



सत्यमेव जयते

भारत सरकार / GOVERNMENT OF INDIA
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE
क्षेत्रीय कार्यालय, भोपाल/ REGIONAL OFFICE, BHOPAL

Kendriya Paryavaran Bhavan, Link Road No.3, E-5, Ravi Shankar Nagar,
BHOPAL - 462016 (M.P.)

TEL: 0755-2466525 E-mail: rowz.bpl-mef@nic.in



File No. 6-MPA002/2024-BHO

Dated: 18/04/2024.

To,

The Additional Director General of Forests (FC)
Ministry of Environment, Forest & Climate Change
Indira Paryavaran Bhawan
Jor Bagh Road, Aliganj
New Delhi - 110 003.

Sub: Site Inspection for diversion of 1397.54 ha forest land out of which 1335.35 ha Reserved forest land (RF) in various forest compartments and 62.19 ha Revenue forest in various Khasras of Forest Range Waidhan/ Sarai East for Open Cast Dhirauli Coal Mine Project in favour of M/s Stratatech Mineral Resources Private Limited under Singrauli Forest Division, Singrauli District of Madhya Pradesh State (*Online No. FP/MP/MIN/142344/2021*) - reg.

Ref: MoEF&CC , New Delhi Letter No. 8-01/2024-FC dated 02/02/2024.

Sir,

With respect to the subject and reference cited above, the Site Inspection Report of Regional Office, Bhopal in respect of 1397.54 ha forest land out of which 1335.35 ha Reserved forest land (RF) in various forest compartments and 62.19 ha Revenue forest in various Khasras of Forest Range Waidhan/ Sarai East for Open Cast Dhirauli Coal Mine Project in favour of M/s Stratatech Mineral Resources Private Limited under Singrauli Forest Division, Singrauli District of in Madhya Pradesh is submitted herewith for further necessary action.

Yours faithfully

Encl : As above.

A.K. Sinha
18/4/24
(A.K. Sinha)

Dy. Director General of Forests (C)

Copy to:

Shri Suneet Bhardwaj, AIGF, Ministry of Environment, Forest & Climate Change (FC Division), Indira Paryavaran Bhawan, Jor Bag Road, Aliganj, New Delhi.

Site Inspection Report of A.K. Sinha, IFS, DDGF (C), RO Bhopal

Ref: GoI, MoEF&CC (FC Division), letter No. 8-01/2024-FC, Dated- 02 February, 2024.

Date of Inspection: 24.02.2024

Officers present at the time of inspection:-

- (i) A. K. Sinha, Dy. Director General of Forests (C), Regional Office, MoEF&CC, Bhopal.
- (ii) Shri Narendra Kumar Tripathy - Sub DFO, Waidhan
- (iii) Shri Bacha Prasad - Chief of Cluster, Singrauli
- (iv) Shri Rajkishor Singh -Project Head, M/s Stratatech Mineral Resources private Limited
- (v) Shri Lalan Kumar Jha - DGM Operation, Singrauli
- (vi) Shri Ashish Mishra - FRO, East Sarai, Singrauli
- (vii) Smt. Sunita Panadiya - Dy. FRO, East Sarai, Singrauli
- (viii) Shri Sunil Rajak - FBO, East Sarai, Singrauli

Title of theProject:		Diversion of 1397.54 ha forest land out of which 1335.35 ha Reserved forest land (RF) in various forest compartments and 62.19 ha Revenue forest in various Khasras of Forest Range Waidhan/Sarai East for Open Cast Dhirauli Coal Mine Project in favour of M/s Stratatech Mineral Resources private Limited under Singrauli Forest Division, Singrauli District of Madhya Pradesh State. (Online proposal No. FP/MP/MIN/142344/2021)					
1.	Legal status of the forest land proposed for diversion:	Reserved Forest: 1335.35 ha Revenue Forest: 62.19 ha Total: 1397.54 ha					
2.	Item-wise break-up details of the forest land proposed for diversion:	Following is the breakup of proposed area for diversion:-					
		No.	Component	Name of Forest Division	Range	Forest Compartment no.	Area (ha)
		1.	Excavation Area	Singrauli	Waidhan, Mada and East Sarai	Waidhan	1180.14
		2.	Safety Zone			(RF-	10.46
		3.	Green Belt Area			353,354,3	30.97
		4.	Rationalization Area			56,361),	33.31
		5.	Infrastructure Area			Mada (RF-	0
		6.	External Dump			534) and	132.28
		7.	Other uses (Garland drain, Road, Embankment etc.)			East Sarai (RF-	10.37
					362,363,3		
					64,370,37		
					1,372,373,		
					337,357,3		
					60,& 377)		
						1397.53	

