

PART-II

(To be filled by the concerned deputy Conservator of Forests)

State serial No. of proposal : JH-46/2020

7. Location of the project/Scheme: **JHARKHAND**

- i. State/Union Territory : **JHARKHAND**
- ii. District: **Giridih**
- iii. Forest Division: **Hazaribag East**
- iv. Area of forest land proposed for diversion (in ha.) : **1.7587**
- v. Legal Status of Forest

S. No.	Division	Forest Land(ha.)	Legal Status
1	Hazaribagh East	1.7587	Protected Forest
Total		1.7587	


vi. Density of vegetation

S. No.	Area(in ha.)	Density	Eco-Class
1	1.7587	0.7	Eco 3
Total.	1.7587		

- vii. Species-wise (Scientific names) and diameter class-wise enumeration of trees (to be enclosed. In case of irrigation/hydel projects enumeration at FRL, FRL-2 meter & FRL-4 meter also to be enclosed. : **Attached as annexure-1**
- viii. Brief note on vulnerability of the forest area to erosion.
Almost the entire area had gentle slope with some portion being moderately sloping. At places, the soil erosion becomes severe with rill and gully erosion being easily seen.
- ix. Approximate distance of proposed site for diversion from boundary of forest. :
0.00 km
- x. Whether forms part of National Park, wildlife sanctuary, biosphere reserve, tiger reserve, elephant corridor, etc. (If so, the details of the area and comments of the Chief Wildlife Warden to be annexed) : **Yes (Attached as annexure-2)**
 1. The entire area is part of migratory route of wild elephants with the most recent migration being in June-July, 2021. As, such, a site-specific wildlife management plan will be needed to address human-elephant interface issues.

Schander
SOURAV CHANDRA
I.F.S.
Divisional Forest Officer
Hazaribag East Forest Division

2. In the said project, there is a habitat of small wild animals like Python, Mongoose, Indian Cobra, Barking Deer, Jackal, Peafowl/Peacock, Wild Pig etc. There is strong likelihood of major adverse impact on them as per the nature of the project.
- xi. Whether any rare/endangered/unique species of flora and fauna found in the area-if so. Details thereof. **No**
- xii. Whether any protected archaeological/heritage site/defense establishment or any other important monument is located in the area. If so, the details thereof with NOC from competent authority, if required. : **No**
8. Whether the requirement of forest land and proposed by the user agency in col.2 of part-I in unavoidable and barest minimum for the project. If no, recommended area item-wise with details of alternatives examined.: **Yes**
9. Whether any work in violation of the Act has been carried out (Yes/No). If yes, details of same including period of work done, action taken on erring officials. Whether work in violation is still in progress. : **No**
10. Details of compensatory afforestation scheme:
- i. Details of non-forest area/degraded forest area identified for compensatory afforestation, its distance from adjoining forest, number of patches, size of each patch.

Patch Wise Details						
S.no	Patch No.	Area(ha.)	Name of PF/RF	Range	Compartment No	Uploaded KML file of patch
1	1	4.00	NAGARKESHWARI	Bagodar	23p, 24p	

- ii. Map showing non-forest/degraded forest area identified for compensatory afforestation and adjoining forest boundaries. : **Yes**
- iii. Detailed compensatory afforestation scheme including species to be planted, implementing agency, time schedule, cost structure, etc. : **Attached as annexure-3**
- iv. Total financial outlay for compensatory afforestation scheme. : **29.41642 Lakh**
- v. Certificates from competent authority regarding suitability of area identified for compensatory afforestation and from management point of view. (To be signed by the concerned Deputy Conservator of Forests) : **Attached as annexure-4**

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SOURAV CHANDRA
I.F.S.
 Divisional Forest Officer
 Jharia East Forest Division

