

**F. No. 8-25/2009-FC**

**Sub: Diversion of 226.67 ha of forest land for Karo OCP in favour of M/s Central Coal field Limited (CCL) in Bokaro district of Jharkhand.**

**FACT SHEET**

1.	Name of the Proposal	Diversion of 226.67 ha of forest land for Karo OCP in favour of M/s Central Coal field Limited (CCL) in Bokaro district of Jharkhand.
2.	Location	
	i) State	Jharkhand
	ii) District	Bokaro
3.	Details of the user agency	
	Name of the user agency	Central Coalfield Limited- A subsidiary of Coal India Limited
	Nature of the user agency	A Central Government Undertaking
4.	Particulars of Forests	
5.	a) Name of Forest Division	Bokaro Forest Division
6.	b) Forest area involved	226.67 ha
7.	c) Legal Status/Sy. No	Protected forest
8.	d) Map	Enclosed (p-8/c)
9.	Topography of the area	-
10.	(i) Vegetation	Sal, Mahua, Pipal, Bargad, Harre, Khair, Jamun, Bel, Neem, Babul, Salai, Gular, Kusum, Palas, Siris, etc at p-35/c.
11.	(ii) No. of trees which will be affected	1,30,221 (reported in the original proposal) 86,412 trees (7,374 above 60 cm girth and 79,038 trees below 60 cm girth revised in response to MoEFCC letter dated 24.09.2010)
12.	(iii) Density	0.4
13.	Whether area is significant from wildlife point of view	It does not form part of any National Park, Sanctuary or Biosphere reserve, Tiger reserve, Elephant corridor, etc.
14.	Details of Mining	
15.	i. Total project area	535.242 ha
16.	ii. Notified forest land	304.096 ha
17.	iii. Area of jungle / jhar	-
18.	iv. Tenancy land / non-forest	231.146 ha
19.	v. Period of mining lease proposed	30 years
20.	vi. Total reserve	113.36 MT of coal
21.	vii. Reserve in forest area	-
22.	viii. Reserve in non-forest area	-

23.	ix. Annual estimated production	3.5 million tonnes of coal
24.	x. Nature of mining operation	Open Cast
25.	xi. Phased reclamation plan	Reclamation plan at p-93/c.
26.	xii. Gradient of the mining area	-
27.	xiii. No of labourers to be employed	889
28.	Compensatory Afforestation	The Compensatory Afforestation (CA) has been proposed over double the degraded forest land i.e. 453.34 ha and 26.66 ha for one & half times safety zone at the total cost of Rs.1,65,30,250/- with 7 years maintenance. CA Scheme needs to revised as per the existing Guidelines to make it for a period of 7-10 years. DGPS map of the area identified for raising CA needs to be submitted by the State Government Site suitability certificate (updated) needs to be furnished
29.	Catchment Area Treatment	-
30.	Rehabilitation of Oustees a) No of families involved b) Category of families c) Details of rehabilitation plan	- 160 - SC/ST Enclosed p-122-135/c.
31.	Reclamation of mined areas	-
32.	Cost Benefit Ratio	1:8.84 at p-11/c.
33.	Recommendation i. DFO ii. PCCF iii.State Government	All have recommended the proposal. p-20/c. p-58/c. p-59c.
34.	District Profile	
	(i) Total Geographical area of District	3124.80 sq km
	(ii) Total forest area of District Divisional forest area	637.51 sq km -
	(iii) Total area diverted since 1980	708.58 ha in 7 no of cases
	(iv) Total CA stipulated	Forest land : 3509.708 Non-forest land : 90.77
	(iv) Total CA done since 1980	Forest land : Nil Non-forest land : Nil

**Other Remarks:**

1. The proposed Karo OCP is located in the Bokaro district of Jharkhand and lies in the B&K area of CCL.
2. The Karo OCP (3.5 MTY) has been proposed to meet the shortage of power grade and washery grade coal to be supplied to TVNL & DVC located at a distance of about 30 km.

