

Letter No: HIL/JH/EDS/Bagru (FC)/166

Date: 07.07.2022

To
The Nodal Officer (PCCF),
Van Bhawan, Doranda, Ranchi, Jharkhand.

Subject: Submission of response to the Essential Details sought (EDS) by the Nodal officer in Form A for seeking prior approval of Central Govt. under section 2 of the Forest (Conservation) Act, 1980 for Diversion of Forest land of 7.52 Ha. for Bagru Bauxite Mine at Village-Bagru, Tehsil-Kisko, District-Lohardaga, Jharkhand by M/s Hindalco Industries Ltd. - regarding.

Ref: Proposal no- FP/JH/MIN/155456/2022 dated 22/05/2022 and Essential Details sought (EDS) by the Nodal officer on 21/06/2022

Sir,

With reference to the application submitted (proposal no- FP/JH/MIN/155456/2022, dated 22/05/2022) for seeking prior approval of Central Govt. under section 2 of the Forest (Conservation) Act, 1980 for Diversion of Forest land of 7.52 Ha. for Bagru Bauxite Mine at Village-Bagru, Tehsil-Kisko, District-Lohardaga, Jharkhand by M/s Hindalco Industries Ltd and subsequent Essential Details sought (EDS) by the Nodal Officer on 21/06/2022, we are submitting requisite documents for your kind perusal and further processing of the forest diversion proposal.

Thanking you,

Yours faithfully,

A handwritten signature in blue ink, appearing to read 'Basudev', is written over a blue horizontal line.

Basudev Gangopadhyay

Sr. GM (Environment and Geology)

Authorized representative

M/s Hindalco Industries Ltd

Enclosure: EDS reply dated 21/06/2022 along with enclosures

Proposal number (FP/JH/MIN/155456/2022)

EDS Reply Dated 21/06/2022

S.N	Point Number	Remarks, Nodal officer	Compliance
1.	B.1.	Bagru Bauxite Mine is an on-going project is it a past or same project or is it separate project. If it is a part of old project then details of previous project is also to be mentioned at B.1.	So far as status of Bagru mine is concerned the mining operation is closed at present whereas lease is valid up to 31.03.2030. The project is same but the actual position is that it involves 7.52 ha of forest land and due to this reason the mining activity cannot be started in the non-forest area also. Thus, a separate proposal of diversion of 7.52 ha of forest land for non-forestry purposes has been submitted under section 2 of Forest (Conservation), Act 1980.
2.	B.1.	Mention previous proposals	<p>This proposal was also submitted earlier in 2005 where in an area of 19.56 ha of land was sought for diversion. The proposal was considered several times in this State Advisory Group Meeting and at the SAG sought for the detailed break-up of 19.56 ha of forest land which was provided by the state forest and environment department vide letter dated 13.8.2010 (copy enclosed for ready reference). The detail break up of 19.56 ha is as under.</p> <p>Broken up forest land – 9.87 ha Un broken forest land – 7.52 ha Total – 17.39 ha</p> <p>It has been clearly mentioned in the letter of the State Government that 2.17 ha of forest land has been left for the safety zone. For safety zone forest diversion has not been requested.</p> <p>In the SAG meeting the issue of compensatory afforestation for diversion of forest land was also raised but the user agency could not provide appropriate non-forest land for compensatory afforestation which could only be mutated in favour of forest department in 2022. Since the proposals of diversion of forest land are now being processed online thus a fresh proposal was submitted in 2022 for consideration.</p>
3.	C.(ii).(a)	Area given in patch wise details and area on KML file mismatches.	The mismatch in the area has been rectified and corrected KML file is uploaded.