11. Site inspection report of the DCF (to be enclosed) especially highlighting facts asked in col. 7(xi, xii), 8 and 9 above. : **Attached as annexure-5**
12. Division/District Profile:
- i. Geographical area of the district.: **485400.00 ha.**
 - ii. Forest area of the district. : **16311.48 ha.**
 - iii. Total forest area diverted since 1980 with number of cases. : **10 No.**
 - iv. Total Compensatory afforestation stipulated in the district/division since 1980 on
 - (a) forest land including penal compensatory afforestation.: **Nil**
 - (b) non-forest land. : **Nil**
 - v. Progress of compensatory afforestation as on (date)**23.10.2021** on
 - (a) forest land : **840.44 ha.**
 - (b) non-forest land. : **Nil**
13. Specific recommendations of the DCF for acceptance or otherwise of the proposal with reasons. : **Attached as annexure-6**


Signature

Name: SOURAV CHANDRA, I.F.S

Official Seal

SOURAV CHANDRA
I.F.S
Divisional Forest Officer
Hazaribag East Forest Division

Date: - 01-11-2021

Place: - Hazaribag

Abstract of Total No. of Trees (Girth-wise) of District- Giridih (in cm)

Sl. No.	Village Name	Plot No.	Species of Trees	0-30 (cm)	31-60 (cm)	61-90 (cm)	91-120 (cm)	121-150 (cm)	>150 (cm)	TOTAL
1	Sariya Khurd	54	Bandar Lari	1	0	0	0	0	0	1
2			Bel	1	0	1	0	0	1	3
3			Bhelwa	1	0	1	1	0	0	3
4			Chodra	1	1	0	2	1	1	6
5			Ecasia	291	1	0	0	0	0	292
6			Eucalyptus	13	9	27	11	1	0	61
7			Gulel	2	1	0	0	0	0	3
8			Jamun	3	0	0	1	0	0	4
9			Kadam	2	0	0	1	0	0	3
10			Mango	0	0	0	0	0	1	1
11			Neem	3	0	0	0	0	1	4
12			Palash	49	10	2	1	3	0	65
13			Pipal	0	0	0	0	0	1	1
14			Sagwan	1	0	0	0	0	0	1
15			Sarifa	3	0	0	0	0	0	3
16			Simar	0	0	1	1	0	0	2
17			Siris	0	0	0	0	1	0	1
18		53	Chodra	0	0	0	0	0	1	1
19			Gair Neem	0	0	0	1	0	0	1
20			Simar	0	0	0	0	1	2	3
21			Siris	0	0	0	0	0	1	1
Grand Total				371	22	32	19	7	9	460

8.10.2021
 महाप्रबंधक / समन्वय
 GENERAL MANAGER / Co-ordination
 डेडीकेटेड फ्रेट कॉरीडोर कॉर्पोरेशन ऑफ इंडिया लि.
 Dedicated Freight Corridor Corporation of India Ltd.
 भारत सरकार (रेल मंत्रालय) का न्यायन
 A Govt. of India (Ministry of Railways) Undertaking
 कोलकाता / KOLKATA

SOURAV CHANDRA
 I.F.S.
 Divisional Forest Officer
 Hazaribag East Forest Division

WLW Report

(Proposal Name – New Keshwari station and Yard of DFCCIL at Sariya Khurd village)

1. The entire area is part of migratory route of wild elephants with the most recent migration being in June-July, 2021. As, such, a site-specific wildlife management plan will be needed to address human-elephant interface issues.
2. In the said project, there is a habitat of small wild animals like Python, Mongoose, Indian Cobra, Barking Deer, Jackal, Peafowl/Peacock, Wild Pig etc. There is strong likelihood of major adverse impact on them as per the nature of the project.
3. The proposed project is located at a close distance from the populated area.


**Divisional Forest Officer,
Hazariabagh East Forest Division.**

S. CHANDRA
I.F.S.
Divisional Forest Officer
Hazariabagh East Forest Division

Forest, Environment & Climate Change Department, Jharkhand

Hazaribag East Forest Division

Name of Scheme RDF Plantation Under Compensatory Afforestation Scheme

Name of Agency DFCCIL Railway Line (Diverted land 1.758 ha.)

