector.</li> </ul>
14.	Brief note on status of compliance of the conditions stipulated by MOEF&CC	Details are enclosed as <b>Annex-I</b> .

#### *Annex-I*

**Status of Compliance of conditions stipulated by MOEF, Govt. of India in Environmental Clearance letter No. J- 12011/36/2003-IA-1 dated 09.03.2006.**

#### **Part – A: Specific conditions**

- i. Only one village would now get affected. The exact number of families and population getting affected may be communicated to this Ministry after conducting a fresh socio-economic survey of the project affected village. The affected families should be rehabilitated as per R & R plan proposed in the EMP report. A monitoring committee shall be set up for monitoring and implementation of R & R plan. The committee should include a woman representative from the project affected persons.*

**Compliance:** MOEF&CC vide letter dated 23.10.2007 accepted socio- economic survey report along with R&R plan prepared by University of Kashmir with a financial implication

of Rs. 30.66 crore. However, after series of meetings with various stakeholders, concerned MLAs, the R&R plan was revised to Rs. 253.75 crore and approved by Deputy Commissioner, Bandipora on 03.09.2011. Accordingly, amount of Rs. 6491.58 lakh was released to District Administration, Bandipora for implementation of local area development works, etc. However, as directed by Standing Committee to review the R&R issues held on 19.02.2015, R&R plan was remodeled based on already approved R&R plan for Ratle HEP and was approved by J&K State Govt. Cabinet vide Order dated 09.12.2015 with total financial implication of Rs 152.72 Crores which was revised and approved by J&K Cabinet approved on 22.12.2016 with total cost of Rs. 171.22 crore.

As per verification, payment was disbursed to 143 fully displaced PAFs, out of which 125 PAFs opted for cash and 18 PAFs opted for land & cash. Displaced families were successfully evacuated from the submergence area and reservoir filling was done as per Indus Water Treaty. Verification of 05 displaced families was completed at Bandipora and payment was disbursed to them. The R&R Plan was reviewed/ revisited by Empowered Committee in its meeting held on 16.05.2018, wherein following decisions were taken:

- i) Inclusion of 76 left out families in the list of PAFs
- ii) Payment of R&R benefits to additional 46 partially affected families in Gurez has been sanctioned.
- iii) Provision of 05 marla land for displaced families of Badwan Village Gurez.
- iv) Enhancement in the provision of Solar Street lights for Rs 2 Cr.

**The revised number of PAFs for the project is under:**

Location	Categories		
	Fully Affected	Partially Affected	Total PAFs
Powerhouse area (Bandipora)	05	166	171
Dam area (Gurez)	158	487	645
<b>Total</b>	<b>163</b>	<b>653</b>	<b>816</b>

Review meetings on R&R issues held dated 19.10.2019, 02.11.2019 and 07.01.2020 wherein works related to R&R of KGHEP including were discussed with DC, Bandipora.

**ii. Catchment Area treatment plan as has been proposed should be completed in six years.**

**Compliance:** The CAT plan is being implemented through J&K State Forest Dept. An amount of ₹679.94 lakhs was earmarked for CAT Plan in EMP report. However, the CAT plan was revised by J&K State Forest Department with a financial implication of ₹ 1024 lakhs. MOEF&CC vide letter dated 12.01.2016 conveyed NOC for cost escalation of CAT plan. An amount of Rs 18.00 Lakh has been released to J&K Forest Deptt. As seventh installment on 29.08.2022. Thus, the total amount deposited with J&K Forest Department for execution of CAT plan is Rs 997.43 + GST 26.55 lakhs. The physical & financial progress of CAT works till date is as under:

Funds released by the project	Fund utilized by Forest Dept.	Details of engineering works done	Area covered by plantation & no of plants planted
Rs. 997.43 Lakhs	Rs. 968.49 Lakhs	i. DRSM Works: 233532 cum ii. Crate works: 2843 Nos. ii. Catch Water drain : 1110	Total Area covered : 563 ha Nos. of plants planted: 437300 nos Patch sowing: 82000 nos.

		rmtr v. Brushwood Check dam: 197 nos	Nursery developed: 3 ha
--	--	--	-------------------------

- iii. ***The solatium for the project affected families be increased from 15% to 30% in line with the Government of India guidelines.***

**Compliance:** As per J&K Land Acquisition Act, 1990, 15% Jabrana has been paid to the project affected families as a part of compensation of their land/property.

