
	Office of the Deputy Conservator Of Forest, Nandurbar Forest Division, Nandurbar "Vanbhavan", Sardar Vallabhbhai Patel Chouk, Mission Highschool Taloda Road, Nansurbar Ta. Dist- Nandurbar Pin-425412 Telephone 02564-234228 Email: dycf_Shahada@yahoo.co.in	
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Letter

Sub:- Diverision of 73.94 ha forest land for construction of
Kareghat Minor Irrigation Tank at Kareghat, Tal. Nawapur,
District Nandurbar in the State of Maharashtra (Online No.
FP/MH/IRRIG/61238/2020) - regarding.

जावक क्र.अ/जमीन/कारेघाट/ 213 /सन 2023-24
नंदुरबार 425412 दिनांक- 16 /05/2023

प्रति,
म. वनसंरक्षक (प्रा.)
धुळे.

- संदर्भ:-** 1. आपले कार्यालयचे पत्र जा.क्र.कक्ष-5/नोडल/म.क्र./36/2023-24 दि.08.05.2023
2 मा. अपर प्रधान मुख्य वनसंरक्षक व केद्रस्थ अधिकारी नागापुर यांचे पत्र क्रं. Desk/modal/dhule/RS-IID-
12942/25/358/2023-24 Dt. 08/4/05/2023
3 क्रेद्र शासनाचे पत्र 8/28 02.05.2023 रोजीचे.

उपरोक्त विषयांकित प्रकरणी कळविण्यात येते कि, संदर्भ क्रं. 3 च्या अनुषंगाने त्यांनी उपस्थित केलेल्या त्रुटीची पुर्तला करून अहवाल माहीती व आवश्यक कार्यावाहीस्तव सविनय सादर करीत आहे.

सहपत्र- वरीलप्रमाणे.



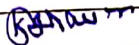
(कृ.बा.भवनर)

उपवनसंरक्षक,

नंदुरबार वनविभाग, नंदुरबार

प्रतिलिपी- मा. अपर प्रधान मुख्य वनसंरक्षक व न केद्रस्थ अधिकारी नागापुर यांना माहीतीस्तव सविनय सादर.
प्रतिलिपी- कार्यकारी अभियंता नंदुरबार मध्यम प्रकल्प विभागीय पथक नंदुरबार यांना माहीतीस्तव सन्नेह अग्रोषित.

S.No.	MoEF&CC Points	Compliance
1	The KML file of proposed diversion area is in line features which is not appropriate for calculation of area and the same cannot be analyzed through DSS tool. Therefore, the revised KML file of proposed diversion area showing all components shall be submitted in polygon form	KML file of proposed diversion area showing all components have been uploaded in Part-I form of PARIVESH.
2	The CAT plan is required to be approved by the competent authority as mentioned in the para 9.2(vi) of the Handbook of guidelines dated 28.03.2019. Accordingly, the copy of the approval of the CAT plan needs submission.	Related to the Forest Department.
3	The cost of Compensatory Afforestation as mentioned in the Cost Benefit analysis is not at par with the cost contained in the CA scheme. The Cost Benefit analysis therefore needs revision and the same shall be submitted as per the prescribed format.	Cost contained in the CA scheme has now been included in the Cost Benefit analysis and the revised Cost-Benefit analysis has been uploaded in Part-I form of PARIVESH.
4	The State Govt. vide letter dated 12.09.2022 had informed that the total Non-forest land involved in the project is 77.54 ha and later vide letter dated 13.12.2022 informed that 3.60 ha non-forest area is involved in the project for the construction of canal. The Part-1 of the proposal mentions the NFL to be Nil. The State Govt shall verify the total Non-forest land involved in the project and the accurate details shall be filled in the Part-1 of the proposal online.	Due to some typographical error an area of 77.54 ha Non-forest land was incorrectly mentioned in the State Govt. letter dated 12.09.2022. Along with 73.94 ha forest land for construction of Minor irrigation tank, an area of 3.60 ha was earlier proposed to be taken by the irrigation department for the construction of Canal. Accordingly, the State Govt. vide letter dated 13.12.2022 mentioned an area of 3.60 ha Non-forest land in the project. Later on, the Irrigation Department has decided to use Pipe Distribution Network (PDN) an underground pipe line network in the wake of the Govt. of Maharashtra policy to distribute irrigation water through PDN, vide Govt. Resolution of 09.06.2016 and revised on dated 13.01.2017 instead of Canal system as it overcomes the lacunas of the flow irrigation system viz land acquisition, lavish use of water from the farmers in the upper reaches of the canal. This PDN system will also serve the drinking water purpose to this water scarce area. Therefore, in the present project there is no requirement of the Non-forest area. Hence, it has been mentioned as 'Nil' in the Part-I form on PARIVESH.
5	The KML file of the Non forest land involved in the project is required to be submitted in polygon form.	In the present proposal requirement of the Non-forest land is Zero due to which the KML file of Non-forest land has not been uploaded on PARIVESH.
6	The State Govt. has reported 91.26 ha Non forest land for CA whereas the area of KML file as provided has been found to be 153 ha. Therefore the correct KML file of 91.26 ha Non-forest/ Revenue land located in Villages Sutare and Satarpada, is required to be submitted and uploaded online on the PARIVESH portal.	KML file of 91.26 ha Non-forest land located in Villages Sutare and Satarpada have been uploaded online on the PARIVESH portal.
7	The KML file (153 ha) as submitted for the Compensatory Afforestation site apparently contains encroachment and roads etc. Moreover, the presence of settlements can also be seen within. Therefore, apart from submission of correct KML file as above the State Govt shall ensure that the area proposed for CA is free from all encumbrances	Compensatory Afforestation (CA) area has been provided to Forest Department is 91.26 ha but the DCF, Dhule has given suitability certificate for 87 ha and remaining 4.26 ha land for Compensatory afforestation is not suitable for plantation. Revised KML file of 91.26 ha Non-forest land located in Villages Sutare and Satarpada, Dhule district have been uploaded online on the PARIVESH portal. Encroachments as visible within the given CA land are temporary in nature and these shall be removed before according the final approval to this project under the FC Act, 1980.


