8-01/2024-FC 1/72144/2024

Government of India Ministry of Environment, Forest and Climate Change (Forest Conservation Division)

Indira Paryavaran Bhawan, Jor Bag Road, Aliganj, New Delhi – 110003 Dated: As per e-Sign

To,

The Principal Secretary (Forests), Government of Madhya Pradesh, Bhopal.

Subject: 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 Khasra's 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) - regarding.

Madam/Sir,

I am directed to refer the Ministry letter of even no. dated 02.02.2024 wherein the State Govt. was requested to furnish the information/documents/clarification on certain issues (**Copy enclosed**). However the reply is still awaited.

The Ministry vide letter of even no. dated 02.02.2024 requested the Regional Office, Bhopal for site inspection report. In this reference, the Regional Office, Bhopal vide their letter NO. 6-MPA002/2024-BHO dated 18.04.2024 has submitted their site inspection report (**Copy enclosed**) wherein it has been mentioned that the compartment nos. RF-360, 364, 370 and 371 are on higher altitude, having high stripping ratio and consist of high density Sal forest and has recommended that extraction of coal in this area should be done through underground mining.

In view of the above, the State Government is requested to furnish their comments on the observations of RO, Bhopal as mentioned in their site inspection report along with the reply of above referred Ministry letter dated 02.02.2024 for further consideration of the proposal.

Yours sincerely,

8-01/2024-FC 1/72144/2024

(Suneet Bhardwaj) Assistant Inspector General of Forests

Copy to:

- 1. The PCCF (HoFF), Department of Forest, Government of Madhya Pradesh, Bhopal;
- 2. The Dy. DGF (Central), Regional Office, MoEF&CC, Bhopal;
- 3. The Nodal Officer (FCA), Department of Forest, Government of Madhya Pradesh, Bhopal;
- 4. User Agency;
- 5. Monitoring Cell, FC Division, MoEF & CC, New Delhi for uploading on PARIVESH portal.

Government of India Ministry of Environment, Forest and Climate Change (Forest Conservation Division)

Indira Paryavaran Bhawan, Jor Bag Road, Aligani, New Delhi – 110003 Dated: February, 2024

To.

The Principal Secretary (Forests), Government of Madhya Pradesh, Bhopal.

Subject: 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 Khasra's 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) - req.

Madam/Sir.

I am directed to refer the APCCF (LM) and Nodal Officer, FCA, 1980, Govt. of Madhya Pradesh letter No. F-1/845/2023/10-11/492 dated 22.01.2024 forwarding a fresh proposal on the above subject seeking prior approval of the Central Government under section 2 (1) (ii) of the Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980. After examining the proposal, the following shortcomings have been observed:

- i. Calculated area of Shape file/ KML file of Forest land proposed for diversion within the mining lease is found 1601.058 Ha (software calculated). However, instant proposal has been submitted for diversion of 1397.54 ha forest land only.
- ii. The Sanjay Dubri Wildlife Sanctuary is located at a distance of 10.07 Km from the proposed forest land for diversion. Moreover the State Govt. informed that the proposed area is falling within the 1 km of the elephant corridor as per the prevailing working plan for the period 2019-20 to 2028-29. Further, movement of leopard (Tendua) reported in the SIR of the DFO, Singrauli. Therefore, the comments from CWLW along with proposed mitigation measures need submission.
- iii. The proposed forest land is having density of forests ranging from 0.4 to 0.6 density wherein 5,70,666 no. of trees are estimated to be affected from the proposed activities. The detail of the forest crops and diameter classes of valuable trees estimated needs to be elaborated and phase wise felling details should also be indicated.
- iv. The method of mining has been reported in the online application as Opencast + Underground. However the State Govt. in their reference letter has mentioned the same as open cast method of mining. The state govt shall therefore examine the same and report whether the proposal is for underground mining, open cast mining or both. The detail of area proposed for OCP and underground mining including the component wise KML file shall be submitted.
- v. As per DSS analysis the proposed area is falling in Inviolate or In High conservation zone value (HCV) with majority area falling in Very Dense Forest category. The state shall submit the justification for proposing such pristine area