Name of Range BAGODAR

Name of Thana/ Thana no. Bagodar/28

Name of Site NAGARKESHWARI

Khata/ Plot no. Plot no. 23p, 24p

Wage Rate (Rs./Mandays) 311.33

Area of Site (ha) 4.000

Length of fencing 63 Chanin

No. of plants/ha 1000

Spacing 3mx3m, 2mx2m, 3mx2m

Sl.no.	Particulars of Works	Prescribed Rate			Estimated Amount (as per site)			Remarks
		Unit	MD (No.)	Materials (Rs.)	Wages (Rs.)	Materials (Rs.)	Total (Rs.)	
1	2	3	4	5	6	7	8	9
I	Advance Work (1st Year) 2021-22							
1	Survey & Demarcation	ha	3	0.00	3735.96	0.00	3735.96	
2	Site Clearance	ha	7	0.00	8717.24	0.00	8717.24	
3	Trench Fencing- 1.83mx1.22mx1.22m by hydraulic machine. (Add GST 18% (1963.79+1963.79 x 18% = 2317.27)	Chain	2	2317.27	39227.58	145988.01	185215.59	
4	Soil Work -Pit digging 0.30mx.30mx0.30m	ha	22	0.00	27397.04	0.00	27397.04	
5	Contour Trench - 41 Contour/ha. (Contour Size 5m x 0.30m x 0.30m)	ha	25	0.00	31133.00	0.00	31133.00	
6	Soil & Water Conservation work- Check Dam, Retaining wall & Breast wall, T wall, Spur and Torrent Control Works etc.	ha	55	0.00	68492.60	0.00	68492.60	
7	Gully Plugging	ha	10	0.00	12453.20	0.00	12453.20	
8	Nursery (part)- Raising of plants including watering, maintenance & protection	ha	10	0.00	12453.20	0.00	12453.20	
9	Materials- Polythene bag, Seeds, Fertilizers, Manures, Chemicals, Fencing material etc. . (Add GST 18% (1350+1350 x 18% = 1593.00)	ha	0	1593.00	0.00	6372.00	6372.00	
10	Miscellaneous Works- Sign Boards, Photography etc. . (Add GST 18% (150+150 x 18% = 177.00)	ha	0	177.00	0.00	708.00	708.00	
	Sub-Total		134	4087.27	203609.82	153068.01	356677.83	
11	Entry Point Activities (15% Total Cost of Advance work)						53501.67	
	Total:-						410179.50	

II	Completion Work (2nd Year) 2022-23			358.03			
1	Nursery (part) including watering sorting, seed sowing, maintenance & protection	ha	13.00	0.00	18617.53	0.00	18617.53
2	Planting	ha	22.00	0.00	31506.60	0.00	31506.60

Schandra
SOURAV CHANDRA
 I.F.S.
 Divisional Forest Officer
 Hazaribag East Forest Division