 (Krishna B. Bhavar)
 Deputy Conservator Of Forest
 Mandurhar Forest Division, Nandurbar

Cost-Benefit Analysis
Kareghat M.I. Tank Project

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

S. 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 judgment.
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 forest land 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 centers, 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

S. No.	Parameters	Remarks										
1	Ecosystem services losses due to proposed forest diversion.	<p>Economic value of loss of eco-system services due to diversion of forests land and in this project total forest land to be diverted is 73.94 ha. Hence, following are the calculations are made on the basis of NPV Guidelines issued by Government of India, Ministry of Environment, Forest and Climate Change, (Forest Conservation Division), New Delhi vide no. File No.5-3/2011-FC(Vol-1) dated 6th January 2022.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Particulars</th> <th>Area</th> <th></th> <th>NPV Rate</th> <th>Amount</th> </tr> </thead> <tbody> <tr> <td>Dam</td> <td>73.94</td> <td>x</td> <td>1228590</td> <td>90841945</td> </tr> </tbody> </table> <p>= Rs. 908.41 Lakhs</p>	Particulars	Area		NPV Rate	Amount	Dam	73.94	x	1228590	90841945
Particulars	Area		NPV Rate	Amount								
Dam	73.94	x	1228590	90841945								

2	Loss of animal husbandry productivity, including loss of fodder.	Estimated loss of animal husbandry productivity due to diversion of @ 10% of NPV $10\% \times 1228590 \times 73.94 \text{ ha} = \text{Rs.}90.84 \text{ Lakhs}$
3	Cost of human resettlement.	Loss of Human Settlement = Rs. 0 Lakhs
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.	Loss of public facilities and administrative infrastructure (Roads, building, schools, dispensaries, electric lines, railways, etc.) on forest land. Hence, Rs. 0 Lakhs
5	Possession value of forest land diverted.	30% of NPV = Rs. 272.52 Lakhs
6	Cost of suffering to oustees.	Nil
7	Habitat Fragmentation Cost.	This project involves forest land along river bank, nalla which is habitat for various wild animals and birds found in that area. But there is no Tiger project, no National Park, Wildlife sanctuary or Eco-sensitive zone of protected area. Habitat fragmentation cost calculated at 50% of NPV = Rs. 454.20 Lakhs
8	Compensatory Afforestation and soil & moisture conservation cost.	The actual cost of compensatory afforestation scheme for an area of 91.26 ha and soil & moisture conservation and its maintenance in future = Rs 40713687.45/- Or say Rs. 407.136 Lakhs