3.	Whether proposal involves construction of any buildings (including residential) or not. If yes, details thereof:	No
4.	Total cost of the Project at present rates:	Rs. 2856.47 Crores (As per online Part-I)
5.	Wildlife:	<p>Compartment no. RF-373 is under Elephant corridor According to working plan of Singrauli Division. The prescriptions in the working plan is as follows:-</p> <p>16.6 (9): Any permanent disturbance creating activities like construction of building, establishment of timber depot & labour camp and other permanent & temporary establishments are restricted in this area.</p> <p>16.6 (10): The compartment falling under Elephant corridor should not be allotted for non-forestry activity if in case it is unavoidable to take these compartment for non-forestry activity then in that case alternative corridor route has to be established.</p> <p>However, as per the document (unsigned map) uploaded at annexure section, sl. no. 25, it is observed that the Elephant Corridor is away from the proposed diversion area.</p>
6.	Vegetation:	<p>EcoClass-3 and Crown Density is 0.6</p> <p>The main species present are as follows :-</p> <ol style="list-style-type: none"> i. <i>Shorea robusta</i> ii. <i>Anogeissus latifolia</i> iii. <i>Aegle marmelos</i> iv. <i>Boswellia serrata</i> v. <i>Buchanania lanzan</i> vi. <i>Butea monosperma</i> vii. <i>Careya arborea</i> viii. <i>Chloroxylon swietenia</i> ix. <i>Diospyros melanoxylon</i> x. <i>Emblica officinalis</i> xi. <i>Ficus benghalensis</i> xii. <i>Ficus religiosa</i> xiii. <i>Ficus racemosa</i> xiv. <i>Grewia tiliifolia</i> xv. <i>Gmelina arborea</i> xvi. <i>Holoptelea integrifolia</i> xvii. <i>Lagerstroemia parviflora</i> xviii. <i>Lannea coromandelica</i>

		<p>xix. <i>Madhuca indica</i> xx. <i>Milusa tomentosa</i> xxi. <i>Mitragyna parvifolia</i> xxii. <i>Schleichera oleosa</i> xxiii. <i>Semecarpus anacardium</i> xxiv. <i>Syzygium cumini</i> xxv. <i>Tectona grandis</i> xxvi. <i>Terminalia arjuna</i> xxvii. <i>Terminalia bellirica</i> xxviii. <i>Terminalia chebula</i> xxix. <i>Mangifera indica</i> xxx. <i>Artocarpus heterophyllus</i> xxxi. Misc. Species</p>																														
7.	Background note on the proposal:	<p>The Dhirauli block is allocated to M/s Stratatech Mineral Resources Private Limited (SMRPL) vide letter no. NA-104/7/2020-NA dated 03.03.2021 by MoC, GoI. The mine is envisaged to be worked in combination with Open Cast and Underground mining method. It is planned to extract Coal with capacity of 5.0 MTPA from Open Cast mine and 1.5 MTPA from underground mines. Open cast mining is proposed by surface miners (SM)-FEL-truck combination for Coal and drill blast for Overburden. Underground mining is proposed by continuous miner (CM). The project will produce G7/G8 grade Coal.</p> <p>The extracted Coal is proposed to be supplied to Mahan Energen Limited (Power Plant) and for Open Commercial Sale.</p>																														
8.	Compensatory Afforestation:	<table border="1"> <thead> <tr> <th>Sr. No</th> <th>District/ Division</th> <th>Tehsil</th> <th>Village</th> <th>Area (ha)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Sagar North</td> <td>Rahatgarh</td> <td>Laxmanpura</td> <td>33.56</td> </tr> <tr> <td>2</td> <td>Raisen</td> <td>Begamganj</td> <td>Chainpura Muzafata</td> <td>9.89</td> </tr> <tr> <td>3</td> <td>Shivpuri</td> <td>Bairad, Shivpuri, Pohri, Kolaras</td> <td>Basai, Budha, Imlipura & Others</td> <td>757.88</td> </tr> <tr> <td>4</td> <td>Agar Malwa</td> <td>Agar, Badod, Baraud</td> <td>Sanawad, Shivgarh, Chipya & Others</td> <td>596.21</td> </tr> <tr> <td colspan="4" style="text-align: center;">Total</td> <td>1397.54</td> </tr> </tbody> </table>	Sr. No	District/ Division	Tehsil	Village	Area (ha)	1	Sagar North	Rahatgarh	Laxmanpura	33.56	2	Raisen	Begamganj	Chainpura Muzafata	9.89	3	Shivpuri	Bairad, Shivpuri, Pohri, Kolaras	Basai, Budha, Imlipura & Others	757.88	4	Agar Malwa	Agar, Badod, Baraud	Sanawad, Shivgarh, Chipya & Others	596.21	Total				1397.54
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9.	Whether proposal involves violation of Forest(Conservation)Act, 1980 or not.	No																														

	If yes, a detailed report on violation including action Taken against the concerned officials:	
10.	Whether proposal involves rehabilitation of displaced persons. If yes, whether rehabilitation plan has been prepared by the State Government or not:	The project involves rehabilitation of 49 families from the proposed diversion area. The necessary approved rehabilitation plan has been uploaded at sl. No. 15 in annexure section (Part-I).
11.	Reclamation Plan: (If applicable, submit details and Financial allocation:	Reclamation plan is included in the approved Mining Plan.
12.	Details on catchment and command area under the project:	Not applicable.
13.	Cost benefit ratio:	1:26.91 (as per online Part-I)
14.	Recommendations of the Principal Chief Conservator of Forests / State Government:	The proposal is recommended by the Addl. Principal Chief Conservator of Forests & State Government in Part-IV & Part-V.
15.	Utility of the Project:	The project envisages supply of Coal to Mahan Energen Limited (Power Plant) and for Open Commercial Sale. Apart from this the company will also provide large number of direct and indirect employment, thereby boosting the economy of the country.
16.	Whether land being diverted has any sociocultural/religious value:	No.
17.	Situation w.r.t. any P.A.	Proposed area is neither a part of any protected area nor within 10 km of any protected area.
18.	Any other information relating to the Project:	-

19. **Specific comments/ observation of inspecting officer**

INSPECTION OF DIVERSION AREA

Inspected compartment no. RF-362 of East Sarai Range

The area is situated on a hillock with moderate to steep gradient. The proposed diversion area is totally covered with excellent Sal Forest with excellent regeneration. The vegetation in the area is as given in Column no. 06. The area has excellent soil i.e. Red soil with excellent depth. Due to excellent forest cover, there is hardly any erosion. The forest looks to be undisturbed without much of biotic interferences as there is hardly any village inside. Since the human population in the area is very sparse, there is hardly any pressure on the forest or fuel or MFP.