3. The legal status of the forest land proposed for mining is Protected Forests falling under Baidyakaro, Karo, Barkari Uri and Kargali PFs comprising of 304.096 ha.
4. The user agency has informed that 77.43 ha of forest land has already been diverted in the name of Kaveri OCP covering part of Karo & Kargali PFs vide this Ministry's letter no.8-22/2003-FC dated 31.03.2004.
5. The item wise break-up of the forest land for different purposes is as below:

S. No.	Purpose	Forest land (in ha)	Non-forest land (in ha)	Total land (in ha)
1.	Quarry	187.091	110.973	298.064
2.	External OB Dump	29.799	64.969	94.768
3	Haul Road	8.68	1.92	10.60
4.	CHP	10.62	2.636	13.256
5.	Sub station	1.506	0.134	1.64
6.	Workshop-I Excavation	4.505	1.115	5.62
7.	Service area	61.895	19.689	81.584
8.	Safety Zone	15.61	29.71	45.32
	<b>Sub total</b>	<b>319.706</b>	<b>231.146</b>	<b>550.852</b>
9.	Less forest in Safety zone	(-) 15.61	0.00	(-) 15.61
	<b>Total</b>	<b>304.096</b>	<b>231.146</b>	<b>535.242</b>
	Already released under FC Act	77.43	-	-
	Forest land for diversion	226.67*	-	

(\* 226.67 ha does not include the area of safety zone and as per the existing guidelines, the area of safety zone needs to be included in the total forest area proposed for diversion).

6. The User Agency has given an undertaking to bear the cost of NPV & CA on twice the area of forest land diverted at p-61/c.
7. The User agency has also submitted a copy of the public hearing at p-38-49/c.
8. The Compensatory Afforestation (CA) has been proposed over double the degraded forest land i.e. 480.00 ha, including one and half times safety zone, spread over 4 patches in Bokaro Forest Division at the total cost of Rs.1,65,30,250/- at p-21 to 33/c.
9. The DFO has certified the suitability of the CA areas at p-34/c.
10. The total cost of the project Rs.115.7572 crores.
11. The State Government while recommending the proposal has made the following submissions:
  - i. The User agency will reclaim and surrender all areas which were handed over to them 20 years back.
  - ii. The User agency to remove the already accumulated slurry from the area without causing any adverse impact on environment.

## **SITE INSPECTION REPORT:**

1. The site inspection has been done by the Regional Office, Bhubaneswar.
2. Legal status of the forest land is Protected Forest.
3. The total cost of the project is Rs.115.7572 Crores.
4. The wildlife found in the area includes Fox, Wolf cat, Wild pig, Monkeys, Mongoose, Birds like- Baz, Sparrow, Owl, Peacocl, Eagle, etc., and snakes are mainly python, krait, cobra etc.
5. About 1,30,221 trees are required to be felled. The details are as below-

No. of trees below 60 cm girth -	76,275
No. of trees below 60 cm girth -	53,946
6. The density of the forest is reported to be 0.4.
7. The Main species are Sal, Mahua, Pipal, Bargad, Harre, Khair, Jamun, Bel, Chiraunji, Karam, Semal, Sidha, Gular, Koraiya, Salai, Kusum, Babul Siris, Piyar, Neem, Kend etc.
8. The plots are located in 4 patches. The CA area at Budgadda (30 ha) has been utilized in different forestry programs, so that area will not be available for raising CA as the same has already been used in different programme. The total financial outlay is Rs.1,65,30,250/-.
9. About 270 numbers employments will be generated for which direct beneficiaries will be 1500 and indirect beneficiaries will be 4500. The total man days employed will be around 4700.
10. The cost benefit ratio is 1:8.84.
11. No violation of FC Act, 1980 has been reported by the State Government.
12. The nearest sanctuary is Hazaribagh wildlife sanctuary which is around 80 km away.
13. The CCF (central) while forwarding the proposal has recommended the following:
  - i. The user agency is asking for 29.799 (forest) + 64.969 (non-forest) = 94.768 ha of land for external OB dump which appears to be a large area. The user agency should plan such a fashion that the internal dumping starts early which will reduce the actual OB dump area. The mining plan should be modified in that line. The external OB dump should be limited to the non-forest area alone. The user agency also should explore the possibility of dumping the OB from the proposed mine in the already existing voids or voids being created due to mining in other adjacent mines of the user agency.
  - ii. The Karo OCP is located in the East Bakaro coal fields, where a number of mines of CCL are under operation. Due to the mining the area has been denuded causing environmental problems like dust pollution, damage of trees, etc., which need immediate attention. The user agency should plan for taking up plantation in all the available areas in the East Bokaro coalfields of CCL. The plantation should be done by the CCL under the supervision and advice of the Forest Department. Instead of sectoral green planning, the CCL should go for integrated green planning including soil and moisture conservation measures for the East Bokaro coal fields.

