

**Six Monthly Progress Report on
Compliance to conditions Stipulated in Environment Clearance Letter**

(Period ending March 2023)

Period ending March 2020

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 UT of 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, UT of J&K - 193 502. Tele: 01957-225008; Fax: 01957-225011 Executive Director Environment& DM Division, Corporate Office, NHPC Office Complex, Sector-33, Faridabad-121 003 Ph- 0129-2254674 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 & 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 & 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
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7.	Break -up of the Project area (land details) a) Submergence area (forest & non-forest) b) Others	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						
		C.	Additional non-forest land acquired at Bandipora	03 Marla (0.02 ha)						
		D	Additional forest land at Gurez:	0.9574 ha						
		Grand Total (A+B+C+D)		382.575 ha						
		(3 Marla of land & structure has been acquired at main gate of NHPC office cum residential complex in September 2018 and 0.9574 ha forest land at Gurez (FC-I on 31.03.2021).								
		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	Details of Project Affected Families (PAFs):						
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				
Category-wise classification:										
Location				Gen.	SC	ST	OBC	RBA	Total	
Power house				114	02	53	01	01	171	
Dam area				-	-	645	-	-	645	
(RBA- Reserved Backward Area)										
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 plans so far.			₹ 3642.00 Cr. CCEA approved PL Sept. 2007. ₹ 5633.28 Cr. at completion cost						
				₹5373.51 crores (as per auditor balance sheet)						
				₹58.95 crores (EMP) + ₹171.22 crores (R&R plan) + 4.42 crores (Financial assistance to retrenched land owners) = ₹234.59 crores						
				S. No		EMP		Funds allocated (₹ in Lakhs)		Expenditure incurred up to March 2023 (₹ 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	1412.00 +(GST=236.16)
	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
		sub-total (a)	4273.14	3132.63 + (272.45 GST)
	11.	Resettlement & Rehabilitation Plan	17122.00	16335.46
		Financial Assistance to Retrenched Land Owners	442.75 (Revised on 24.11.2017)	399.32 + (0.61 GST)
		sub-total (b)	17564.75	16734.78 + (0.61 GST)
	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	NPV, CA etc. for 0.9574 ha forest land	12.27	12.27
		sub-total (c)	1633.77	1283.27
		Grand-Total (a+b+c)	23471.66	21150.68 + (GST 273.06)
10.	Forest Land requirements a) Status of approval for diversion of forest land for non -forestry use. b) The status of clear felling in forest land		<p>Forest clearance for 125 ha forest land was accorded by Forest Department, Govt. of J&K vide order dated 27.05.2008.</p> <p>In-principle Forest clearance for 0.9574 ha forest land in Gurez by Govt. of J&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= 1460 nos. trees + 842 nos. saplings</p> <p>Clear felling undertaken = 1402 nos. trees</p>	
11.	Status of construction a) Date of commencement b) Date of completion		<p>Jan. 2009 (Actual)</p> <p>May 2018 (Actual)</p>	
12.	Reasons for the delay. If, project is yet to be started.		Not Applicable	
13.	Details of site visits a) By Monitoring Committee		<p>1st visit and meeting of Multidisciplinary Environmental Monitoring Committee (EMC) held on 1st June 2011.</p> <p>2nd visit and meeting of EMC held on 16-17 Nov. 2012.</p> <p>3rd visit and meeting of EMC held on 11-12 Dec 2013.</p> <p>4th visit and meeting of MDMC held on 10-13 Aug. 2015.</p> <p>5th visit and meeting of MDMC held on 26-29 Oct. 2017.</p>	

	b) By Regional Office / State	<p>Vide letter dated 29.11.2022 & 09.03.2023 communicated to concerned MOEF office for conducting Multidisciplinary Environmental Monitoring Committee meeting to oversee the EMP activities of Kishanganga H.E. Project.</p> <ul style="list-style-type: none"> • Visit by representative of Northern Regional Office of MOEF&CC, Chandigarh with EMC visits. • Site inspection was conducted by officials of J&K State Pollution Control Board on 23.02.2019. • Site inspection was conducted by officials of J&K State Pollution Control Board on 12.02.2020. • Site inspection was conducted by officials of J&K State Pollution Control Board in Sept. 2021. • Review meeting by Principal Secretary Govt. of J&K were held on 11.09.2019, 02.11.2019, 07.01.2020, 28.08.2021 and 21.09.2021 for review of various ongoing development works including R&R issue of KGHEP. • Review meeting by District Development Commissioner Bandipora, Govt. of J&K held on 18.01.2021 for various R&R and other ongoing Development works. • Site inspection was conducted by officials of J&K State Pollution Control Board on 25.03.2022. • Meetings were organized by DC Bandipora on 21.10.2021, 31.12.2021 and 01.01.2022 to review the various ongoing development works including R&R issue of the project.
14.	Brief note on status of compliance of the conditions stipulated by MOEF&CC	Details are enclosed as 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.

