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TAMILNADU FOREST DEPARTMENT

From

Thiru Sachin Tukaram Bhosale, I.F.S.,

District Forest Officer.

Nilgiris Forest Division,

Udhagamandalam – 1.

The Principal Chief Conservator of Forests

and Chief Wildlife Warden

Panagal Maaligai, Saidapet,

Chennai - 600 015

(Through Conservator and Field Director

Mudumalai Tiger Reserve

Udhagamandalam)

Ref.No.5681/2022/D1. Dated.20.07.2022

Sir,

Forests - Forest (Conservation) Act 1980 - Online forest Sub clearance proposal for diversion of 0.6996 ha of forest land in Naduhatty Reserve Forest of Nilgiris Forest Division for formation of cement concrete road at Naduhatty Village Panchayat road in the Nilgiris District - Human Wildlife conflict mitigation plan Submission for approval -Regarding.

- Online application uploaded by the Block Development officer Ref (VP), Kotagiri Block, Kotagiri, The Nilgiris District Proposal No.FP/Tn/Road/156883/2022 Dated:14.06.2022 submission of proposal on 20.06.2022
 - The Principal Chief Conservator of Forest (Head of Forest Force) Chennai Ref no: TS3/18050/2022 dated: 13.07.2022.

I submit that in the reference 1st cited the online Forest Clearance proposal has been received from The Block Development Officer Village Panchayat Kotagiri Block, Kotagiri, The Nilgiris District under Section 2 0f Forest (Conservation)Act,1980 for diversion of 0.6996 ha of the Forest land in Naduhatty Reserve Forests of this division for formation of cement concrete road to a length of 2332 m to a width of 3.00 m through the Naduhatty Reserved Forest area from the Kallaty road at Naduhatty Village Panchayat road in The Nilgiris District to access patta lands for cultivation purpose.

The subject area was inspected by me along with the Forest Range officer, Kattabettu Range on 05.07.2022 with the relevant records. During the field inspection it is noted that the length of the road through forest (0/000 to 1/530 m & 1/718m to 2/520m) is 2332 m and a width of the road is 3.00 m to an extent of 0.6996 ha of Forest land involved

in this project and there is neither tree growth nor any plantations in the proposed site. Wad animals like Tiger, Leopard, Indian Guar, Sambar Deer, Wild Boar, Porcupine, Barking deer, Black naped hare and wild dog movement is recorded in the proposed area. Hence the Human wildlife Conflict mitigation plan is submitted for approval as per instructions issued by the Principal Chief Conservator of Forests, Chennai in vide reference 2nd cited. It is requested that mitigation plan may kindly be approved for further action.

This is for favour of kind perusal

Enclosure: As state above

Yours faithfully,

District Forest Officer,

Nilgiris Forest Division, Udhagamandalam.

Copy submitted to The Conservator of Forests and Field Director Mudumalai Tiger Reserve, Udhagamandalam, The Nilgiris District.

HUMAN WILDLIFE CONFLICT MITIGATION PLAN FOR THE PRPOSED PROJECT OF CEMENT CONRETE ROAD AT NADUHATTY

1. INTRODUCTION:

The proposal for formation of cement concrete road through the existing coupe road at Naduhatty Reserved Forest in Kattabettu Range of Nilgiris Forest Division is recommended under section 2 of Forest (Conservation) Act, 1980 for diversion of 0.6996 Ha. In order to compensate the negative impact in lieu of the diversion of Forest land due to this project, a Wildlife mitigation plan need to be put in place considering the wildlife movement in the area, hence the following mitigation plan is proposed.

1.1 Project background

This particular stretch of the road is proposed for diversion by the user agency namely, Block Development Officer (Village Panchayat) Kotagiri for the benefit of the local people to go to their agricultural land located beyond this Reserved Forest. They have been using this coupe road for a considerable time before and after enactment of the Forest (Conservation) Act, 1980 on annual lease rent basis. However in order to regulate such leases under the purview of the Forest (Conservation) Act, 1980 permission under section 2 of the act is sought for.

1.2 Justification & Benefit of the project;

The project of formation of concrete road from Naduhatty kallatty road of Naduhatty Panchayat is located in Naduhatty Reserve Forest. Since the road already exists in the RF as coupe road which is the only access for the local people to enter in their patta land for cultivation purpose. There is no alternative route /access to their patta land. Hence the project is located through the Reserved Forest. The local people have been requesting to accord long term permission to enter their cultivation lands instead of seeking permission every year from the Forest Department which would avoid additional burden to them. If the road is laid, the present complication in sourcing additional labour for transporting agriculture implements as well as the agriculture products, otherwise on head load, which in turn enhance their livelihood due to saving of expenditure. The cultivation process by the landholders also ensures employment opportunity to the local people.

1.3 Details of the proposed cement concrete road project:

The components of the proposed work consist of laying plain cement concrete 1:2:4 using 20mm metal 150mm thick over a base concrete of 1:4:8 150mm thick (Over all depth 300mm) to a width of 3.00m throughout the entire length of the road under diversion with restoration of side drain. The concrete road will be laid over existing wheel track damaged BT coupe road. There is no felling involved in the project.