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.	<p>a) Net increase in agricultural produce for 50 years. Per year benefits are at Rs. 70,000/ 4 Villages/ year = $280000 \times 50 = \text{Rs.} 1400 \text{ Lakhs}$</p> <p>b) It is proposed to develop fisheries produced reservoir, the average reservoir area between FSL and M.D.D.L area is Ha annual production of @5000 Kg/1000 Ha, amounting to Rs 6.930 Lakhs per year after deduction of expenditure. Thus the overall benefits on this account in 50 Years will be = $6.93 \times 50 \times 87.00 \times 8.10 = \text{Rs.} 2441.78 \text{ Lakh}$</p>

		c) Animal husbandry produce 10% of NPV = $908.41 \times 10\% = 90.41$ Lakhs
2	Benefits to economy due to the specific project.	It is assumed that there will be an overall benefit to the economy at 50% of increase in the agricultural output worked out under parameter 1 (a). Thus, benefit due to project on this account will be = Rs 1400 Lakhs $50\% \times 1400 = 700$ Lakhs
3	No. of population benefited due to specific project.	Overall all 4 villages will be benefited in the command areas due to this project. Total population of these villages is 70000 persons'. Total number of families benefited will be @17415 family. Assuming increase in income per family Rs.50,000/- per year to these families on this account for 50 years, for 17415 families will be Rs. 4353 lakh.
4	Economic benefits due to of direct and indirect employment due to the project.	a) Employment generated during construction period. Generally, in construction project, ratio of labour component cost to material component cost is 30:70. The total cost of the project is 12959.95 Lakhs labour employment will be about 30% of Rs.3382.60 Lakhs. The employment potential generated assuming the labour wages of Rs. 80/day (average) in monetary terms the employment potential will be 80 Lakhs $30\% \times 3382.6 = 1014.78$ Lakhs b) After completion of the project it has been assessed from the statistics available for the irrigation project in operation that a labour potential of 73 mandays/Ha. year is generated perennially due to employment in the fields and in agro based industries in case of this project the irrigable command area is 994 Ha. Assuming wages of Rs. 280/- per day the employment potential that will be created during 50 years. $280 \times 994 \times 50 = 1391$ Lakhs c) Drinking water Benefits (As per approved First administrative approval estimate) for $5.2272 \text{ M.cum} \times 0.232 \times 10 = 12.12$ Lakhs per year $\times 50 \text{ Years} = \text{Rs.}606.35$ Lakhs
5	Economic benefits due to Compensatory afforestation.	213.45 Lakhs

Cost-Benefit Analysis
Kareghat M.I. Tank Project

Calculations of Benefit Cost Ratio

Total Cost (as per Table-B calculation) = Rs. 2133.106 Lakhs

Total Benefits (as per Table-C calculation) = Rs. 12210.77

Hence, Benefit/Cost Ratio = 5.724

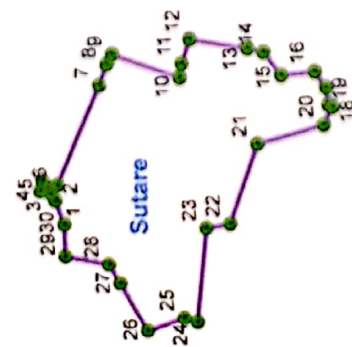
Jueshar

Executive Engineer
Nandurbar Irrigation Project
Divisional Unit Nandurbar

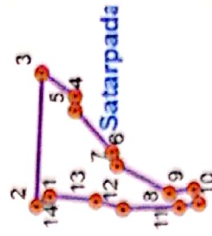
Bhavar

(Krishna B. Bhavar)
Deputy Conservator Of Forest
Nandurbar Forest Division, Nandurbar

DGPS Coordinates of Compensatory Afforestation Sites at Village Sutare & Satarpada Dhule District



Village:- Sutare		
S.No.	Latitude	Longitude
1	21°4'46.715" N	74°2' 41.124" E
2	21°4'47.922" N	74°2' 44.503" E
3	21°4'48.550" N	74°2' 45.517" E
4	21°4'50.055" N	74°2' 45.860" E
5	21°4'49.718" N	74°2' 47.284" E
6	21°4'47.633" N	74°2' 46.676" E
7	21°4'41.399" N	74°3' 0.739" E
8	21°4'40.319" N	74°3' 3.685" E
9	21°4'39.536" N	74°3' 5.076" E
10	21°4'29.986" N	74°3' 1.734" E
11	21°4'29.674" N	74°3' 3.717" E
12	21°4'28.539" N	74°3' 7.054" E
13	21°4'20.357" N	74°3' 5.696" E
14	21°4'18.136" N	74°3' 5.214" E
15	21°4'15.626" N	74°3' 2.027" E
16	21°4'10.895" N	74°3' 2.462" E
17	21°4'9.302" N	74°3' 0.241" E
18	21°4'8.960" N	74°2' 57.844" E
19	21°4'8.434" N	74°2' 57.488" E
20	21°4'9.647" N	74°2' 55.041" E
21	21°4'19.069" N	74°2' 52.475" E
22	21°4'22.930" N	74°2' 41.200" E
23	21°4'26.328" N	74°2' 40.582" E
24	21°4'27.756" N	74°2' 27.212" E
25	21°4'29.626" N	74°2' 27.751" E
26	21°4'34.936" N	74°2' 25.917" E
27	21°4'38.798" N	74°2' 32.676" E
28	21°4'40.391" N	74°2' 35.379" E
29	21°4'46.619" N	74°2' 36.538" E
30	21°4'46.715" N	74°2' 41.124" E