- iv. ***Once the construction of dam is completed the downstream water flow will be reduced. To check mosquito breeding, a minimum rate of flow of water at 60 cm/sec should be maintained. Specific measures to alleviate the problem of malarial mosquito breeding will have to be made as a part of this project.***

**Compliance:** This condition is now replaced by MoEF&CC vide letter dated 01.10.2012 as following- "The minimum environmental flow of not less than 4.25 cumecs shall be released to downstream of the dam for sustenance of aquatic life".

However as per order of International Court of Arbitration (ICA), environmental flow of 9 cumecs is being released for which a pipe of 1300 mm dia. has been provided in the Dam body.

- v. ***Project authorities should take measures for the biodiversity conservation & multiplication of endangered medicinal plants found in the project area.***

**Compliance:** An amount of ₹ 102.06 lakhs was earmarked for Biodiversity Conservation Plan as per EMP. First installment of ₹ 27.50 lakhs was released to Wildlife Department, Govt. of J&K. and stands utilized.

Assistant director vide letter dated 25.09.2023 & 27.10.2023 requested for release of balance fund for DPR formulation and execution of Project. Before releasing the funds, clarification was sought from the CAT Officer of Kishanganga Power Station. The matter is under process.

- vi. ***Fishery development plan as proposed should be implemented in consultation with the State Fishery Department.***

**Compliance:** An amount of Rs. 57.33 lakh was earmarked for Fisheries Development Plan in the EMP report. An amount of Rs. 25 lakh was released to Fisheries Dept., Govt. of J&K in Jan. 2011 for works related to Development of Fish farm at Gurez and Fisheries Dept. Has submitted the utilization certificate for Rs. 24.48 lakh. J&K State Fisheries Deptt. vide letter dated 10.02.2014 had submitted revised fishery development plan to Rs. 630.78 lakh, for which Administrative Approval was Accorded by JK Govt. vide Order dated 23.08.2017.

A meeting was held with Director (Fisheries) & other Officials of Deptt. of Fisheries on 13.10.2017 for the finalization of the schedule of work and codal formalities to execute the work, wherein it was decided that balance amount of Rs.605.78 lakh shall be released in four quarterly installments subject to submission of Utilization certificate. In view of above, an amount of Rs. 150 lakh was released by NHPC on 09.02.2018 to Director, Fisheries Govt. of J&K for executing various work components as per the approved plan. Assistant Director Fisheries Bandipora vide letter dated 17.04.2019 had submitted

utilization certificate for Rs. 150.00 lakhs. The site visit was conducted on 04.03.2020 along with Executive Engineer (R&B) Govt of J&K. The fisheries department has completed the works pertaining to Fisheries development at Bandipora.

In order to take up the remaining fisheries works of KGPS an amount of Rs 230 lakh has been released to Director Fisheries on dated 19.02.2021, as on 16.02.2023 total Rs. 405.00 lakhs released to Director, Fisheries Govt. of J&K and Rs. 287.89 lakhs stands utilized. Further, to take up the remaining Fisheries work at Gurez, Rs. 100 lakhs released to Director, Fisheries Govt. of J&K on 25.03.2023. Assistant Director, Fisheries, District Bandipora vide letter dated 06.10.2023 requested to release of balance funds of Rs. 125.78 lacs for the establishment of trout hatchery in Gurez. The same is under process.

### **Part B: General Conditions.**

- i. *Adequate free fuel arrangement should be made for the laborers force engaged in the construction work at project cost so that indiscriminate felling of trees is prevented.*

**Compliance** Project is now commissioned. Condition was complied with during construction phase.

- ii. *Fuel depot may be opened at the site to provide the fuel (kerosene/ wood/LPG). Medical facilities as well as recreational facilities should also be provided to the labourers.*

**Compliance:** Project is now commissioned. Condition was complied with.

- iii. *All the labourers to be engaged for construction works should be thoroughly examined by health personnel and adequately treated before issuing them work permit.*

**Compliance:** Condition was complied with. The Project is now commissioned.

- iv. *Restoration of construction area including dumping site for excavated materials should be ensured by leveling, filling up of burrow pits, landscaping etc. The area should be properly treated with suitable plantation.*

**Compliance:** The muck generated due to construction works at various sites was dumped at earmarked and approved dumping sites with proper protection measures such as crates walls, etc. to avoid any spillage of muck from the Sites. Restoration works at TBM muck disposal site was taken up by State Soil Conservation Dept. Soil Conservation Officer (Bandipora) and site was stabilized.