Compartment wise observation-

RF-364: most of the area is having canopy density 0.5 to 0.6

RF-371: most of the area is having canopy density 0.5 to 0.6

RF-370: most of the area is having canopy density 0.5 to 0.6

RF-360: most of the area is having canopy density 0.5 to 0.6

All these above mentioned compartments are on hillock with excellent Sal Forest. A part of the Compartments RF-361, RF-362 & RF-363, area having density around 0.4 and situated at lower elevation.

The diversion area comprises of plain land and hills with altitude ranging from 1600 ft to 2150 ft. The proposed diversion area is not a part of any wildlife Sanctuary. As per SIR of DFO and CF, an elephant corridor is passing through the area. However, as per map uploaded in annexure section sl. No. 25, the same is found outside the proposed diversion area. Common wildlife found in the area include Sloth Bear, Jackals, Monkeys, Hyenas, occasional movement of Leopards, etc.

The proposed diversion area comprises of 09 no. of Coal seams. Out of these 05 Coal seams are proposed to be extracted by open cast mining and from the rest 04 nos. of seams, only workable seams are proposed to be extracted by underground method of mining. The top seams which would be worked by open cast is at a minimum depth of about 22.4 meters from the surface.

It is observed that the proposal for external dumping is on a higher elevation bearing excellent Sal forest in compartment no. RF-360. The rest of the dumping is proposed internally. The transport of extracted Coal is proposed to be taken up by the existing road from Suliyari-Khanuakhas-Rajmilan to Mahan Energen power plant.

The KML for Safety zone is showing gaps in RF-356,360,371 & 372 which needs to be corrected.

There are 49 families having FRA rights and staying in the proposed diversion area. However, their rehabilitation plan has been approved by the competent authority.

The tree enumeration was carried out on 04.07.2022 by sampling method. The total no. of samples laid was 140 of 0.1 ha each and total no. of trees proposed for felling, arrived at is 5,70,666.

Further, it is observed that there are 04 nos. of 765 KVA transmission lines and 01 no. of 132 KVA transmission line are passing over the proposed diversion area. Out of this 01 no. of 132 KVA transmission line has already been approved for shifting with diversion of 21.372 ha (FP/MP/TRANS/155291/2022) and the remaining may have to be shifted with diversion of some more RF/PF/Revenue Forest, in case the proposal is approved for open cast mining.

After taking into consideration, the facts mentioned above, it is observed that the compartment nos. RF-360, 364, 370 and 371 are on higher altitude and are endowed with excellent natural Sal forest with canopy density ranging from 0.5 to 0.6. The stripping ratio in the area is very high for Open cast Mining. This implies that the area involves huge amount of overburden removal and removal of excellent forest. Removal of huge amount of overburden, apart from incurring a huge cost, would require burning of huge quantity of diesel besides hauling and handling of huge quantity of overburden. Also, it will require removal of excellent natural Sal forest. Therefore, for extraction of a fossil fuel by burning huge quantity of another fossil fuel after removal of excellent Carbon sink, would not be environment friendly and hence would not be a wise decision.

Therefore, considering all the above mentioned points, extraction of Coal in compartment nos. RF-360, 364, 370 and 371 is not advisable to be done by Open Cast method of mining. Extraction of Coal in the above mentioned area should be taken up only by underground method of mining wherein huge overburden and excellent forest in the area would not be required to be removed. In rest of the compartments, extraction of coal may be taken up by Open cast mining method as proposed.

INSPECTION OF CA AREAS

The total proposed diversion area is 1397.54 ha for open cast Coal mining by M/s Stratatech Mineral resources Pvt. Ltd. Accordingly, as per the rules, the area proposed for Compensatory Afforestation is 1397.54 ha in non forest land, spread over 45 patches, 29 villages and in 04 districts.

Date of inspection: 19.03.2024

District: Agar malwa; Forest Division: Shajapur; Range- Agar

Officers present:

- | | | |
|-------|---|-----------------|
| (i) | A. K. Sinha, Dy. Director General of Forests (C), Regional Office, MoEF&CC, Bhopal. | |
| (ii) | Shri Mayank Chandiwala | - DFO, Shajapur |
| (iii) | Shri Laxmi Narayan Choudhary | - FRO, Shajapur |
| (iv) | Shri Lakhan Singh | - Dy. RO, Agar |
| (v) | Shri Chhagan Lal Parmar | -FBO, Tanodiya |

Village: Shivgarh; Beat: Tanodiya; Khasra no.-647,648,644,467,652,653 &654; Tehsil: Agar; Area: 43.00 ha.

The area is gently sloping with a small hillock. Depth of the soil is moderate. The surface was covered with small stone boulders scattered all around. The soil was black cotton soil mixed with small boulders. The vegetation in the area is negligible. The sporadic vegetation found in the area comprised of mainly *Prosopis spicigera*. The area seems to be very dry with scanty rainfall. It was observed that at most of the locations, fresh staggered contour trenches were dug by the local villagers under MGNREGS. There is no encroachment found in the proposed area.