- for mining. Further, keeping in view the conservation value of the area, the state shall intimate whether any impact assessment/biodiversity study taking into account the impact of mining has been carried out or not. If so the details be provided.
- vi. Satellite imagery and Land use plan submitted by the user agency reveals that there are five (5) transmission lines which are passing through the proposed forest land for diversion. The copy of approvals granted under Van(Sanrakshan Evam Samvardhan), Adhiniyam, 1980 along with NoC from concerned agencies to shift the power lines from the proposed area have not been submitted. The state shall therefore submit the copy of approvals under Van(Sanrakshan Evam Samvardhan), Adhiniyam, 1980 and the copies of NOC form the concerned agencies. The state shall also intimate whether any additional forest land would be required for the shifting of transmission lines or not along with details.
- vii. Presence of water bodies like Nala/ Tributary are also visible in the proposed forest land. The state shall submit the detail of mitigation measures in this regard along with the NoC/permission from the concerned department.
- viii. The proposal involves diversion of 1397.54 ha forest land out of which 225.4 ha has been proposed for external dumping and 6.3 ha has been earmarked for infrastructure which are non-site specific. The details of total overburden area in the proposal involving both forest as well as non forest land has not been submitted, which is required to be done. The state shall also explore the possibility of shifting of theses components on non-forest land.
- ix. As per the component wise breakup an area of 67.11 ha is designated as undisturbed area. The purpose and reason for including the same in the instant proposal has not been submitted.
- x. Compensatory Afforestation has been proposed in total 45 patches comprising an area of 1397.523 ha wherein two CA patches namely Village Imlipura, Khasra No 2 and 19, Shivpuri District are falling in the Forest compartment boundary as per DSS analysis. Moreover, these two patches are also located in Tiger corridor. The state shall examine the matter and ensure to provide NFL for CA as per guidelines. The CA sites namely Village Dhandheda Kanad (Kh No 102,80,139,103), Village Raipuriya (Kh No 78, 128 and 105) are located on the earthen dam, which may not be suitable for raising CA and the land may not be free from all encumbrances. Further, the documentary evidence of proposed CA site namely Village: Raghunathapura (Survey No. 3), Shivpuri District revealed that the ownership of land is with the Forest Department. The state shall examine the issues as above and ensure that all the CA areas are suitable, free from encumbrances and eligible for the purpose of CA as per prescribed guidelines.
- xi. Mode of mineral/ coal transportation route and how the requirement of electricity and water will be met has not been given in the proposal. The state shall therefore submit the detailed mineral evacuation plan along with the details as to how the requirement of electricity and water would be met. The detail of additional forest land required for the purpose(if any) shall also be submitted.
- xii. In accordance with the Para 7.8(i) of Chapter 7 of the consolidated guidelines and clarification issued under Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980 and Van (Sanrakshan evam Samvardhan) Rules, 2023, the State govt shall give the justification for the necessity of opening the new mining lease along with details.
- xiii. The Quantitative values on the parameters such as Cost of Human resettlement, Loss of public facilities has not be ascertained in the Cost-Benefit analysis, which is required to be done.
- xiv. As per the SIR of the DFO, Singrauli Divison, rights of 49 leaseholder have been

- recognized in the proposed area. The state shall submit details of the same and status of R&R plan.
- xv. As per the 3-D subsidence prediction study report Maximum tensile strain reported in the proposed area is 17.47. The state shall examine the same and submit its comments in case the proposal is for underground mining only.

Accordingly, it is requested to furnish the above mentioned information to this Ministry for further consideration of the proposal.

Yours sincerely,

Sd/-(Suneet Bhardwaj) Assistant Inspector General of Forests

Copy to:

- 1. The PCCF (HoFF), Department of Forest, Government of Madhya Pradesh, Bhopal;
- 2. The Dy. DGF (Central), Regional Office, MoEF&CC, Bhopal;
- 3. The Nodal Officer (FCA), Department of Forest, Government of Madhya Pradesh, Bhopal;
- 4. User Agency;
- 5. Monitoring Cell, FC Division, MoEF & CC, New Delhi for uploading on PARIVESH portal.



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.

Dy. Director General of Porests (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
 - 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			erved Forest:					
	forest land proposed for diversion:			enue Forest:					
2.	Item-wise break-up		Total: 1397.54 ha Following is the breakup of proposed a				a for divorc	ion	
۷.	details of the forest		FOII	wing is the brea	Name of	poseu area	Forest	1011	
	land proposed for		No.	Component	Forest	Range	Compart	Area (ha)	
	diversion:			•	Division		ment no.		
	diversion.		1.	Excavation Area			Waidhan	1180.14	
			2.	Safety Zone	1		(RF-	10.46	
			3.	Green Belt Area	-		353,354,3	30.97	
			4.	Rationalization Area		Waidhan, Mada	56,361), Mada (RF- 534) and	33.31	
			5.	Infrastructure Area	Singrauli	and East	East Sarai (RF-	0	
			6.	External Dump	-	Sarai	362,363,3	132.28	
			7.	Other uses (Garland drain, Road, Embankment etc.)			64,370,37 1,372,373, 337,357,3 60,& 377)	10.37	
					Total			1397.53	