Village:- Satarpada		
S.No.	Latitude	Longitude
1	21° 3' 46.293" N	74° 6' 46.426" E
2	21° 3' 48.146" N	74° 6' 45.130" E
3	21° 3' 47.385" N	74° 7' 2.349" E
4	21° 3' 42.721" N	74° 6' 59.335" E
5	21° 3' 42.719" N	74° 6' 57.424" E
6	21° 3' 37.583" N	74° 6' 51.987" E
7	21° 3' 36.895" N	74° 6' 50.210" E
8	21° 3' 29.596" N	74° 6' 46.539" E
9	21° 3' 26.165" N	74° 6' 46.997" E
10	21° 3' 25.417" N	74° 6' 45.097" E
11	21° 3' 28.170" N	74° 6' 44.677" E
12	21° 3' 36.069" N	74° 6' 44.567" E
13	21° 3' 39.849" N	74° 6' 45.689" E
14	21° 3' 46.293" N	74° 6' 46.426" E

Rehman
 (Krishna B. Bhavari)
 Deputy Conservator Of Forest
 Maharashtra State Forest Department, Mumbai, Maharashtra



OPEN SERIES MAP

No. F4304

Scale 1:50,000

F4301 Durgam 1864/71	F4302 Durgam 1864/71	F4303 Durgam 1864/71	F4304 Durgam 1864/71	F4305 Durgam 1864/71
F4306 Durgam 1864/71	F4307 Durgam 1864/71	F4308 Durgam 1864/71	F4309 Durgam 1864/71	F4310 Durgam 1864/71

सर्वेक्षण विभाग
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CONVENTIONAL SYMBOLS

1. Rivers	2. Canals	3. Wells	4. Dams	5. Bridges	6. Roads	7. Railways	8. Airways	9. Telegraph lines	10. Power lines	11. Telephone lines	12. Fences	13. Boundaries	14. Forests	15. Cultivated areas	16. Uncultivated areas	17. Settlements	18. Temples	19. Mosques	20. Churches	21. Schools	22. Hospitals	23. Public buildings	24. Industrial buildings	25. Mines	26. Quarries	27. Pits	28. Shallow water	29. Deep water	30. Sandbanks	31. Rocks	32. Cliffs	33. Hills	34. Mountains	35. Snow	36. Ice	37. Clouds	38. Fog	39. Rain	40. Sun	41. Moon	42. Stars	43. Planets	44. Comets	45. Meteors	46. Earthquake	47. Volcano	48. Hot springs	49. Cold springs	50. Wells	51. Caves	52. Ponds	53. Tanks	54. Reservoirs	55. Dams	56. Bridges	57. Roads	58. Railways	59. Airways	60. Telegraph lines	61. Power lines	62. Telephone lines	63. Fences	64. Boundaries	65. Forests	66. Cultivated areas	67. Uncultivated areas	68. Settlements	69. Temples	70. Mosques	71. Churches	72. Schools	73. Hospitals	74. Public buildings	75. Industrial buildings	76. Mines	77. Quarries	78. Pits	79. Shallow water	80. Deep water	81. Sandbanks	82. Rocks	83. Cliffs	84. Hills	85. Mountains	86. Snow	87. Ice	88. Clouds	89. Fog	90. Rain	91. Sun	92. Moon	93. Stars	94. Planets	95. Comets	96. Meteors	97. Earthquake	98. Volcano	99. Hot springs	100. Cold springs
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REVISIONS
1. Revised map No. 19, 1977-A
2. Revised map No. 19, 1977-A

NOTES
1. The map is compiled from the original maps and other sources.
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COMPLETION INDEX
1. Revised map No. 19, 1977-A
2. Revised map No. 19, 1977-A

(Signature)
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 Nandurbar Forest Division, Nandurbar