Sl.n o.	Particulars of Works	Prescribed Rate			Estimated Amount (as per site)			Remarks
		Unit	MD (No.)	Materials (Rs.)	Wages (Rs.)	Materials (Rs.)	Total (Rs.)	
1	2	3	4	5	6	7	8	9
3	Two Weeding and Hoeing	ha	25.00	0.00	35802.95	0.00	35802.95	
4	Seed Sowing on Trench Berm (165 Chain)	ha	2	0.00	118149.74	0.00	118149.74	
5	Protection of plants	site	275	0.00	98458.11	0.00	98458.11	
6	Materials- Seeds, Fertilizers, manures, Chemicals etc.. (Add GST 18% (1575+1575 x 18% = 1858.50))	ha	0	1858.50	0.00	7434.00	7434.00	
7	Miscellaneous Works- Sign Boards, Photography etc.. (Add GST 18% (150+150 x 18% = 177.00))	ha	0	177.00	0.00	708.00	708.00	
	Total		337.00	2035.50	302534.93	8142.00	310676.93	
III	Maintenance Work (3rd Year) 2023-24			411.73				
1	One Weeding and Hoeing	ha	14	0.00	23057.10	0.00	23057.10	
2	Fertilizer etc. (Add GST 18% (785+785 x 18% = 926.30))	ha	0	926.30	0.00	3705.20	3705.20	
3	Protection of plants	site	365	0.00	150282.88	0.00	150282.88	
4	Fencing Repair	Chain	1	0.00	25939.24	0.00	25939.24	
5	Casualty Replacement etc. (Add GST 18% (176+176 x 18% = 207.68))	ha	2	207.68	3293.87	830.72	4124.59	
	Total		382.00	1133.98	202573.09	4535.92	207109.01	
IV	Maintenance Work (4th Year) 2024-25			473.49				
1	One Weeding and Hoeing	ha	14	0.00	26515.66	0.00	26515.66	
2	Fertilizer etc. (Add GST 18% (785+785 x 18% = 926.30))	ha	0	926.30	0.00	3705.20	3705.20	
3	Protection of plants	site	365	0.00	172825.32	0.00	172825.32	
4	Casualty Replacement etc. (Add GST 18% (176+176 x 18% = 207.68))	ha	2	207.68	3787.95	830.72	4618.67	
	Total		381.00	1133.98	203128.93	4535.92	207664.85	
V	Maintenance Work (5th Year) 2025-26			544.52				
1	One Weeding and Hoeing	ha	14.00	0.00	30493.01	0.00	30493.01	
2	Fertilizer etc. (Add GST 18% (300+300 x 18% = 354.00))	ha	0	354.00	0.00	1416.00	1416.00	
3	Protection of plants	site	365	0.00	198749.11	0.00	198749.11	
4	Fencing Repair	Chain	1	0.00	34304.64	0.00	34304.64	
	Total		380.00	354.00	263546.77	1416.00	264962.77	
VI	Maintenance Work (6th Year) 2026-27			626.20				
1	Protection of plants	site	365	0.00	228561.48	0.00	228561.48	
	Total		365.00	0.00	228561.48	0.00	228561.48	
VII	Maintenance Work (7th Year) 2027-28			720.13				
1	Protection of plants	site	365	0.00	262845.70	0.00	262845.70	
	Total		365.00	0.00	262845.70	0.00	262845.70	
VIII	Maintenance Work (8th Year) 2028-29			828.14				
1	Protection of plants	site	365	0.00	302272.56	0.00	302272.56	
	Total		365.00	0.00	302272.56	0.00	302272.56	


S. CHANDRA
I.F.S.
 Divisional Forest Officer
 Tribag East Forest Division

Sl.no.	Particulars of Works	Prescribed Rate			Estimated Amount (as per site)			Remarks
		Unit	MD (No.)	Materials (Rs.)	Wages (Rs.)	Materials (Rs.)	Total (Rs.)	
1	2	3	4	5	6	7	8	9
IX	Maintenance Work (9th Year) 2029-30			952.37				
1	Protection of plants	site	365	0.00	347613.44	0.00	347613.44	
	Total		365.00	0.00	347613.44	0.00	347613.44	
X	Maintenance Work (10th Year) 2030-31			1095.22				
1	Protection of plants	site	365	0.00	399755.46	0.00	399755.46	
	Total		365.00	0.00	399755.46	0.00	399755.46	
	Grand Total:-		3439.00	8744.73	2716442.17	171697.85	2941641.69	

Note :- 1. Estimate prepared on basis of PCCF Development Office order no. 36 dated 13.08.2019
2. 15% wage enhancement for every year

ABSTRACT					
S.N.	Work & Year	Wages (Rs.)	Materials (Rs.)	Total Amount	
I	Advance Work (1st Year) 2021-22	203609.82	153068.01	356677.83	
II	Completion Work (2nd Year) 2022-23	302534.93	8142.00	310676.93	
III	Maintenance Work (3rd Year) 2023-24	202573.09	4535.92	207109.01	
IV	Maintenance Work (4th Year) 2024-25	203128.93	4535.92	207664.85	
V	Maintenance Work (5th Year) 2025-26	263546.77	1416.00	264962.77	
VI	Maintenance Work (6th Year) 2026-27	228561.48	0.00	228561.48	
VII	Maintenance Work (7th Year) 2027-28	262845.70	0.00	262845.70	
VIII	Maintenance Work (8th Year) 2028-29	302272.56	0.00	302272.56	
IX	Maintenance Work (9th Year) 2029-30	347613.44	0.00	347613.44	
X	Maintenance Work (10th Year) 2030-31	399755.46	0.00	399755.46	
	Sub Total:-	2716442.17	171697.85	2888140.02	
	Entry Point Activities (15% Total Cost of Advance work)			53501.67	
	Grand Total:-			2941641.69	
	Or Say			2941642.00	