3.	Whether proposal involves	No
	construction of any	
	buildings (including	
	residential) or not. If	
	yes, details thereof:	
4.	Total cost of the	Rs. 2856.47Crores (As per online Part-I)
	Project at present	
	rates:	
5.	Wildlife:	Compartment no. RF-373 is under Elephant corridor According to working plan of Singrauli Division. The prescriptions in the working plan is as follows:-
		prescriptions in the working plan is as follows
		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.
		16.6 (10). The compartment falling under Flenhant corridor should
		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.
		However, as per the document (unsigned map) uploaded at
		annexure section, sl. no. 25, it is observed that the Elephant
	Vanatation	Corridor is away from the proposed diversion area.
6.	Vegetation:	EcoClass-3 and Crown Density is 0.6 The main species present are as follows:-
		i. Shorea robusta
		ii. Anogeissus latifolia
		iii. Aegle marmelos
		iv. Boswellia serrata
		v. Buchanania lanzan
		vi. Butea monosperma
		vii. Careya arborea
		viii. Chloroxylon swietenia
		ix. Diospyros melanoxylon
		x. Emblica officinalis
		xi. Ficus benghalensis
		xii. Ficus religiosa
		xiii. Ficus racemosa
		xiv. Grewia tiliifolia xv. Gmelina arborea
		xv. Gmelina arborea xvi. Holoptelea integrifolia
		xvi. Holopteleu integrijoliu xvii. Lagerstroemia parviflora
		xviii. Lannea coromandelica
L	1	AVIII. Dullied Coloniditatica

_							
					Madhuca indica		
					Miliusa tomentosa		
					Mitragyna parvifo		
					Schleichera oleosa		
					Semecarpus anaca	ırdium	
					Syzygium cumini		
					Tectona grandis		
					Terminalia arjuna		
					Terminalia bellirio		
					Terminalia chebul	а	
					Mangifera indica		
					Artocarpus hetero	phyllus	
		-	11 T		Misc. Species	. M./ C	1 24: 1
7.	Background note on the proposal:	R 1 e U w fri sri b c C	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. The extracted Coal is proposed to be supplied to Mahan Energen Limited (Power Plant) and for Open Commercial Sale.				
8.	Compensatory Afforestation:		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
9.	Whether proposal involves violation of Forest(Conservation)Act, 1980 or not.	N	lo				

	TC 1 1 1	
	Ifyes,adetailedrepor	
	tonviolationincludin	
	gaction	
	Takenagainsttheco	
10	ncerned officials:	The project involves vehiclitation of 40 families from
10.	Whether proposal involves	The project involves rehabilitation of 49 families from
	rehabilitation of	the proposed diversion area.
		The necessary approved rehabilitation plan has been
	displaced persons. If	uploaded at sl. No. 15 in annexure section (Part-I).
	yes, whether	
	rehabilitation plan	
	has been prepared	
	by the State	
	Government or	
11.	not: ReclamationPlan:	Reclamation plan is included in the approved Mining Plan.
11.	(If applicable,	Reclamation plan is included in the approved Mining Frank
	submit details and	
	Financial allocation:	
12.	Details on	Not applicable.
	catchment and	
	command area	
	under the project:	
13.	Cost benefit ratio:	1:26.91 (as per online Part-I)
14.	Recommendations	The proposal is recommended by the Addl. Principal
	of the Principal	Chief Conservator of Forests & State Government in
	Chief Conservator	Part-IV & Part-V.
	of Forests / State	
	Government:	
15.	Utility of the	The project envisages supply of Coal to Mahan Energen
	Project:	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	No.
	diverted has any	
	sociocultural/religi	
	ous value:	
17	Cituation	Dropogod area is poither a part of any protected area now within
17.	Situation w.r.t.	Proposed area is neither a part of any protected area nor within 10 km of any protected area.
10	any P.A.	To kin 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 Chandiwal
- (iii) Shri Laxmi Narayan Choudhary
- (iv) Shri Lakhan Singh
- (v) Shri Chhgan Lal Parmar

- DFO, Shajapur
- FRO, Shajapur
- Dy. RO, Agar
- -FBO, Tanodiya

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

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, Ficusbenghalensia, Ficusracemosa, etc.

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

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.

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

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.

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

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.

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

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.

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

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.

<u>Village: Durgapura, Beat: Badod, Khasra no.- 510,5111,507,508,504,505,506,516</u> &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

<u>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)</u>

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 melanoxylon, 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 benghalensia, 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	Not Applicable

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

FIELD PHOTOGRAPHS





Village - Chipiya





Village - Dhandheda





Village - Durgpura





Village - Hatipura





Village - Jhalrabarod





Village - Padal





Village - Raipuriya





Village - Shivgarh

Inspection of Shivapuri CA Areas





Village - Budda





Village - Dongari





Village - Dulahara





Village - MaroraKhalsa





Village – İmlipura