The wildlife in the area comprises of Neelgai, Wild pig, Black bucks, Chinkara, Porcupine, Hares, Jackals, Hyena, etc. It is suggested to construct one watcher's hut/ watch tower in the area for close surveillance.

The area requires SMC works like Staggered contour trenches, continuous contour trenches around the small hillock, etc. Since the area has low rainfall, it is suggested to provide a few ponds to impound water for watering the plants in lean season. Adjoining to this Solar pump with borewell may also be installed.

The area is suitable for raising CA with strong protection structures all around. The Plantation should be taken up with the local species such as *Azadirachta indica*, *Holoptelia integrifolia*, *Dalbergia sissoo*, *Pithecellobium dulce*, *Feronia elephantum*, *Gmelina arborea*, *Terminalia bellirica*, *Acacia catechu*, *Ficus religiosa*, *Ficus benghalensis*, *Ficus racemosa*, etc.

Village: Dhandheda Kanad; Beat: Tanodiya; Khasra no.-102, 103, 80 & 139; Tehsil: Agar; Area: 30.00 ha.

The area is similar to the CA area proposed in Shivgarh village. It is having moderate slope with a number of gully formations. Vegetation in the area comprises of mainly *Prosopis spicigera*. The soil is black cotton soil with considerable depth. The area seems to be very dry with scanty rainfall. The Wildlife in the area is similar to Shivgarh village. There is no encroachment in the proposed area. It is suggested to take up soil and moisture conservation works like staggered contour trenching, Gully plugging, Check dams, etc. It was noticed that an earthen dam was already constructed in the area which is impounding water during rainy seasons and is very much useful for local cattle, wildlife and acts as a percolation tank. The same would be very much useful for the plantation which would be raised as part of CA.

The area is suitable for raising CA with strong protection structures all around. The Plantation should be taken up with the local species such as *Azadirachta indica*, *Holoptelia integrifolia*, *Dalbergia sissoo*, *Pithecellobium dulce*, *Feronia elephantum*, *Gmelina arborea*, *Terminalia bellirica*, *Acacia catechu*, *Ficus religiosa*, *Ficus benghalensis*, *Ficus racemosa*, etc.

Village: Raipuriya, Beat: Tanodiya, Khasra no.-78,128,130,137,129 & 105, Tehsil: Agar, Area: 74.96 ha.

The area is similar to the CA area proposed in Dhandheda Kanad village. It is having moderate slope with a number of gully formations. Vegetation in the area comprises of mainly *Prosopis spicigera*. The soil is black cotton soil with considerable depth. The area seems to be very dry with scanty rainfall. The Wildlife in the area is similar to Shivgarh village. There is no encroachment in the proposed area. It is suggested to take up soil and moisture conservation works like staggered contour trenching, Gully plugging, Check dam, percolation tank, etc. It was noticed that an earthen dam was already constructed in the area which is impounding water during rainy seasons and is very much useful for local cattle, wildlife and acts as a percolation tank. The same would be very much useful for the plantation which would be raised as part of CA. It was observed that a few low tension power transmission lines were passing over the area. The Forest department should make an effort to get the power line shifted at the time of planting.

The area is suitable for raising CA with strong protection structures all around. The Plantation should be taken up with the local species such as *Azadirachta indica, Holoptelia integrifolia, Dalbergia sissoo, Pithecellobium dulce, Feronia elephantum, Gmelina arborea, Terminalia bellirica, Acacia catechu, Ficus religiosa, Ficus benghalensis, Ficus racemosa*, etc.

Village: Chipya, Beat: Tanodiya, Khasra no.- 752,2272,753,761,765,776 & 767, Tehsil: Badod, Area: 31.86 ha.

The area is similar to the CA area proposed in Dhandheda Kanad village. The area is relatively plain without any vegetation cover. Vegetation in the area comprises of mainly *Prosopis spicigera*. The soil is black cotton soil with considerable depth. The area seems to be very dry with scanty rainfall. The Wildlife in the area is similar to Shivgarh village. There is no encroachment in the proposed area. It is suggested to take up soil and moisture conservation works like staggered contour trenching, Percolation tanks, etc.

The area is suitable for raising CA with strong protection structures all around. The Plantation should be taken up with the local species such as *Azadirachta indica, Holoptelia integrifolia, Dalbergia sissoo, Pithecellobium dulce, Feronia elephantum, Gmelina arborea, Terminalia bellirica, Acacia catechu, Ficus religiosa, Ficus benghalensia, Ficus racemosa*, etc.

Village: Padal, Beat: Tanodiya, Khasra no.- 631, Tehsil: Badod, Area: 32.21ha.

The area is similar to the CA area proposed in Chipya village. The area is relatively plain with sparse vegetation cover. Vegetation in the area comprises of mainly *Prosopis spicigera, Prosopis juliflora* and *Butea monosperma*. The soil is black cotton soil with considerable depth. The area seems to be very dry with scanty rainfall. The Wildlife in the area is similar to Shivgarh village. There is no encroachment in the proposed area. It is suggested to take up soil and moisture conservation works like staggered contour trenching, Percolation tank, etc. It was observed that a few low tension power transmission lines were passing over the area. The

Forest department should make an effort to get the power line shifted at the time of planting. Further, in part of the area some staggered contour trenches were dug by local villagers under MGNREGS, which would be useful for the CA plantation.