4.	C.(iv)	Geo coordinates not mention on Geo-Map uploaded.	The Geo coordinates have been mentioned in the Geo-Map and correct file is uploaded.
5.	H.(c)	On EC it is mentioned that lease area is 75.41 ha of which forest land is 19.56 ha, 47.35 ha wasteland, 1.76 ha water bodies, & 6.74 ha others. But in Form on column A.1.(x) Non-forest land required is mentioned as 0.	The proposal for diversion of 19.56 ha (7.52 ha has been submitted because as per EC out of 19.56 ha of forest land only diversion of 7.52 ha is required which has been detailed in 2 B1 above. So far as non-forest land is concerned "0" (zero) was in advertently mentioned in the proposal which should be actually 67.89 ha (Broken up area – 9.87 Ha + Safety Zone – 2.17 Ha + Non-forest area – 55.85 Ha) as per EC. The requisite correction has been made in the proposal.
6.	G	CB Analysis not uploaded.	CB Analysis is not uploaded as per the MoEF&CC <u>"Guidelines of conducting Cost Benefit Analysis for projects involving diversion of forest land under the provision of the Forest (Conservation) Act ,1980" dated 01/08/2017. (Copy enclosed)</u>
7.	L.(iv)	It is mentioned as number of patches is six, But only one patch of 7.69 ha is uploaded. on uploaded KML file area is showing as 8.63 ha. Also KML of land identified for Compensatory Afforestation & outer boundary of mining lease area is same. Which is contradictory?	The correction has been made in the number of patches as "one". So far as contradiction is concerned it is submitted that the mining lease area lies in Lohardaga district whereas the CA area lies in Palamau district, so, there can not be any contradiction at all.
8.	M1.(d).	Total area of mining lease is shown as 75.41 ha. A.1.(viii)&(ix) forest and non-forest total area is 7.52 ha. only.	The correction has been made in the proposal. The total forest area proposed for diversion is 7.52 Ha and Non-Forest Area is 67.89 ha (Broken up area – 9.87 Ha + Safety Zone – 2.17 Ha + Non-forest area – 55.85 Ha) as per EC.
9.	M.2.(vii)	Outer boundary of mining lease area of uploaded KML file is 8.63 whereas total mining lease area is mentioned as 7.56 ha. Also KML of land identified for Compensatory Afforestation & outer boundary of mining lease area is same. Which is contradictory?	Necessary correction has been made and correct file has been uploaded in the proposal. So far as contradiction is concerned it is submitted that the mining lease area lies in Lohardaga district whereas the CA area lies in Palamau district, so, there cannot be any contradiction at all.
10.	Additional Information	On land schedule forest area is mentioned as 19.56 ha whereas in village wise breakup it is mentioned as 7.52 ha. Needs to be explained. Upload the abstract of project area	It is correct to say that 19.56 ha of forest land has been mentioned in the land schedule which is inclusive of broken up and safety zone forest area for which diversion has not been requested. Plot wise area requested for diversion after deducting broken up area is as under.

7.52 ha which they have applied in tabular form with land details so that the area may be calculated from the land schedule uploaded.

Village	Plot No(s)	Forest Area (ha) to be diverted as per the proposal
Bagru	80	4.01
	116	0.83
	191	0.22
Bhusar	215	1.03
Hisri	29	1.43
	Total	7.52



pe
Broken
Area

झारखण्ड सरकार

वन एवं पर्यावरण विभाग

प्रेषक,

मुकेश कुमार वर्मा,
सरकार के उप सचिव।

सेवा में,

मुख्य वन संरक्षक (केन्द्रीय),
भारत सरकार,
पर्यावरण एवं वन मंत्रालय,
पूर्वी क्षेत्रीय कार्यालय,
ए/3, चन्द्रशेखरपुर, भुवनेश्वर-751023

राँची, दिनांक 13/8/2010/

विषय:- लोहरदगा जिलान्तर्गत मौजा-बगडू, भूसाड़ एवं हिसरी में वन (संरक्षण) अधिनियम, 1980 के तहत मेसर्स हिण्डालको का 19.56 हे० वनभूमि के अपयोजन का प्रस्ताव।

महाशय,

निदेशानुसार उपर्युक्त विषयक प्रधान मुख्य वन संरक्षक, झारखण्ड, राँची के पत्रांक-22पी०-2(2)9/2006-4503 दिनांक-06.10.2006 से प्राप्त विषयक प्रस्ताव मूल में एवं प्रतिवेदन की छायाप्रति सभी अनुलग्नक के साथ अग्रेत्तर कार्रवाई हेतु संलग्न है।