 Divisional Forest Officer
 Hazaribag East Forest Division
SOURAV CHANDRA
I.F.S.
 Divisional Forest Officer
 Hazaribag East Forest Division

Land Suitability Certificate

(Proposal Name – New Keshwari station and Yard of DFCCIL at Sariya Khurd village)

This is to certify that 4.00 ha. of forest land identified in Nagar Keshwari P.F.,
Thana No. Bagodar-28, Plot No. 23p, 24p, Range-Bagodar Forest Range, Tehsil-
Bagodar, District- Giridih for Compensatory Afforestation is suitable from
management point of view and is free from encroachment.


Divisional Forest Officer,
Hazaribagh East Forest Division

SOURAV CHANDRA
I.F.S

Divisional Forest Officer
Hazaribagh East Forest Division

Site Inspection Report

Date of Inspection – 19.08.2021

Name of Proposal – New Keshwari station and Yard of DFCCIL at Sariya Khurd village

Presence – Forest officials

- (1) Sri Sourav Chandra, DFO, Hazaribagh East Forest Division .
- (2) Sri Suresh Ram, RFO, Bagodar Range.
- (3) Sri Purosattam Pandey, BO, Bishnugarh Beat.
- (4) Sri Uday Kumar Keshri, SBO, Sariyakhurd Sub-beat.
- (5) Sri Somnath Modak, SBO, Chichaki Sub-beat.
- (6) Sri Dev Narayan Das, SBO, Garaiya Sub-beat.

User Agency officials

- (1) Sri Baleshwar Singh, Deputy Project Manager, DFCCIL
- (2) Sri Anand Mishra, Senior Executive, DFCCIL

On the aforementioned date, the proposed forest land for diversion was visited. The total forest land proposed for diversion is 1.7587 ha. which is meant for Construction of New Keshwari Station and yard of DFCCIL. The details are given below: -

Sl. No.	Name of Village	Thana No.	Area (in ha.)	Type of land
1.	Sariya khurd	Bagodar-32	1.7587	Notified/demarcated forest land

As stated by the User Agency, the proposed Keshwari Station and Yard is part of the Eastern corridor of the DFCC passing through the Giridih district in Jharkhand state. The site of Keshwari Yard and station has already been fixed by UA and the same has been further reiterated in the justification part of the proposal. An alternative site was examined but it was found that the minor shifting of yard will not result avoidance of diversion of forest land.

The trees in the enumeration list were checked on site inspection. The species and its girth were matched. It was found to be correct.

The GPS locations of the pillars were also checked and matched with that of those mentioned in the proposal. It was found to be almost accurate.

The total proposed area has the presence of a variety of trees. It consisted of mainly Acacia with Eucalyptus, Mango, Bel, Plash, Semal etc. At places, the

Schandra
SOURAV CHANDRA
I.F.S.
Divisional Forest Officer
Hazaribagh East Forest Division

undergrowth of *Clerodendron* sp. and *Cassia tora* were also seen. The crop density was observed as 0.7. The important observation was about the heavy infestation of *Lantana camara* in the proposed area as well as surrounding forest areas at many places.

Almost the entire area had gentle slope with some portion being moderately sloping. At places, the soil erosion becomes severe with eroded topography rill and gully erosion was being easily seen.

The proposed area has Barakar river on the northern side and Khedo river on the southern side. As such, the proposed construction of station and yard will lead to significant erosion and destruction of catchment area.

The entire area is part of migratory route of wild elephants with almost regular visits of the proposed area. The most recent migration of wild elephants was witnessed in the month of June-July 2021 only. The area is frequented by wild elephants to such an extent that many a times, it was requested to railway officials for slowing the speed of passing trains. Also, LC gate present just adjacent to the proposed forest land has also seen damage due to wild elephants in the recent past. As such, a site-specific wildlife management plan will be needed to address human-elephant interface issues.