S.No.	Condition as per EC letter	Compliance																			
	Part – A: <u>Specific conditions</u>																				
i	<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.</i>	<p>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.</p> <p>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:</p> <ul style="list-style-type: none">i) Inclusion of 76 left out families in the list of PAFsii) 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. <p>The number of PAFs for the project is under:</p> <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>158</td><td>487</td><td>645</td></tr><tr><td>Total</td><td>163</td><td>653</td><td>816</td></tr></table>	Location	Categories			Fully Affected	Partially Affected	Total PAFs	Powerhouse area (Bandipora)	05	166	171	Dam area (Gurez)	158	487	645	Total	163	653	816
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		Review meeting 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 DDC, Bandipora.								
ii	<i>Catchment Area treatment plan as has been proposed should be completed in six years.</i>	<p>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 Lakhs + GST=26.55 lakhs. The physical & financial progress of CAT works till date is as under:</p> <table><tr><th>Funds released by the project</th><th>Funds utilized by Forest Dept.</th><th>Details of engineering works done</th><th>Area covered by plantation & no of plants planted</th></tr><tr><td>₹ 997.43 Lakhs</td><td>₹ 968.49 Lakhs</td><td>i. DRSM works: 23353 cum ii. Crate works: 2843 nos. iii. Catch water drain: 1110rmtr iv. Brushwood Check dam:197 nos</td><td>Total area covered: 563 ha Nos. of plants planted: 437300 nos Patch sowing: 82000 nos. Nursery developed: 3 ha</td></tr></table>	Funds released by the project	Funds utilized by Forest Dept.	Details of engineering works done	Area covered by plantation & no of plants planted	₹ 997.43 Lakhs	₹ 968.49 Lakhs	i. DRSM works: 23353 cum ii. Crate works: 2843 nos. iii. Catch water drain: 1110rmtr iv. Brushwood Check dam:197 nos	Total area covered: 563 ha Nos. of plants planted: 437300 nos Patch sowing: 82000 nos. Nursery developed: 3 ha
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iii	<i>The solatium for the project affected families be increased from 15% to 30% in line with the Government of India guidelines.</i>	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	<i>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.</i>	<p>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”.</p> <p>However as per order of International Court of Arbitration (ICA), environmental flow of 9 cumces is being released for which a pipe of 1300 mm dia. has been provided in the Dam body.</p>								
v	<i>Project authorities should take measures for the</i>	An amount of ₹ 102.06 lakhs was earmarked for Biodiversity Conservation Plan as per EMP. First								

	<i>biodiversity conservation & multiplication of endangered medicinal plants found in the project area</i>	installment of ₹ 27.50 lakhs was released to Wildlife Department, Govt. of J&K. and stands utilized. Department of Wildlife Protection Jammu & Kashmir vide letter dated 29.07.2021 has requested for the release of funds earmarked for its implementation. The implementation of Biodiversity plan shall be discussed with concerned wildlife warden.
vi	<i>Fishery development plan as proposed should be implemented in consultation with the State Fishery Department.</i>	<p>An amount of Rs. 57.33 lakhs 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 submit 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.</p> <p>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 lakhs 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.</p> <p>In order to take up the remaining fisheries works an amount of Rs. 230 lakhs has been released to Director Fisheries on 19.02.2021. The activities undertaken are as under:</p> <ul style="list-style-type: none"> • Construction of Survey Hut at Gurez- completed • Purchase of Feed mill at Shokbaba- completed • Chain link fencing for pelleted trout feed mill- completed • Construction of 2 pairs of American type raceways at Shokbaba- completed • Laying of water pipeline- completed • Construction of farm hut at Bandipora – completed. • Construction of 4 nos. American type raceways- in progress.

	Part B: General Conditions.	
i	<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</i>	Project is now commissioned. Condition was complied during construction phase.
ii	<i>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</i>	Project is now commissioned. Condition was complied with.
iii	<i>All the labourers to be engaged for construction works should be thoroughly examined by health personnel and adequately treated before issuing them work permit.</i>	Condition was complied with. The Project is now commissioned.
iv	<i>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.</i>	<p>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.</p> <p>In this connection, NHPC on 23.07.2018 has requested Principal Chief Conservator of Forest, GoJK to take up the matter 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) was 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 and on 14.08.2020 informed NHPC that bidder for executing work in Gurez and muck disposal site, Bandipora has been finalized. An amount of Rs. 100.00 lacs excluding GST as 5th instalment has been released to DFO CAT Bandipora on 28.09.2022.</p>
v	<i>Financial provision should be made in the total budget of the project for</i>	Financial provision has been kept in DPR.

	<i>implementation of the above suggested safeguard measures.</i>	
vi	<i>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.</i>	A multidisciplinary committee has been constituted to oversee the implementation of environmental safeguard measures at the project.
vii	<i>Six monthly monitoring report should be submitted to the Ministry and its Regional Office for review.</i>	Six monthly monitoring reports are being regularly submitted to MoEF&CC, New Delhi and its Integrated Regional Office.

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.

2. Solid Waste Disposal

Project is commissioned. Sewage Treatment Plant of 20 kl/day capacity was installed at Project Township for the treatment of domestic sewage. Further, this STP is being upgraded and there is a proposal of installing three STPs at Project Campus with 02 Nos. with 100KLD and one number with 50KLD capacity. The proposal is at tendering stage. A system for collection and disposal of domestic solid waste has been developed wherein waste is being collected and disposed at designated disposal site through Municipal Committee, Bandipora.

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

Monitoring of ambient air, water quality and noise level is being taken up.