विषयक प्रस्ताव के संबंध में विभाग द्वारा की गई पृच्छाओं का निराकरण प्रतिवेदन नाभिक पदाधिकारी, झारखण्ड, राँची के पत्रांक-864 दिनांक-20.11.2007, प्रधान मुख्य वन संरक्षक, झारखण्ड, राँची के पत्रांक-22पी०-2(2)-9/2006-3190 दिनांक-08.09.2008 एवं नाभिक पदाधिकारी, झारखण्ड, राँची के पत्रांक-593 दिनांक-20.07.2010 से प्राप्त है, जिसकी छायाप्रति सानुलग्नक संलग्न है। प्रतिवेदन के अनुसार विषयगत प्रस्ताव की वस्तु-स्थिति निम्नवत् है:-

1. विषयगत प्रस्ताव मेसर्स हिण्डालको के पक्ष में लोहरदगा जिलान्तर्गत मौजा-बगडू, भूसाड़ एवं हिसरी में 17.39 हे० वनभूमि के अपयोजन का प्रस्ताव है। वनभूमि की स्थिति निम्नवत् है:-

पूर्व खंडित वनभूमि	-	9.87 हे०
अखंडित वनभूमि	-	7.52 हे०
कुल	-	17.39 हे०

इसमें सेपटीजोन के लिए प्रस्तावित 2.17 हे० वनभूमि सम्मिलित नहीं है। इसे सम्मिलित करने पर यह 19.56 हे० का हो जाता है, लेकिन सेपटीजोन के लिए प्रस्तावित वनभूमि का अपयोजन नहीं होता है। इस प्रकार यह प्रस्ताव 17.39 हे० वनभूमि अपयोजन का है।

2. विषयगत परियोजना हेतु पर्यावरणीय स्वीकृति के संबंध में नाभिक पदाधिकारी ने अपने पत्रांक-593 दिनांक-20.07.2010 द्वारा सूचित किया गया है कि भारत सरकार, पर्यावरण एवं वन मंत्रालय के पत्रांक-J-11015/585/07-IA-II(M) दिनांक-20.05.2009 द्वारा पर्यावरणिक स्वीकृति अनुमोदित की जा चुकी है। चूँकि माईनिंग लीज मेसर्स इण्डाल के नाम से है। इसलिए जबतक इस लीज को मेसर्स हिण्डालको के पक्ष में नहीं कर दिया जाता है, तबतक औपचारिक आदेश निर्गत नहीं करने की बात कही गई है। खनन विभाग का कहना है कि पर्यावरण एवं वन मंत्रालय से अनापत्ति प्रमाण-पत्र प्राप्त होने के बाद ही लीज का हस्तान्तरण/नामान्तरण किया जाएगा।

3. खंडित क्षेत्र में रोपवे, टसल क्रेशर तथा मैंगनीज के निर्माण हेतु वनभूमि का उपयोग किया था। उक्त अपयोजन हेतु तत्कालीन प्रावधानों के अनुरूप प्राप्त किया जाना प्रतिवेदित है।

4. प्रयोक्ता अभिकरण द्वारा आवेदन विहित प्रपत्र फार्म-A-पार्ट-I में समर्पित किया गया है, जो प्रस्ताव के साथ संलग्न है।

5. प्रस्ताव के पार्ट-II, III, III-A एवं पार्ट-IV पर क्रमशः वन प्रमंडल पदाधिकारी, वन प्रमंडल, लोहरदगा/वन संरक्षक, प्रादेशिक अंचल, राँची/क्षेत्रीय मुख्य वन संरक्षक, राँची एवं प्रधान मुख्य वन संरक्षक, झारखण्ड, राँची का मंतव्य अंकित है, जो प्रस्ताव के साथ संलग्न है।

