

SITE INSPECTION REPORT

Name of the Proposal:- Diversion of 263.5406 ha of Forest Land for construction of Sambarkund Medium Project, Tal - Alibag, Dist - Raigad in the State of Maharashtra

Name of the Inspecting Officer- Shri C.K.SONWANE, IFS, Deputy Inspector General of Forests (Central), Regional Office, MoEF&CC, Nagpur.

Officials from the State Forest Department present during the inspection:

1. Shri G.D. Giri ACF FLCS & CAMPA Kainwat
2. B N Thakur, ACF Tendu & CAMPA Nanded
3. Shri Pramod Rathod, RFO (T), Kinwat
4. Shri Rohit Jadhav, RFO (T) Mahur
5. Shri Vijay Katake RFO, Hadgaon, Nanded
6. Shri Anil Majjanwar, Surveyor, Nanded
7. Shri Narendra Patil, RFO Alibag
8. Smt Gayatri Patil, ACF, Alibag
9. Shri Namdeo Bansod, Ranger Surveyor

Officials from the User Agency present during the inspection:

1. Smt. DineshreeRajbhoj, Executive Engineer, Hetawane Medium Project Division, Kamarli, Tal - Pen, Dist - Raigad.
2. Shri A. D. Rokade, Sub Divisional Engineer, Hetawane Medium Project Subivision, Umbarde - Pen, Dist - Raigad
3. Shri. A. V. Adhal, Junior Engineer, Hetawane Medium Project Subivision, Umbarde - Pen, Dist - Raigad

The MoEF&CC, New Delhi vide letter No 8-34/2022-FC dated 3rd January, 2024 requested the Regional Office Nagpur inspect the forest area proposed for diversion and land identified for Compensatory Afforestation (CA) and submit a detailed site inspection report (SIR) to this Ministry. As sought by the Ministry and directed by the DDG (Central) RO Nagpur, undersigned carried out site inspection of both forest area proposed for diversion and few patches of non forest area identified for Compensatory afforestation on **28.01.2024 to 30.01.2024** in presence of officials as mentioned above from the State Forest Department and the User Agency.

(I) Brief note on the project:

The Project envisages the construction of an dam of capacity 49.85 Mcum across the river Sambarkund River. The length of earthen dam and Waste weir is about 725 m and height is 38.70 m. The total irrigated area will be 2528 Ha along the Sambarkund river. The Length of LBC is 5 km and the length of RBC is 18 km. **As reported by the User Agency the water will be utilized for the following purposes approximately 10.733 mmc for industrial use, 25.465 mmc for irrigation and 7.12 mmc for drinking water purpose and 4.152 mmc is anticipated as evaporation lose .**



- (a) **Justification for selection of the proposed site:** The user Agency justified the location for the following i.e. The length of dam is minimum, more catchment area is available and therefore more storage, comparatively less height of dam for maximum storage, more command area is available, suitable site for good foundation in rock, comparatively less submergence area, ideal site for Irrigation and near about 33 villages in Alibag Taluka are benefited etc.
- (b) **Need of the project:** The User Agency reported that the project is very much required for the following facts ie. There is no irrigation work either in the catchment or in the command area of the project, Irrigation facility will lead to shift from rainy season food crops to Perennial plantation and cash crops (Mainly Mango, Coconut, Chikoo) , Reservation of drinking water supply to nearby villages and Alibag city in the Project water planning, Assured water supply to Alibag will be boon for the speedy development of the Alibag one of the famous Tourist destination on Coastal Konkan, Employment generation to local people resulting Economic development and social upliftment of the region, Overall 33 villages are to be benefited in the command area due to this project. total population of these villages is 37398 as per Census data 2011, assuming 4 persons in a family i.e. 9350 families will be benefited etc

(II) Details of the forest area proposed for diversion:

(a) Legal status of the forest land proposed for diversion:

S.No.	Division	Forest land (Ha)	Legal Status
1	Alibag	28.5474	RF (Sec 4 of IFA)
2	Alibag	40.5848	Restored Private Forest
3	Alibag	12.3725	Private Forest
4	Alibag	182.0359	RF
	Total	263.5406	

(b) Item-wise break-up details of the forest land proposed for diversion:

S.No.	Component	Forest Area (in ha)	Non forest area (inha)
1	Submergence	238.2415	98.7662
2	Dam Seat	8.332	34.3949
3	Waste Weir	5.0921	0
4	Tail Channel	0.952	3.4215
5	Approach Road	2.8469	3.3913
6	PDN	8.0761	13.3307
7	Rehabilitation Land	0	18.5131
	Total area	263.5406	171.8177

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As per the report of Government of Maharashtra the total non forest land involved in the project is 169.3896 ha.