- iii. The voids available locally within the CCL should be identified and earmarked for deposition of ash generated from the nearby Bokaro TPS.
- iv. The user agency should give an undertaking to contribute proportionately for the regional wildlife management plan which is under preparation.

The Regional Office recommended the proposal with above observation.

**CONSIDERATION OF THE PROPOSAL BY THE FOREST ADVISORY COMMITTEE AND RECOMMENDATION THEREOF**

1. The above mentioned proposal was initially considered by the considered by the FAC in its meeting held on 20.08.2009 and the Committee, after discussion on the proposal desired that following information may be sought from the State Government:
  - i. The details of total area, including forest land, leased to the M/s.CCL with total mineable reserve.
  - ii. The total number of Open cast and underground mines, approved and active, with annual production and utilization of coal from each of them.
  - iii. The time required for de-mining of the existing mines and their reclamation as per existing progressive mine closure plans.
  - iv. The additional requirement of forest area as per long term future expansion plan keeping in view the demand and supply.
  - v. The working plan prescription for the area in question.
2. The above recommendation of the FAC were conveyed to the State Government of Jharkhand vide this Ministry's letter of even number dated 24.09.2009. The Government of Jharkhand vide their letter no. 3/Vanbhumi-2/2009/3354 dated 23.10.2009, placed alongwith its annexure at page 188-218, submitted the requisite information sought by the Ministry vide its letter dated 24.09.2009. Summary of the same is given as under:
  - i. With respect to query no.(i), the User Agency through the State Government has submitted that there are 58 projects involving 21,700 ha area including 4060.95 ha forest area) with 1475 MT mineable reserves at p-196/c.
  - ii. With respect to query no.(ii), the User Agency through the State Government has submitted that there are 37 OCP and 21 UG projects at p-200/c).
  - iii. 6. With respect to query no.(iii), the User Agency has submitted the details at p-201/c.
  - iv. With respect to query no.(iii), the User Agency has submitted the following:
 

Future Projects	:	2546.91 ha
Expansion Projects	:	1462.41 ha
<u>New Projects</u>	:	<u>1512.15 ha</u>
 Total	 :	 5521.47 ha

The demand and supply position is given at p-205/c.
  - v. The Working Plan prescription is given at p-218/c.

3. The proposal alongwith the additional information submitted by the State Government, was again considered by the FAC in its meeting held on 4.11.2009 and the FAC again sought additional information from the State Government on the following:
  - i. Whether the present proposal is an extension of the already existing mine or a fresh mine.
  - ii. The location of this mine vis-à-vis other 57 mines on the coal map of the area on SOI toposheet of suitable scale.
  - iii. Land use pattern within 10 km radius from the boundary of the mine.
  - iv. The photographs with report on the forest crop composition of the area.
  - v. Certificate of the State Government regarding settlement of right forest dwellers rights under the Forest Rights Act, 2006 as required as per advisory to States issued by the Ministry.
4. The above recommendation of the FAC were communicated to the State Government vide this Ministry's letter of even number dated 14.12.2009. The Government of Jharkhand vide their letter no. 3/Vanbhumi-2/2009/2142 dated 17.06.2010, placed alongwith its annexure at page 234-245, submitted the requisite information sought by the Ministry vide its letter dated 14.12.2009. Summary of the same is given as under:
  - i. With respect to query no.(i), the State Government has submitted that the proposal of Karo OCP is an expansion proposal of existing Kaveri OCP Mine. The final approval for divesion of Kaveri OCP, area 77.43 ha was granted vide MoEF's letter no. 8-22/2003FC dated 31.03.2004 at p-240/c.
  - ii. With respect to query no.(ii), the User Agency through the State Government has submitted that the location map of Karo OCP along with other existing / operating as well as upcoming mines of CCL are given in the toposheet of 1:2,50,000 scale enclosed at p-245/c.
  - iii. With respect to query no.(iii), the User Agency has submitted the land use pattern within 10 km radius from the boundary of the Karo project, as per satellite survey/data given by CMPDI is given below and map is enclosed at p-242/c:

Sl. No.	Class of Land	Particulars	Area	
			Sq km	Percentage
1.	Settlement	Urban	10.28	3.27
		Rural	3.2	1.02
		Industrial	0.97	0.30
		<b>Sub-total</b>	<b>14.44</b>	<b>4.59</b>
2.	Vegetation Cover	Dense Forest	27.3	8.69
		Open Forest	42.33	13.47
		Scrub	102.30	32.50
		Plantation of OB Dump	6.08	1.94
		<b>Sub-Total</b>	<b>151.71</b>	<b>47.91</b>
3.	Agricultural Land	Crop land	44.92	14.30
		Fallow land	42.28	13.48

		<b>Sub-Total</b>	<b>87.20</b>	<b>27.75</b>
4.	Waste land + Sand land		21.04	6.79
5.	Mine Area	Quarry	4.58	1.46
		OB Dump	4.73	1.51
		<b>Sub-Total</b>	<b>9.01</b>	<b>2.86</b>
6.	Surface Water Body		4.28	1.36
	<b>Total</b>		<b>314.28</b>	<b>100.00</b>

- iv. With respect to query no.(iv), the State Government has informed that the photographs with report on forest crop composition of the area being provided.
- v. With respect to query no.(v), the State Government has informed that no proposal/claims for this area has been received under the FRA, 2006 at p-243/c.
5. Proposal alongwith above information was considered by the FAC in its meeting held on 21.07.2010 and the FAC after detailed discussion recommended the proposal for diversion of forest land. However, the competent authority of the MoEF&CC, after examination of the recommendation of the FAC had made following observation:
- “Isn’t total of about 1,30,000 trees of various girth classes including 85,000 below 60 girth cm on the higher side?”*
6. The above observation of the competent authority of the MoEF&CC were conveyed to the State Government vide this Ministry’s letter of even number dated 29.09.2010. The Government of Jharkhand vide their letter no. 3 / VanBhumi - 02 / 2009 /4221 / VP dated 11.08.20152, placed along with its annexure at page 272-280/c (received through email dated 24.10.2015), submitted the reply to the observation raised by the MoEF&CC in its letter dated 24.09.2010. Summary of the same is given as under:
- i. The State Government has informed that as per report received from the PCCF, Jharkhand vide his letter no. 2407 dated 24.07.2015, trees enumeration has been done and the abstract is enclosed. The State Government has also reported that as per the direct enumeration of trees in the area instead of 1,30,000 trees reported in the original proposal, only 86,412 trees have been found existing in the area. Out of the total enumerated trees above 60 cm girth includes 7,374 while below 60 cm girth number of trees estimated to the tune of 79,038. Abstract of trees jointly enumeration of Karo –I Forest Land is given under:

S.No.	Tree Name	Numbers	0 to 29	30 to 59	60 to 89	90 to 119	120 above
1.	Aam	16	1	4	7	4	
2.	Ailsa	2		2			
3.	Aitha	19	15	3	1		
4.	Arar	6	3	2	1		
5.	Asan	247	85	142	18	2	
6.	Awla	21	8	11	1	1	
7.	Bandarloor	921	416	463	41	1	
8.	Bargad	13		7	4	1	1
9.	Behra	7	2	3	1		1
10.	Bel	681	198	403	73	7	