6. खनन संबंधी जिला से संबंधित सूचना प्रस्ताव के साथ संलग्न है।

7. माइनिंग प्लान प्रस्ताव के साथ संलग्न है। भारतीय खान ब्यूरो, भारत सरकार, खान मंत्रालय के पत्रांक-314(3)/2004-MCCM (CZ) / MP-19 दिनांक-03.05.2005 द्वारा अनुमोदन प्राप्त है, जो प्रतिवेदन के साथ संलग्न है।

8. सात वर्षीय वृक्षारोपण योजना का प्रस्ताव प्रतिवेदन के साथ संलग्न है।

9. प्रस्तावित वनभूमि के वृक्षों की गणना सूची प्रस्ताव के साथ संलग्न है।

10. 1:50,000 स्केल के टोपोशीट पर लोकेशन मैप प्रस्ताव के साथ संलग्न है।

11. ग्रामीणों की सहमति पत्र प्रतिवेदन के साथ संलग्न है।

12. लागत-लाभ विश्लेषण प्रतिवेदन के साथ संलग्न है। लागत-लाभ विश्लेषण के संबंध में नाभिक पदाधिकारी, झारखण्ड, राँची ने अपने पत्रांक-593 दिनांक-20.07.2010 द्वारा प्रतिवेदित किया है कि लागत-लाभ विश्लेषण किए जाने के क्रम में प्रयोक्ता अभिकरण द्वारा क्षति में मात्र 0.151 करोड़ रुपये की क्षति (Loss of Timber) के रूप में दिखायी गई है। इस परियोजना के कारण Environmental Loss की गणना नहीं की गई है। वन (संरक्षण) अधिनियम, 1980 के तहत निर्गत दिशा-निदेश के अनुलग्नक-VI(b) की कंडिका-5 में दिए गए निदेश के आलोक में 0.4 घनत्व के वनों के अपयोजन के फलस्वरूप प्रति हे० 50.696 लाख रुपये की क्षति होगी। इस प्रकार 19.56 हे० के लिए कुल क्षति 991.61 लाख रुपये होगी। इस प्रकार Timber of loss तथा Environmental Loss मिलाकर कुल क्षति 10.061 करोड़ रुपये होगी। प्रयोक्ता अभिकरण द्वारा इस परियोजना के लिए कुल 14.37 करोड़ रुपये का लाभ बताया गया है। इस प्रकार लागत-लाभ अनुपात 1:1,428 होगा।

13. क्षतिपूरक वनरोपण हेतु प्रस्तावित गैर वनभूमि के संबंध में अंचलाधिकारी का प्रमाण-पत्र प्रस्ताव के साथ संलग्न है।

14. मेसर्स हिण्डालको के खनन पट्टा की स्वीकृति 22.01.1974 से 21.01.2004 तक 30 वर्षों के लिए थी। नवीकरण हेतु आवेदन राज्य सरकार के विचाराधीन है। प्रयोक्ता अभिकरण Deemed lessee की श्रेणी में आते हैं, प्रधान मुख्य वन संरक्षक, झारखण्ड, राँची द्वारा प्रतिवेदित है।

15. रोपवे से संबंधित रकबा जो, वनभूमि से गुजरा है, वह 6.88 हे० है और यह प्रस्ताव का भाग है।

अतः प्रधान मुख्य वन संरक्षक, झारखण्ड, राँची के अनुशंसा से सहमत होते हुए विषयगत प्रस्ताव को निम्नांकित शर्तों के साथ अग्रोत्तर कार्रवाई करने की अनुशंसा की जाती है:-

(क) प्रयोक्ता अभिकरण को माननीय सर्वोच्च न्यायालय के अद्यतन निदेश के आलोक में ए०पी०भी० का भुगतान करना होगा।