(c) Wildlife: Whether forest area proposed for diversion is important from wildlife point of view or not:

As reported that proposed forest area for diversion is 10.30 Km from Phansad wildlife Sanctuary and the said area is not falls under ESZ of the Phansad wildlife Sanctuary. However, as reported fauna like sporadic leopard movement, jackel, Indian hare etc are are existing in and around the forest area proposed for diversion;

(d) Vegetation:

The density of the forest area is 0.3 and area falls under the eco class-1. The predominate species like Teak, Khair, Hed etc., the girth wise enumeration list of trees at FRL are 86970, FRL-2 metre are 67624, FRL-4 meter are 61860. **The tree enumeration for the proposed forest area for diversion has been done as per the sample plotting method and as reported, as per sample plotting, 331 trees per hectare has been calculated. For the purpose of confirmation, one sample plot of 100 X 100 mtrs in Compt No 195 has been cross verified and enumerated trees found to be correct in the said sample plot.**

(e) Effect of removal of trees on the general ecosystem in the area:

The area is inundated with 2 major streams with rugged and undulating terrain which has heavy flow of water during the monsoon times. The area after tree felling may be prone to heavy soil erosion, hence, proper soil Moisture Conservation (SMC) plan needs to be implemented to arrest soil erosion.

(f) Details of any protected archaeological/heritage site/defence establishment or any other important monument located in the area, if any:

As reported, no protected archaeological/heritage site/defence establishment or any other important monument is located in the area.

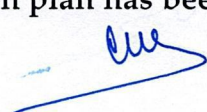
(g) Comment as to the reasonability of the extent of the forest land proposed for diversion:

Requirement of forest land as proposed by the user agency is unavoidable and bare minimum for the project.

(h) Whether any work in violation of the Act or guidelines issued under the Act has been carried out

During site inspection, it is observed that no work in violation of Adhinyam has been carried out by the User Agency.

(i) Whether proposal involves rehabilitation of displaced persons. If yes, whether rehabilitation plan has been prepared by the State Government



or not. Details be furnished specifically if rehabilitation plan would affect any other forest area by trans-locating outside in and around the said forest:

Yes the project involves displacement of peoples. It is reported that due to construction of Sambarkund Irrigation Project, 3 wadis of Mahan village (Khairwadi, Jambhulwadi and Sambarkund wadi) will be affected. No of affected families is 230 and Population is 1187

It is reported that an area over an extent of 27.99 ha at Rajewadi has been selected for rehabilitation and further reported that which is based on the choice given by the PAP's Land for rehabilitation of three wadis. It is further reported that the Rehabilitation and Resettlement Plan has been prepared submitted To Divisional Commissioner of Konkan Region for approval. **The rehabilitation plan would not affect any other forest area as the out sees are relocated in the non-forest land in the command area.**

(j) **Reclamation Plan:**

Not applicable

(k) **Cost Benefit Ratio:** Reported as 10.71

(l) **Details on catchment and command area under the project:**

a) **Catchment Area:-**

- i) The catchment area up to Sambarkund dam site is 28.10 Sq. Km. with slopy hills and forest. The latitude and longitude of the proposed site are respectively 18°32' and 73° 3' with reference Topo sheet 47 F/2. The river is originating from altitude 335M and flows towards the west and meets Kundlika River near village Bhonang. The Kundlika River is a west flowing river and meets the Arabian Sea near village Salav of Raigad district. Total free catchment of Sambarkund Medium Project is **28.10 Sq. km** i.e. 2810 Hectare and all catchment area falls in Raigad District. Total Forest area under catchment of the project is 2778.38 Ha. Catchment is fan shaped and covered with thick forest.
- ii) The dam site falls in the influence zone of Nagothane, Roha Rain gauge station. The area falls in the rainfall range of 2500 to 5000 mm as per Isohytal map of I.M.D. It is proposed to utilize full yield of 75% dependability, i.e. 50.70 Mcum being there is no upstream utilization in the catchment.

b) **Command Area:-**

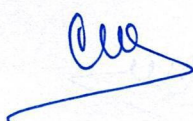
- i) The project will command a gross area of 4313 ha. of 33 villages in Alibag Taluka of Raigad District. The command area occupied patches of plain land, near sea coast, slopping foot- hills and few wooded hills. The climate is warm and humid during most of the year. It receives an average annual rainfall of 3,000 mm., mainly during the monsoon. The area is mostly under kharif paddy and grasses.