The area is suitable for raising CA with strong protection structures all around. The Plantation should be taken up with the local species such as *Azadirachta indica*, *Holoptelia integrifolia*, *Dalbergia sissoo*, *Pithecellobium dulce*, *Feronia elephantum*, *Gmelina arborea*, *Terminalia bellirica*, *Acacia catechu*, *Ficus religiosa*, *Ficus benghalensis*, *Ficus racemosa*, etc.

Village: Hatipura, Beat: Badod, Khasra no.- 170,8,9,169,5/3,225,4 & 5/2, Tehsil: Badod, Area: 38.43 ha.

Local Forest Officers present :

- 1) Shri Mayank Srivastava -Dy. RO, Badod
- 2) Shri Padam Parmar -FBO, Badod

The area is undulating with red soil and morrum mixed. The area is covered with good vegetation comprising of *Butea monosperma*, *Azadirachta indica*, *Acacia leucophloea*, *Holoptelia integrifolia*, *Manikara hexandra*, *Diospyros melanoxylon*, *Annona squamosa*, *Carissa carandas*, etc. The available root stock in the area is quite dense and hence may not be amenable for planting at the rate of 1000 plants per ha. Therefore, the DFO shall prepare CA scheme for plantation of balance number of plants in RDF. The existing root stock may be subjected to Aided Natural Regeneration for rejuvenation of the area. The area is also infested with lantana which should be uprooted at the time of plantation. As there existed a number of Nallas, there is scope for construction of Check dams, Earthen dams and Percolation tanks. All these activities should be in the CA scheme. The area is bordering Rajasthan State and the rainfall seems to be scanty. The wildlife in the area comprises of wild pigs, Neelgai, Porcupine, Chinakara, Hares, Hyenas, etc. It is suggested to construct one watcher's hut/ watch tower in the area for close surveillance.

The area is suitable for raising CA with strong protection structures all around. The Plantation should be taken up with the local species such as *Azadirachta indica*, *Holoptelia integrifolia*, *Dalbergia sissoo*, *Pithecellobium dulce*, *Feronia elephantum*, *Gmelina arborea*, *Terminalia bellirica*, *Acacia catechu*, *Ficus religiosa*, *Ficus benghalensis*, *Ficus racemosa*, etc.

Village: Jhalharabaraud, Beat: Badod, Khasra no.-84, 85, 2/2 & 2/3 , Tehsil: Badod, Area: 7.85 ha.

The area is undulating with red soil with morrum mixed. The area is mostly open with sporadic vegetation comprising of *Butea monosperma*, *Azadirachta indica*, *Acacia leucophloea*, *Holoptelia integrifolia*, *Manikara hexandra*, *Diospyros melanoxylon*, *Annona squamosa*, *Carissa carandas*, etc. It was observed that there is a newly constructed well with cement concrete lining and a cement concrete structure for animal drinking water. Also there was underground water pipeline laid in the area. Therefore, the User Agency should revise the CA area by excluding the area having these structures from the CA area. The revised KML file shall also be uploaded in the Parivesh portal. The area is bordering Rajasthan State and the rainfall seems to be scanty. The wildlife in the area comprises of wild pigs, Neelgai, Porcupine, Hares, etc.

The area is suitable for raising CA with strong protection structures all around. The Plantation should be taken up with the local species such as *Azadirachta indica*, *Holoptelia integrifolia*, *Dalbergia sissoo*, *Pithecellobium dulce*, *Feronia elephantum*, *Gmelina arborea*, *Terminalia bellirica*, *Acacia catechu*, *Ficus religiosa*, *Ficus benghalensis*, *Ficus racemosa*, etc.

Village: Durgapura, Beat: Badod, Khasra no.- 510,511,507,508,504,505,506,516 &656, Tehsil: Badod, Area: 20.14 ha.

The area is undulating with red soil with morrum mixed. The area is covered with scrub jungle growth with vegetation comprising of mainly *Carissa carandas*, *Butea monosperma*, *Azadirachta indica*, *Acacia leucophloea*, *Manikara hexandra*, *Annona squamosa*, etc. The available root stock in the area is quite dense and hence may be amenable for planting at the rate of 600 plants per ha. Therefore, the DFO shall prepare CA scheme for plantation of balance number of plants in RDF. The existing root stock may be subjected to Aided Natural Regeneration for rejuvenation of the area. The area is also infested with lantana which should be uprooted at the time of plantation. There is scope for digging staggered contour trenches, continuous contour trenches, Check dams and Percolation tanks. All these activities should be in the CA scheme. The area is bordering Rajasthan State and the rainfall seems to be scanty. The wildlife in the area comprises of wild pigs, Neelgai, Porcupine, Hares, etc.

The area is suitable for raising CA with strong protection structures all around. The Plantation should be taken up with the local species such as *Azadirachta indica*, *Holoptelia integrifolia*, *Dalbergia sissoo*, *Pithecellobium dulce*, *Feronia elephantum*, *Gmelina arborea*, *Terminalia bellirica*, *Acacia catechu*, *Ficus religiosa*, *Ficus benghalensis*, *Ficus racemosa*, etc.