- (ख) प्रयोक्ता अभिकरण को सेफ्टीजोन का पुनर्वास एवं उसके डेढ़ गुणे क्षेत्र में अवकृष्ट वनभूमि में वृक्षारोपण कार्य हेतु राशि उपलब्ध करानी होगी ।
- (ग) खनन कार्य के बाद Reclamation कार्य वन विभाग की देखरेख में वार्षिक योजना के अनुरूप करना होगा । नये क्षेत्रों में वनभूमि खण्डन से प्राप्त top soil को निकालकर Polytheist sheet से ढँक कर सुरक्षित रखा जाएगा, जिसका उपयोग Back filling में Top layer के रूप में किया जाएगा ।
- (घ) प्रयोक्ता अभिकरण को क्षतिपूरक वनरोपण हेतु गैर वनभूमि एवं उसपर वनरोपण के खर्च की राशि उपलब्ध कराना होगा ।
- (ङ.) प्रयोक्ता अभिकरण को प्रस्तावित खनन क्षेत्रों के आसपास के ग्रामों का सर्वांगीन विकास यथा-विद्युत, विद्यालय, सड़क आदि की मरम्मत का कार्य करना होगा ।
- (च) प्रयोक्ता अभिकरण को सामुदायिक एवं विद्यालय भवन के अगल-बगल के खाली क्षेत्रों में फलदार एवं इमारती लकड़ी के पौधों का रोपण एवं रख-रखाव का कार्य करना होगा ।
- (छ) अन्य मानक शर्तों का अनुपालन किया जाना प्रयोक्ता अभिकरण के लिए बाध्यकारी होगा ।

कृपया अनुरोध है कि विषयगत वनभूमि अपयोजन के प्रस्ताव पर अग्रतर कार्रवाई करने की कृपा की जाय ।

विश्वासभाजन

अनुलग्नक:-यथोक्त ।

ह०/-

(मुकेश कुमार वर्मा)

सरकार के उप सचिव ।

ज्ञापांक- वनभूमि-75/2006...2933.../व०प०, राँची, दिनांक 13/8/2010/

प्रतिलिपि-सचिव, भारत सरकार, पर्यावरण एवं वन मंत्रालय, पर्यावरण भवन, सी०जी०ओ० कॉम्प्लेक्स, लोदी रोड, नई दिल्ली-110510 को विषयगत प्रस्ताव की मूल में एवं प्रतिवेदन की छायाप्रति के साथ सूचनार्थ एवं आवश्यक कार्रवाई हेतु प्रेषित ।

ह०/-

सरकार के उप सचिव ।

ज्ञापांक- वनभूमि-75/2006...2933.../व०प०, राँची, दिनांक 13/8/2010/

प्रतिलिपि-प्रधान मुख्य वन संरक्षक, झारखण्ड, राँची/प्रधान मुख्य वन संरक्षक-सह-कार्यकारी निदेशक, बंजर भूमि विकास बोर्ड, झारखण्ड, राँची/उप महाप्रबंधक (खनन), हिण्डालको, बगडू हिल बॉक्सार्ट, माइन्स, लोहरदग्गा-835302 को सूचनार्थ एवं आवश्यक कार्रवाई हेतु प्रेषित ।

सरकार के उप सचिव ।

No. 7-69/2011-FC(Pt.)
Government of India
Ministry of Environment, Forest & Climate Change
(Forest Conservation Division)

Indira Paryavaran Bhawan,
Jorbagh Road, Aliganj,
New Delhi-110003.
Dated: 01st August, 2017.

To

The Principal Secretary (Forests)
All States / Union Territories Governments.

Sub: **Guidelines for conducting Cost Benefit Analysis for projects involving diversion of forest land under the provisions of the Forest (Conservation) Act, 1980.**

Sir,

I am directed to inform that in supersession of all earlier orders / guidelines including that referred to at 2.6 of the Handbook of Forest (Conservation) Act, 1980 for conducting Cost Benefit Analysis of projects involving forest diversion, a revised set of guidelines has been prepared by the Ministry and shall be applicable for all projects involving diversion of forest land under the provisions of the Forest (Conservation) Act, 1980, which are required to be undertaken as per Table A of the new guidelines, from the date of issue of this letter. These guidelines will be applicable for all such projects which are yet to be recommended by the State Government on the date of issue of this guideline.

The guidelines for conducting Cost Benefit Analysis for projects involving forest diversion areas is enclosed herewith for further action.

This issues with the approval of competent authority.

Yours faithfully,

Encl: As above.