- ii) The most of the command area consists of soil with medium depth suitable for irrigation. No salinity and alkalinity of soils was observed except for the saline near the sea-creek.
- iii) Assured drinking water supply to villages in command and Alibag city.
- iv) The area benefited by this Project lies in Alibag Taluka of Raigad District, which presently do not have any irrigation facilities.
- v) Overall 33 villages are to be benefited in the command area due to this project. Total population of these villages is 37398 as per Census data 2011, assuming 4 persons in a family i.e. 9350 families will be benefited.

(III) Compensatory afforestation:

- (a) As reported, The District Collector, Nanded vide order No. 1997. R.B. Desk3. Land. CR 5643/8/1/97 dated 03/11/1997 and order No. 97/RB Desk-2, Land CR-1/97 dated 31/12/1997 transferred the 1044.85 ha Non-Forest land (NFL) in favour of the DCF, Nanded Forest Department for Compensatory Afforestation. From this Non-Forest land, the **395 ha NFL** has been earmarked for the Compensatory Afforestation work against the present Diversion proposal and accordingly the mutation for the said NFL has been done in favour of the Forest Department
- (b) DCF Nanded had carried out field survey and given the Suitability Certificate vide letter No A/NFD/LAND/ FCA/ 1252/2023-24 dated 08/06/2023.
- (c) As reported the following observations and clarifications are submitted on non forest area which has already been handed over CA to the State Forest Department,

Sr. No.	Current status of the land and it suitability	Area (Ha)
A Area Suitable for Plantation		
1	Area Suitable & Available for Plantation	71.87
2	Area Suitable for Plantation but the State Forest Department has already carried out Plantation under various schemes	171.00
3	Area Suitable for Plantation but presently under Natural Vegetation	30.00
	Total	272.87
B Area not Suitable for Plantation		
4	Area not suitable for Plantation due to Encroachment	31.10
5	Area not suitable for Plantation due to Rocky Structure/ Steep Slope/ Un-Workable Area	91.03
	Total	122.13
	Gross Total (A+B)	395.00



Thus, the out of 395 ha which has already been handed over to the Forest Department, an area of 122.13 ha is not suitable for taking up of any plantation due to encroachments and Rocky Structure/ Steep Slope/ Un-Workable Area. Further, in the remaining 272.87 ha, an area with an extent of 30 ha is already having good natural vegetation and no scope for further plantation and hence, maintenance of existing plantation is only required. Further, reported that over an extent of 171.00 ha, the Forest Department has already carried out plantation under various schemes, hence, no scope for fresh plantation in the said area. In the remaining area of 71.87 ha, and extent of 47.87 ha i.e. Village HINGANI (45.87 Ha.) and SAYPHAL (2 Ha.) are also suitable for plantation work but these patches have been included to carrying out plantation work as per the working plan and hence 47.87 ha Non-forest land area of two villages has been excluded from the total 71.87 ha NFL.

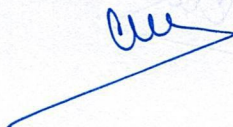
In view of the above stated non forest area usage status, the area Suitable & Available for Plantation is only 24 ha and has been proposed for CA plantation work.

Further, the to meet the required plantation, the DCF Nanded Forest Division proposed 245 ha area of the Degraded Forest Land (DFL) under Nanded Forest Division for raising the balance plantation work. Thus the total 269 ha area (24 ha non forest area + 245 ha Degraded Forest area) has been made available for CA Plantation work.

As per the, provision of sub rule 13 of the Van (Sanrakshan Evam Samvardhan) Rules 2023 The user agency shall provide land which is neither notified as forest under the Indian Forest Act, 1927 (16 of 1927) or any other law nor managed as forest by the Forest Department and it shall also bear the cost of raising compensatory afforestation over such land and in case the non-forest land or portion thereof provided by the user agency is not fit for raising compensatory afforestation of a specified density, then additional compensatory afforestation shall be raised on a degraded notified or un classed forest land under the management control of the Forest Department which is twice in size of such shortfall in the given compensatory afforestation land and the user agency shall also bear the additional cost on such account:

Undersigned carried out inspection of the following sites of the non forest area identified for Compensatory afforestation;

- (a) 20 ha Compt No 350E, gut No 01 at Brahmanwadi has been inspected and during inspection, it is found that only 5 ha of area is found to be suitable for plantation



- (b) 15 ha Copt No 498 A at Nivgha, Hadgaon Range has been inspected and during inspection, it is found that only 8 ha of area is found to be suitable for plantation and it is noticed that approximately 2 ha of area is under encroachment.