11.	Bair	190	83	100	4	1	2
12.	Bhelwa	3464	913	2310	221	15	5
13.	Bhurkund	2		1	1		
14.	Bhursa	16	9	7			
15.	Bhutta	1	1				
16.	Buch	30	16	14			
17.	Chaili	14	5	9			
18.	Churchur	897	514	357	26		
19.	Dhela	1	1				
20.	Dhoya	1401	460	760	168	13	
21.	Dhundi	3	2			1	
22.	Doka	3980	1325	2419	222	11	3
23.	Dumar	18	2	12	4		
24.	Gamhar	5	1	3		1	
25.	Garnim	25	2	16	7		
26.	Ghuith	3	3				
27.	Gudra	1	1				
28.	Gullar	100	39	57	2	1	1
29.	Gulmohar	2	2				
30.	Gurhi	11	6	5			
31.	Gurhikaram	2	2				
32.	Harre	25	9	15	1		
33.	Jamun	142	27	70	30	11	4
34.	Jharya	1	1				
35.	Jogiya	10	3	6	1		
36.	Kaaj	45	13	23	7	2	
37.	Kamail	1	1				
38.	Karam	268	66	167	25	10	
39.	Karang	82	21	46	11	4	
40.	Kari	1411	605	784	19	3	
41.	Kathal	4	3		1		
42.	Kathmohli	1		1			
43.	Kend	9964	3628	5834	440		
44.	Kheir	80	25	55			
45.	Khemal	1			1		
46.		7		4	3		
47.	Konar	15	1	7	5	2	
48.	Koraiya	2578	1379	1116	79	2	2
49.	Kusum	1064	341	634	77	8	4
50.	Mahua	1054	170	553	168	77	86
51.	Makarkend	602	217	364	21		
52.	Mayuri	4	3	1			
53.	Neem	467	107	309	48	2	1
54.	Paker	118	30	68	9	5	6
55.	Palas	2648	746	1589	280	27	6



56.	Paldhi	150	38	92	14	5	1
57.	Paser	61	35	25	1		
58.	Peepal	42	13	19	6		4
59.	Piranji	1254	332	722	164	32	4
60.	Piyar	10368	3729	6211	397	24	7
61.	Puttar	1074	618	439	16	1	
62.	Raipan	3842	1459	1987	373	19	4
63.	Ratangudra	13	12	1			
64.	Sakhua	18018	4260	11034	2303	322	99
65.	Sallga	77	11	55	11		
66.	Sanodh	1	1				
67.	Saran	1			1		
68.	Shikarbans	1	1				
69.	Sidha	12638	5199	6831	552	50	6
70.	Simar	189	31	93	48	16	1
71.	Siris	59	13	38	7		1
72.	Sisam	22	2	15	5		
73.	Sisha	2	1			1	
74.	Vivid prajati	5909	2598	2856	394	49	12
	<b>TOTAL</b>	86412	29864	49174	6320	771	283

No. of trees below 60 cm girth - 79,038  
No. of trees above 60 cm girth - 7,374

- ii. The State Government has also reported that Differential GPS map, kml files of the area proposed for diversion and compliance of FRA, 2006 have also been submitted. However compliance of FRA, 2006 stated to have been submitted has not been received by the MoEF&CC.

In view of the above, it is proposed that though the proposal has already been examined and recommended by the FAC for diversion of forest land, however, since the State Government of Jharkhand has submitted the requisite information after a lapse of a period of almost five years and during the intervening period several attributes like land identified for raising CA, CA scheme, area earmarked for safety zone, etc. might have been changed and proposal is required to be re-examined in light of the existing Guidelines issued by the MoEF&CC. It is therefore, proposed that proposal may be submitted before the forthcoming FAC meeting to be convened on 24.11.2015 for consideration.

Detailed and updated factsheet of the proposal is also enclosed.