(Nisheet Saxena)

Sr. Assistant Inspector General of Forests

Copy to:-

1. Prime Minister's Office (PMO)
2. Secretary, Ministry of Mines, Government of India
3. Secretary, Ministry of Coal, Government of India.
4. Secretary, Ministry of Steel, Government of India
5. Principal Chief Conservator of Forests, all States/UTs.

7. All Regional Offices, Ministry of Environment, Forest and Climate Change (MoEF&/C)
8. Joint Secretary, In-charge, Impact Assessment Division, MoEF&CC.
9. PS to the Hon'ble Minister of State (Independent Charge) for Environment, Forest and Climate Change.
10. Chairman, State Environment Impact Assessment Authority, all States/UTs.
11. Member-Secretary, State Environment Impact Assessment Authority, all States/UTs.
12. All Directors/Assistant Inspector General of Forests in Forest Conservation Division, MoEF&CC.
13. All Advisors/Directors/Dy. Directors in the Impact Assessment Division, MoEF&CC.
14. Director, Regional Office (Headquarters), MoEF&CC.
15. Sr. Director (Technical), NIC, MoEF&CC with a request to place a copy of this letter on website of this Ministry.
16. Sr. PPS to the Secretary, Ministry of Environment, Forest and Climate Change.
17. Sr. PPS to Director General of Forests and Special Secretary, Ministry of Environment, Forest and Climate Change.
18. Sr. PPS to Addl. Director General of Forests (Forest Conservation), Ministry of Environment, Forest and Climate Change.
19. PPS to IGF(FC), MoEF&CC.
20. Guard File.

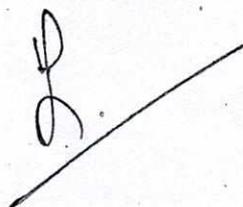


(Nisheet Saxena)

Sr. Assistant Inspector General of Forests

Guidelines for conducting cost-benefit analysis for projects involving forest diversion

- (i) While considering proposal for diversion of forest land for non-forestry use, it is essential that ecological and environmental losses and eco-economic distress caused to the people who are displaced are weighted against economic and social gains.
- (ii) Whenever the forest land is involved in the development projects, the cost of ecosystem services and fragmentation of habitat of wildlife and economic distress caused to people dependent on forests and the cost of settlement of people dependent on forest should also be added as the cost of forest diversion in addition to the standard project cost which would have been incurred by the user agencies without involvement of forest land while conducting the cost benefit analysis of the project. Similarly the benefits from the project accruing due to diversion of forest land and used in the project should also be accounted for in the benefits component in addition to the standard benefits of the project which would have been accrued without involvement of forest land while conducting the cost benefit analysis and determining the benefit and cost ratio (BC ratio).
- (iii) The cost of compensatory afforestation and its maintenance in future and soil & moisture conservation at present discounted value and future benefits from such compensatory forestation accruing over next 50 years monetised and discounted to the present value should be included as cost and benefits respectively of compensatory afforestation while conducting the cost benefit analysis and determining the benefit and cost ratio (BC ratio).
- (iv) **Table-A** lists the details the types of projects involving forest land for which cost-benefit analysis will be required. **Table-B** lists the parameters according to which the cost aspect of forest land diverted for the development projects will be determined, while **Table-C** lists the parameters for assessing the benefits accruing to the project using of forest land.
- (v) A cost-benefit analysis as above should accompany the proposals sent to the Central Government for forest clearance under the Forest Conservation Act.



Cost Benefit Analysis Guidelines for forest land diversion -2017

Table-A : Cases under which a cost-benefit analysis for forest diversion are required

No	Nature of proposal	Applicable/ not applicable	Remarks
1	All categories of proposals involving forest land upto 20 hectares in plains and upto 5 hectare in hills	Not applicable	These proposals may be considered on a case to case basis and value judgement
2	Proposal for defence installation purposes and oil prospecting (prospecting only)	Not applicable	In view of national Priority accorded to these sectors, the proposals would be critically assessed to help ascertain that the utmost minimum forest land is diverted for non-forest use
3	Habitation, establishment of industrial units, tourist lodges complex and other building construction.	Not applicable	These activities being detrimental to protection and conservation of forest, as a matter of policy, such proposals would be rarely entertained.
4	All other proposals involving forestland more than 20 hectares in plains and more than 5 hectares in hills including roads, transmission lines, minor, medium and major irrigation projects, hydro projects, mining activity, railway lines, location specific installations like micro-wave stations, auto repeater centres, TV towers etc.	Applicable	These are cases where a cost-benefit analysis is necessary to determine when diverting the forest land to non-forest use in the overall public interest.