In view of the current land usage and the rules position, the following is recommended;

- a. The User Agency handed over non forest land to the Forest Department long back and the Forest Department has already carried out plantation over **171.00 ha** under various schemes. However, the proposal is still under consideration under Van (Sanrakshan Evam Samvardhan) Adhinyam,1980. Hence, entire non forest land proposed for CA under the proposal may be considered and may direct the State Government to take necessary steps to evict encroachments claimed to be over 30 ha and to notify the entire area of 395 ha as RF / PF.
 - b. Since, the proposal is still under consideration for issuing of in principle approval, sub rule 13 of the Van (Sanrakshan Evam Samvardhan) Rules 2023 will be applicable. Accordingly, compensatory afforestation required to be carried out over required extent of degraded forest area as per the extant rules;
 - c. Cost towards both plantation over suitable extent of area within the non forest area which has already been handed over to the forest department and also over degraded forest area shall be recovered from the User Agency;
- (d) **Whether land for compensatory afforestation is free from encroachments/other encumbrances:**

Deputy Conservator of forest, Nanded certified that 269 ha non-forest handed over to Deputy Conservator of forest Nanded, is free from encroachments and encumbrances.

- (e) **Whether land for compensatory afforestation is important from Religious/Archaeological point of view:**

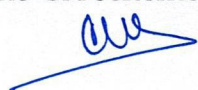
As informed by the DCF Nanded the land for compensatory afforestation is not important from Religious/Archaeological point of view.

- (f) **Land identified for raising compensatory afforestation is in how many patches, whether patches are compact or not:**

The total non forest area i.e. 395 ha handed over to the forest department is consists of 11 patches

- (g) **Total financial outlay:**

Considering the remarks made on required area to be treated for CA under the project as per the Van (Sanrakshan Evam Samvardhan) Rules 2023, the CA scheme needs to be revised accordingly.



(m) **Detailed comments on whether there are any alternatives routes/alignments for locating the project on the non-forest land:**

It is reported that alternatives are examined and most suitable alternative is considered for the proposal. Two alternative dam sites were selected one about 1.5 km D/s of village Mahan and another about 1 km up stream of village Mahan with catchment areas 28.10 sq.m. After detail study the second site U/s of village Mahan is selected i. e. present proposal.

(n) **Whether land being diverted has any socio-cultural/religious value. Whether any sacred grove or very old grown trees/forests exists in areas proposed for diversion:**

NIL

(o) **Any other information relating to the project:**

The Project has been accorded Environment Clearance in the 197th meeting of SEIAA, vide letter No.SIA/MH/RIV/134468/2019, Dated 31/03/2020

Specific comments

Considering the importance and requirement of the project, the proposal may be considered under **Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980, subject to the following conditions;**

- (I) Required area for Compensatory Afforestation and CA scheme as mentioned under Sl No III (c) above to be considered;
- (II) Proper Soil & Moisture Conservation (SMC) plan shall be prepared and implemented at the cost of the User Agency;
- (III) Bare minimum tree felling shall be ensure by the State Forest Department and ensure that no additional forest area shall be utilized for the project;
- (IV) Catchment Area Treatment Plan (CAT) shall require to be implemented effectively. Further, all works and structures created under CAT plan shall be geo tagged for monitoring purpose. The KML files for the area treated under CAT Plan shall be uploaded in e-green watch portal. To oversee the implementation of the CAT plan, State Level committee shall be constituted as per the provision of the para 9.2 of the **Consolidated Guidelines and Clarifications Issued Under Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980** and Committee shall submit an annual report to the Regional Office, Nagpur.

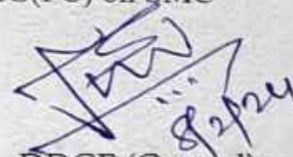


(C. K. Sonwane)

Deputy Inspector General of Forests (Central),
Regional Office, MoEF&CC, Nagpur.

Recommendations of the DDGF (Central) Regional Office, MoEF&CC, Nagpur
along with detailed reasons:

The proposal for diversion of 263.5406 ha of Forest Land for construction of Sambarkund Medium Project, Tal - Alibag, Dist - Raigad in the State of Maharashtra may be considered for approval with the special conditions mentioned in his report by the DIG(FC) on SMC works, CA, CAT Plan and bare minimum tree felling etc.

A handwritten signature in black ink, followed by the date '8/2/24' written in the same ink.

DDGF (Central),
Regional Office, MoEF&CC, Nagpur