Date of inspection: 20.03.2024

District: Shivpuri; Forest Division: Shivpuri

Officers present:

- (i) A. K. Sinha, Dy. Director General of Forests (C), Regional Office, MoEF&CC, Bhopal.
- (ii) Shri Sudhanshu Yadav - DFO, Shivpuri
- (iii) Shri Rajesh Ninama - FRO, Satanwada
- (iv) Shri Manish Sharma -FBO, Dongri

Range: Satanwada ,Village: Dongri, Beat: Dongri, Khasra no.- 50,51,52,53,54,55,181 & 177, Tehsil: Shivpuri, Area: 1) 60.84 ha. 2) 17.60 ha (Khasra no.-198)

Bit 1- 60.84 ha

The area is relatively plain with good soil and moderate depth. The area is infested with lantana weed. The vegetation in the area comprises of mainly *Acacia catechu*, *Diasporus melanoxydon*, *Azadirachta indica*, *Butea monosperma*, etc. The wildlife in the area mainly

comprise of Nilgai, Spotted deer, Hyena, occasional movement of Leopards, Hares, etc. There is no encroachment in the proposed area. It is suggested to take up soil and moisture conservation works like staggered contour trenching, Percolation tanks, etc. Due to existing root stock and sporadic rock outcrops, the plantation can be taken up at the rate of 600 plants per ha only. The rest of the plants have to be planted in RDF. The DFO shall prepare a CA scheme for the same and upload along with KML file on Parivesh portal.

The area is suitable for raising CA with strong protection structures all around. The Plantation should be taken up with the local species such as *Azadirachta indica*, *Holoptelia integrifolia*, *Dalbergia sissoo*, *Pithecellobium dulce*, *Feronia elephantum*, *Gmelina arborea*, *Terminalia bellirica*, *Acacia catechu*, *Ficus religiosa*, *Ficus benghalensis*, *Ficus racemosa*, *Tectona grandis*, etc.

Bit 2- 17.60 ha

The area is relatively plain with good soil and moderate depth. It is open forest with species such as *Acacia catechu*, *Anogeissus pendula*, *Azadirachta indica*, *Butea monosperma*, etc. The area is infested with lantana and *Ocimum basilicum* (Van tulsi). The wildlife in the area mainly comprise of Nilgai, Spotted deer, Hyena, occasional movement of Leopards, Hares, etc. There is no encroachment in the proposed area. It is suggested to take up soil and moisture conservation works like staggered contour trenching, Percolation tank, etc. Due to existing root stock and sporadic rock outcrops, the plantation can be taken up at the rate of 600 plants per ha only. The rest of the plants have to be planted in RDF. The DFO shall prepare a CA scheme for the same and upload along with KML file on Parivesh portal.

The area is suitable for raising CA with strong protection structures all around. The Plantation should be taken up with the local species such as *Azadirachta indica*, *Holoptelia integrifolia*, *Dalbergia sissoo*, *Pithecellobium dulce*, *Feronia elephantum*, *Gmelina arborea*, *Terminalia bellirica*, *Acacia catechu*, *Ficus religiosa*, *Ficus benghalensis*, *Ficus racemosa*, *Tectona grandis*, etc.

Range: Satanwada ,Village: Jhirniya, Beat: Jhirniya, Khasra no.- 03, Tehsil: Shivpuri, Area: 7.75 ha.

Shri Manoj Kumar Jatav - FBO, Jhirniya

The area is relatively plain with good soil and moderate depth. It is open forest with species such as *Acacia catechu*, *Anogeissus pendula*, *Azadirachta indica*, *Butea monosperma*, etc. The area is heavily infested with lantana and *Ocimum basilicum* (Van tulsi). There is no encroachment in the proposed area. It is suggested to take up soil and moisture conservation works like staggered contour trenching, Percolation tank, etc. Due to existing root stock, the plantation can be taken up at the rate of 500 plants per ha. Rest of the plants have to be planted in RDF. The DFO shall prepare CA scheme for the same and upload along with KML file on Parivesh portal.

The area is suitable for raising CA with strong protection structures all around. The Plantation should be taken up with the local species such as *Azadirachta indica*, *Holoptelia integrifolia*, *Dalbergia sissoo*, *Pithecellobium dulce*, *Feronia elephantum*, *Gmelina arborea*, *Terminalia bellirica*, *Acacia catechu*, *Ficus religiosa*, *Ficus benghalensis*, *Ficus racemosa*, *Tectona grandis*, etc.

Range: Santanwada ,Village: Imlipura, Beat: Budda, Khasra no.-19& 2 , Tehsil:Shivpuri, Area: 41.9ha.

Shri Jitendra Parashar - FBO, Budda

The area is relatively plain having soil mixed with stone flakes and moderate depth. It is open forest with species such as *Acacia catechu*, *Anogeissus pendula*, *Azadirachta indica*, *Butea monosperma*, etc. The area is infested with *lantana* and *Ocimum basilicum* (Van tulsi). There is no encroachment in the proposed area. It is suggested to take up soil and moisture conservation works like staggered contour trenching, Percolation tank, etc. The plantation can be taken up at the rate of 1000 plants per ha. While perambulating the area, a boundary pillar was noticed, according to which the CA area is falling outside the PF.

However, while examining the KML file of the CA area with the DFO in the field, it was found to be overlapping with the PF boundaries of compartment nos. 864, 868 & 870. Therefore, the DFO has to examine and ascertain correct KML for the CA area and accordingly the User Agency shall revise the CA area and KML.

Range: Satanwada, Village: Budada, Beat: Budada, Khasra no.- 1577,1578, 1605,1606,1607,1608,1611,1614,1653,1654,1655,1656,1334,1560,1561,1562,1565,1566,1567,1643 , Tehsil: Bairrad , Area: 210.59 ha.