Table-B: Estimation of cost of forest diversion

SN	Parameters	Remarks
1	Ecosystem services losses due to proposed forest diversion	Economic value of loss of eco-system services due to diversion of forests shall be the net present value (NPV) of the forest land being diverted as prescribed by the Central Government (MoEF& CC). <i>Note: In case of National Parks the NPV shall be ten (10) times the normal NPV and in case of Wildlife Sanctuary the NPV shall be five (5) times the normal NPV or otherwise prescribed by the ministry or any other competent authority</i>
2	Loss of animal husbandry productivity, including loss of fodder	To be quantified and expressed in monetary terms or 10% of NPV applicable whichever is maximum
3	Cost of human resettlement	To be quantified and expressed in monetary terms as per approved R&R plan
4	Loss of public facilities and administrative infrastructure (Roads, building, schools, dispensaries, electric lines, railways, etc.) on forest land, which would require forest land if these facilities were diverted due to the project	To be quantified and expressed in monetary terms on actual cost basis at the time of diversion

Cost Benefit Analysis Guidelines for forest land diversion -2017

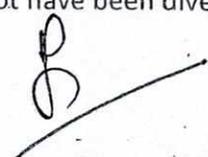
5	possession value of forest land diverted	30% of environmental costs (NPV) due to loss of forests or circle rate of adjoining area in the district should be added as a cost component as possession value of forestland whichever is maximum
6	Cost of suffering to oustees	The social cost of rehabilitation of oustees (in addition to the cost likely to be incurred in providing residence, occupation and social services as per R&R plan) be worked out as 1.5 times of what oustees should have earned in two years had he not been shifted.
8	Habitat Fragmentation Cost	While the relationship between fragmentation and forest goods and services is complex, for the sake of simplicity the cost due to fragmentation has been pegged at 50% of NPV applicable as a thumb rule.
	Compensatory afforestation and soil & moisture conservation cost	The actual cost of compensatory afforestation and soil & moisture conservation and its maintenance in future at present discounted value

Table-C - Existing guidelines for estimating benefits of forest-diversion in CBA

Sr. No.	Parameters	Remarks
1	Increase in productively attribute to the specific project	To be quantified & expressed in monetary terms avoiding double counting
2	Benefits to economy due to the specific project	The incremental economic benefit in monetary terms due to the activities attributed to the specific project
3	No. of population benefited due to specific project	As per the Detailed project report
4	Economic benefits due to of direct and indirect employment due to the project	As per the Detailed project report.
5	Economic benefits due to Compensatory afforestation	Benefits from such compensatory forestation accruing over next 50 years monetised and discounted to the present value should be included as benefits of compensatory afforestation. *For benefits of CA the guideline of the Ministry for NPV estimation may be consulted.

Note-1: Net Present value (NPV) of environment and ecosystem services loss:

The concept of Net Present value of the forest land diverted is a scientific method of calculating the environmental cost and other losses caused due to diversion of forest land for non-forestry purposes. The NPV represents the net value of various ecosystem services and other environmental services in monetary terms which the forest would have provided if the forest would not have been diverted.



Note-2: Possession value of forest land diverted:

The forest land diverted for the project such as irrigation, hydropower, railways, roads, wind, and transmission lines and mining etc are unlikely to be returned and remains in possession of the user agencies. Therefore 30% of the net present value (NPV) of forest land diverted or market rate of adjoining area in the district should be added as a cost component as "possession value of forest land" in addition to the environmental costs due to loss of forests.