In this connection, NHPC on 23.07.2018 has requested Principal Chief Conservator of Forest, GoJK to take up the matter reg. for early restorations of muck dumping sites.

DFO (CAT) inspected the site and submitted DPR for relocation & rehabilitation of Dumping sites to NHPC on 21.06.2019.

Administrative approval for execution of work was accorded by the Competent Authority on 04.11.2019 and DFO (CAT) has been requested to start the works by NHPC. CF, on 07.01.2020 issued administrative approval for the e-tendering process for the execution of work. Accordingly, Project Officer (CAT) floated tenders on 14.08.2020 informed NHPC that bidder for executing work in Gurez and Muck disposal site, Bandipora has been finalized. TBM site approx. 98% work is completed and at Kanzalwan site work has been completed. J&K Forest Department has also requested for joint visit of Kanzalwan site.

- v. *Financial provision should be made in the total budget of the project for implementation of the above suggested safeguard measures.*

**Compliance:** Financial provision has been kept in DPR.

- vi. *A Multidisciplinary committee should be constituted with representatives from various disciplines of forestry, ecology, wildlife, soil conservation, NGO etc. to oversee the effective implementation of the suggested safeguard measures.*

**Compliance:** A multidisciplinary committee has been constituted to oversee the implementation of environmental safeguard measures at the project.

- vii. *Six monthly monitoring report should be submitted to the Ministry and its Regional Office, Chandigarh for review.*

**Compliance:** Six monthly monitoring reports are being regularly submitted to MoEF&CC, New Delhi and its Regional Office, Chandigarh.

#### **Other environment safeguard measures:**

**1. Creation of Green Belt Development around Reservoir:**

Forest Department has submitted proposal for execution of work of Creation of Green Belt Development around Reservoir vide letter dated 14.09.2019. Administrative Approval for execution of work was accorded by the Competent Authority on 30.10.2019. As per the requisition submitted by PO, CAT, an installment of Rs 25 Lakhs plus GST was released for the execution of the work and stands utilized.

**2. Solid Waste Disposal:**

A Sewage Treatment Plant with a capacity of 20 kl/day was installed at the Project Township for the treatment of domestic sewage. Additionally, three more STPs are under construction at the Project Campus, with two having capacities of 100KLD each and one with a capacity of 50KLD; these are in an advanced stage of construction. The proposal was awarded on 15.09.2022 and is currently in an advanced stage. Furthermore, a system for the collection and disposal of domestic solid waste has been developed. The domestic waste generated is collected by the Municipal Committee, Bandipora, and disposed of at designated disposal sites by them.

**3. Monitoring of ambient air, water quality and noise level:**

Consent to Operate (Fresh) under Section 25/26 of the Water (Prevention & Control Pollution) Act, 1974, and under section 21 of the Air (Prevention & Control Pollution) Act, 1981, as amended, was renewed until Aug-24 by the J&K Pollution Control Committee. According to the Act, the Power Station is required to comply with the Water Act, Air Act, and Noise Pollution (Regulation and Control) Rules 2000, respectively. Under the Act, the unit holder must have the emission/effluent samples analyzed from the laboratory of the J&K PCC or laboratories approved by the J&K PCC every six months to check the efficacy of Pollution Control Devices (PCDs) installed in the unit.

The letter of award for "Carrying out various Environmental Monitoring Testing at NHPC office cum residential Complex of colony Power House Complex Kralpora Dam site Gurez and Dawar Colony KGPS" was issued to M/s ALKOM SYNERGY PRIVATE LIMITED on 27.03.2024. The firm will be arriving this month to collect samples from the Power Station.



**4. Plantation Drive at Power Station:**

The Power Station carried out a massive afforestation drive on 'World Arbor Day' in collaboration with the State Forest Department, School children, local area residents, and the CISF unit posted at the Power Station. Approximately 200 nos. plant saplings were planted near the Switch Yard area of the Power House. Various news agencies/media witnessed the afforestation drive.

Continuing the initiative of the Forestation drive on 'World Arbor Day', on 'World Environment Day', which falls on June 5<sup>th</sup> 2024, approximately 120 fruit-bearing tree saplings were planted in the Kishanganga Power Station Colony in collaboration with the State Forest Department and school children.

**5. Jute Bag distributions:**

The Power Station distributed approximately 400 jute bags in collaboration with the J&K Pollution Control Committee to raise awareness about "Say No to Plastic" on the occasions of "Mission Life" and "World Environment Day." The distribution took place among various school children, residents of the project-affected areas, and within the Kishanganga Power Station colony.

.....X.....