The area is relatively plain having soil mixed with stone flakes and moderate depth. It is an open area with very sparse vegetation having species such as *Acacia catechu*, *Diospyros melanoxylon*, *Azadirachta indica*, *Butea monosperma*, etc. It is observed that there is recent encroachment with scattered stone wall fence erected. Also in certain locations, the area seems to be used for raising agricultural crops. It is suggested to take up soil and moisture conservation works like staggered contour trenching, Percolation tanks, etc. The plantation can be taken up at the rate of 500 plants per ha. Either the encroachments have to be removed from the CA area before handing over to the State Forest Department or the CA area has to be changed. The User Agency has to provide encumbrance free land before its transfer to the State Forest Department.

The area is suitable for raising CA with strong protection structures all around. The Plantation should be taken up with the local species such as *Azadirachta indica*, *Holoptelia integrifolia*, *Dalbergia sissoo*, *Pithecellobium dulce*, *Feronia elephantum*, *Gmelina arborea*, *Terminalia bellirica*, *Acacia catechu*, *Ficus religiosa*, *Ficus benghalensis*, *Ficus racemosa*, *Tectona grandis*, etc.

Range: Pohri, Village: Marora Khalsa , Beat: Gondri South, Khasra no.- 756,753,755, Tehsil: Bairrad, Area: 70.93 ha.

Local Forest Officers Present:

Smt. Shruti Rathod- FRO, Pohri
Shri Abhishek Jain- FBO, Gondri South

The area is relatively plain with gentle slope having red soil mixed with morrum. The soil had moderate depth. There is no encroachment in the proposed area. It was observed that in certain areas staggered contour trenching had been taken up by local villagers under MGNREGS. There was hardly any vegetation in the area. It is suggested to take up soil and moisture conservation works like staggered contour trenching, continuous contour trenching, Percolation tank, etc. Due to presence of shallow soil at certain locations, the plantation can be taken up at the rate of 700 plants per ha. Rest of the plants have to be planted in RDF. The DFO shall prepare CA scheme for the same and upload along with KML file on Parivesh portal.

The area is suitable for raising CA with strong protection structures all around. The Plantation should be taken up with the local species such as *Azadirachta indica*, *Holoptelia integrifolia*, *Pithecellobium dulce*, *Feronia elephantum*, *Gmelina arborea*, *Terminalia bellirica*, *Acacia catechu*, *Ficus religiosa*, *Ficus benghalensis*, *Ficus racemosa*, *Tectona grandis*, *Hardwickia binata*, etc.

Range: Pohri, Village: Dulhara, Beat: Gondri South, Khasra no.- 2791, Tehsil: Pohri, Area: 20.00 ha.

Local Forest Officers Present:

Smt. Shruti Rathod- FRO, Pohri
Shri Abhishek Jain- FBO, Gondri South

This patch is adjoining to CA patch of village Marora Khalsa. The area is relatively plain with gentle slope having red soil mixed with morrum. The soil had moderate depth. There is no encroachment in the proposed area. It was observed that in certain areas staggered contour trenching had been taken up by local villagers under MGNREGS. There was hardly any vegetation in the area. It is suggested to take up soil and moisture conservation works like staggered contour trenching, continuous contour trenching, Percolation tank, etc. Due to presence of shallow soil at certain locations, the plantation can be taken up at the rate of 700 plants per ha. Rest of the plants have to be planted in RDF. The DFO shall prepare CA scheme for the same and upload along with KML file on Parivesh portal.

The area is suitable for raising CA with strong protection structures all around. The Plantation should be taken up with the local species such as *Azadirachta indica*, *Holoptelia integrifolia*, *Pithecellobium dulce*, *Feronia elephantum*, *Gmelina arborea*, *Terminalia bellirica*, *Acacia catechu*, *Ficus religiosa*, *Ficus benghalensis*, *Ficus racemosa*, *Tectona grandis*, *Hardwickia binata*, etc.

Range: Pohri, Village: Jhalwasa, Beat: Gondri South, Khasra no.- 1,16, Tehsil: Pohri, Area: 12.10ha.

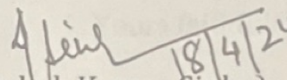
Local Forest Officers Present:

Smt. Shruti Rathod- FRO, Pohri
Shri Abhishek Jain-FBO, Gondri South

This patch is adjoining to CA patch of village Marora Khalsa. The area is relatively plain with gentle slope having red soil mixed with morrum. The soil had moderate depth. There is no encroachment in the proposed area. It was observed that in certain areas staggered contour trenching had been taken up by local villagers under MGNREGS. There was hardly any vegetation in the area. It is suggested to take up soil and moisture conservation works like staggered contour trenching, continuous contour trenching, Percolation tank, etc. Due to presence of shallow soil at certain locations, the plantation can be taken up at the rate of 700 plants per ha. Rest of the plants have to be planted in Degraded Forest Area. The DFO shall prepare CA scheme for the same and upload along with KML file on Parivesh portal.

The area is suitable for raising CA with strong protection structures all around. The Plantation should be taken up with the local species such as *Azadirachta indica*, *Holoptelia integrifolia*, *Pithecellobium dulce*, *Feronia elephantum*, *Gmelina arborea*, *Terminalia bellirica*, *Acacia catechu*, *Ficus religiosa*, *Ficus benghalensis*, *Ficus racemosa*, *Tectona grandis*, *Hardwickia binata*, etc.