Although no rare/endangered/unique species of flora and fauna was observed, the commonly found fauna are as following: -

Sl. No.	Hindi or Local Name	English Name	Scientific Name	Schedule according to Wild life Protection Act- 1972
1	2	3	4	5
1.	Ajgara	Python	<i>Python sp</i>	Sch-I Part II
2.	Newla	Mongoose	<i>Herpestes sp</i>	Sch-IV
3.	Indian Cobra	Indian Cobra	<i>Naja naja</i>	Sch-II part II
4.	Khargosh	Indian Hare	<i>Lepus nigricollis</i>	Sch-IV
5.	Siyar	Jackal	<i>Canis aureus</i>	Sch-I
6.	Mayur/Mor	Peafowl/Peacock	<i>Pavo Cristatus</i>	Sch-I
7.	Jangli Suar	Wild boar	<i>Sus scrofa</i>	Sch. III
8.	Kotra	Barking deer	<i>Muntiacus sp.</i>	Sch-III Section II

The nature of the project is such that there is going to be habitat fragmentation and destruction. As such, suitable mitigation measures will be prominently needed to address the same.

Schanda
SOURAV CHANDRA
 I.F.S.
 Divisional Forest Officer
 Subbag East Forest Division

Apart from the above, the forest area did not have any archeological/heritage site/defense establishment etc.

Overall, the proposal is mainly concerned with construction of new station and yard by DFCCIL. This proposal will lead to the greater movement of goods and speedier cargo disposal on the DFCCIL track. Considering all the above details, it was found that the forest land proposed for diversion was unavoidable and barest minimum of the project.


Divisional Forest Officer,
Hazaribagh East Forest Division

SOURAV CHANDRA
I.F.S
Divisional Forest Officer
Hazaribagh East Forest Division

Recommendation

(Proposal Name – New Keshwari station and Yard of DFCCIL at Sariya Khurd village)

1. The proposed construction of new Keshwari station and yard would be located adjacent to the DFCCIL railway line and the existing track. As such the nature of the project is not site-specific rather it should be seen as an extension of the existing/proposed railway line. The same has been accepted by UA too. Hence, the issues related to the present proposal has significant negative fallout on the local flora and wildlife along with the riverine ecology and hydrology.

It is noteworthy to mention that there are instances of damage caused by wild elephants to the level crossing adjacent to the proposed area. This is in addition with the area being frequented by wild elephants. In this regard, the issue was also raised vide letter no. 1498 dated 03.07.2018 with railway authorities to reduce the speed of trains to avoid collision-induced wild elephant mortality and potential derailment of trains.

As the aforementioned projects have considerable impact on wildlife particularly on wild elephants, the possibility of mortality/injury to wild elephant can not be ruled out without addressing adequate-human-wildlife mitigation measures like underpass with funneling effect, habitat improvement, early warning systems for speed reduction etc.

Thus, the issues raised on account of habitat fragmentation and distraction needs to be addressed exclusively and prominently.

2. The watershed/ catchment area of the nearby river (Barakar) shall be greatly affected by tree felling and consequent soil erosion. Therefore, extensive river side plantation needs to be carried out as per site conditions.
3. At various places, *Lantana camara* infestation was noticed during the site visit. Hence, a *Lantana* removal scheme need to be included for 10 years to check further infestation of this invasive species
4. It was noticed that the forest area has gentle to moderate slope. Therefore, a soil and moisture conservation plan have to be necessarily included to check incidental soil erosion caused by the proposed activities.
5. Furthermore, an avenue plantation scheme needs to be included for loss of flora in the area.

Overall, considering the nature importance of the project, the proposal is hereby recommended for acceptance subject to the addressal of the above observations.


Divisional Forest Officer,
Hazaribagh East Forest Division

SOURAV CHANDRA

I.F.S.

Divisional Forest Officer
Hazaribagh East Forest Division