20	Recommendations Of Regional Deputy Director General of Forests (C) along with detailed reasons:	The project is recommended for approval subject to the compliances of the observations made in the inspection note.
21.	Regional Head shall give detailed comments on whether there are any alternatives routes/alignments for locating the project on the non-forest land:	Not Applicable


 (Ashok Kumar Sinha)
 Dy. Director General of Forests
 Regional Office, Bhopal

FIELD PHOTOGRAPHS

Inspection of Agar Malwa CA Areas

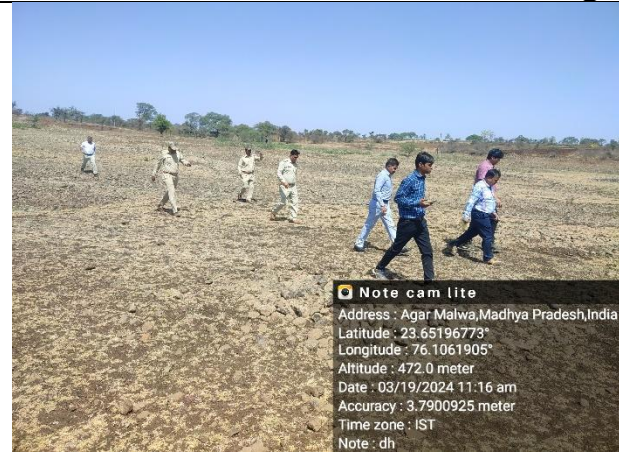


Note cam lite
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Latitude : 23.70806281°
Longitude : 75.92193802°
Altitude : 499.0 meter
Date : 03/19/2024 02:02 pm
Accuracy : 3.7900925 meter
Time zone : IST
Note : chi



Note cam lite
Address : Chipya,Madhya Pradesh,India
Latitude : 23.70817816°
Longitude : 75.92205393°
Altitude : 499.0 meter
Date : 03/19/2024 01:56 pm
Accuracy : 3.7900925 meter
Time zone : IST
Note : chi

Village - Chipiya



Note cam lite
Address : Agar Malwa,Madhya Pradesh,India
Latitude : 23.65196773°
Longitude : 76.1061905°
Altitude : 472.0 meter
Date : 03/19/2024 11:16 am
Accuracy : 3.7900925 meter
Time zone : IST
Note : dh



Note cam lite
Address : Dhandheda Kanad,Madhya Pradesh,India
Latitude : 23.646904°
Longitude : 76.10635323°
Altitude : 485.0 meter
Date : 03/19/2024 11:08 am
Accuracy : 3.7900925 meter
Time zone : IST
Note : dh

Village - Dhandheda



Note cam lite
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Latitude : 23.83708073°
Longitude : 75.76351623°
Altitude : 469.0 meter
Date : 03/19/2024 04:29 pm
Accuracy : 3.7900925 meter
Time zone : IST
Note : Durgapur



Note cam lite
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Latitude : 23.83705424°
Longitude : 75.76351831°
Altitude : 469.0 meter
Date : 03/19/2024 04:20 pm
Accuracy : 3.7900925 meter
Time zone : IST
Note : Durgapur

Village - Durgpura



Village - Hatipura



Village - Jhalrabarod



Village - Padal



Village – Raipuriya



Village – Shivgarh

Inspection of Shivapuri CA Areas



Village – Budda



Note cam lite
 Latitude : 25.70174166666667°
 Longitude : 77.84641333333335°
 Altitude : 375.0 meter
 Date : 03/20/2024 09:31 am
 Accuracy : 1.9 meter
 Time zone : IST
 Note : Dongri



Note cam lite
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 Longitude : 77.84516166666667°
 Altitude : 368.0 meter
 Date : 03/20/2024 10:31 am
 Accuracy : 2.1 meter
 Time zone : IST
 Note : Dagri+Ghudka

Village - Dongari



Note cam lite
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 Latitude : 25.61698666666667°
 Longitude : 77.469245°
 Altitude : 458.0 meter
 Date : 03/20/2024 02:49 pm
 Accuracy : 1.5 meter
 Time zone : IST
 Note : Dulahara



Note cam lite
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 Latitude : 25.615891666666668°
 Longitude : 77.46930666666667°
 Altitude : 427.0 meter
 Date : 03/20/2024 02:50 pm
 Accuracy : 1.6 meter
 Time zone : IST
 Note : Dulahara

Village - Dulahara



Note cam lite
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 Longitude : 77.47319°
 Altitude : 461.0 meter
 Date : 03/20/2024 02:58 pm
 Accuracy : 1.9 meter
 Time zone : IST
 Note : Jhalwasa



Note cam lite
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 Latitude : 25.621145000000002°
 Longitude : 77.476155°
 Altitude : 461.0 meter
 Date : 03/20/2024 03:09 pm
 Accuracy : 1.6 meter
 Time zone : IST
 Note : Jhalwasa

Village - MaroraKhalsa



Note cam lite
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Latitude : 25.862151666666666°
Longitude : 77.654148333333332°
Altitude : 370.0 meter
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Accuracy : 2.1 meter
Time zone : IST
Note : Emilpura



Note cam lite
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Longitude : 77.625016666666667°
Altitude : 367.0 meter
Date : 03/20/2024 12:54 pm
Accuracy : 1.7 meter
Time zone : IST
Note : Boodhada

Village - Imlipura