2. DESCRIPTION OF THE FOREST AREA & LIKELY IMPACT OF PROJECT

2.1 Nilgiris Forest division

The geographical area of the Nilgiris District is 255201.65 ha, of which the district covers partly six revenue taluks namely, Udhagamandalam, Coonoor Kotagiri, Kundah Gudalur and Pandalur. The Forest area of the Division is 527577.194 ha. This division lies in tract varying for the hot arid plains to the cool and bracing hills. The Forests of the tract exhibit considerable variation in composition, quality and contrition due to attitude, physiography and biotic influence. The forest form continuous blocks besides scattered patches smaller in extent. The significant geographical location with vide range of topographic features, the marked difference in rainfall, the high intensity of solar radiation with significant diurnal range of temperature especially in cold months and mainly ground frost during winter are responsible for the richness, uniqueness and unusual diversity seen in the vegetation pattern of this division. The vegetation ranging with southern montane wet temperate forest, southern tropical broad hill forest, southern moist deciduous forest, southern dry deciduous forest and southern tropical thorn forest apart from grass land shola patches. This division is rich in wild life as well with elephants, tigers, leopards, sloth bears, sambar deer, spotted deers, block buck, jackal, Indian gaur, wild dogs, bears, Nilgiris langur etc.

2.2 Naduhatty RF (Proposed project)

Naduhaatty Reserved Forest is located in the Naduhatty beat, Halakarai Section of Kattabettu Forest Range. The extent area of the reserved forest is 192.634 Hectares. The RF was notified vide G.O MS 173 Revenue Department dated 23.02.1892.

2.3 Major Habitat, Flora & fauna

The Reserved Forest contains many varieties of flora like spontaneous shola grout and Eucalyptus, Wattle etc. The habitat supports the wild animals like Tiger, Leopard, Indian Guar, Sambar Deer, Wild Boar, Porcupine, Barking deer, Blacknaped hare, wild dog etc. These wild animals are recorded and movement of these animals are witnessed more often. In this project area, there is neither tree growth nor any plantations as the work involves only road component with improvements to the existing road within the existing width.

3. Impact of project of Forest and Wildlife

3.1 Major activities involved in the road project

The maintenance and improvements of this road contains only laying plain cement concrete including restoration of side drain with necessary earth work without changing any alignment of the road and without widening.

3.2 Likely impact of the project on RF

There is no much negative impact anticipated due to this project in view of meagre area involved that to in the existing road. But the present project if completed with improved condition of road by laying cement concrete surface might have mobility of vehicles with its frequency which may cause disturbance to the adjoining forest and wild life and it is assessed that the impact due to which may have effect on and the following factors of conservation.

3.2.1 Accident or Disturbance to Wildlife:

So far no wildlife accidents have been reported in the existing coupe road (Wheel Track) due to vehicles presently moving along this road. The up gradation to cement road may increase the risk of accidents due to flying of vehicles.

3.2.2 Dust:

The Project shall generate lot of dust. This will cover the leaf surface and affect photosynthesis of plants within the radius of 1 Km.

3.2.3 Noise:

Movement and operation of machineries and of transport vehicles shall generate some noise. Noise induces physiological and behavioural changes. No blasting should be done which will result in considerably less noise pollution.

3.2.4 Forest fire:

Due to increase in human activities, negligence etc. forest fire may take place. Fire is mostly anthropogenic in origin. This, in turn, may deprive wildlife of their cover and food.

Human-Wildlife Conflict: 3.2.5

This is a general impact where any development is undertaken in forest area. In this project also, the conflict is likely to increase due to conversion of this cement road.

All these perceived impacts/threats due to this project needs be removed through different measures in order to improve the habitat for wildlife so that their status can be enhanced and healthy environment is created. The required mitigation measures based on the above impacts, factors have been outlined as below.

4. PROPOSED WILDLIFE MITIGATION MEASURES

4.1 SAFEGUARD TO WILDLIFE PASSAGE

At present, there is already a coupe road where this cement road is going to be constructed. A wheel track has already been laid on this coupe road. There is no need to cut any trees here to form this cement road. This reserved forest covers an area of 192.634 Hectares. Here some Indian Guars roam. Also some other wild animal species are seen. There is no wildlife passage route identified across this existing coupe road. So when this road is converted into a cement road it may cause harm to wildlife especially Indian Guar crossing the road. Hence, speed breakers should be installed at regular intervals (around 400 m interval) to reduce the speed of vehicles to prevent harm to wildlife.

4.2 **Dust control:**

Dust generated due to face activities and movement of vehicles during formation of road affects the wild animals and plants. This will be mitigated by sprinkling of water thrice daily on roads to keep the road damp. Sprinkling with water shall prevent the fugitive emission of dust.

4.3 Noise control:

Noise due to machine operation and vehicles is likely to disturb wildlife. This would be minimized to least possible level. This would be achieved by proper maintenance of machinery and use of efficient muffling devices.

4.4 Smoke control:

Generation of smoke adversely affects the flora and fauna. Effort should be taken by the user agency to use standard machineries and vehicles and no smoke generating activities will be carried out.

4.5 Fire control:

The accidental fires in the project area shall be extinguished immediately. Hence in project area no fire will be allowed to spread to any part including nearest vegetation. All precautionary measures should be taken by the User Agency

4.6 Creation of Fire line

In order to control of forest fire if any, fire line on the side of road will act as a fire barrier from spreading to adjoining forest. At least 3m wide fire line shall be created on the side of proposed road at the cost of User Agency.

4.7 Erection of Awareness boards

In order to create awareness among the local people regarding the importance of forest and it conservation awareness boards are required along the road side especially at entry and exit points and in middle portion may be required and cost may borne by the User Agency.

4.8 Creation of Percolation pond

Presently coupe operation in the proposed location near by this road is in planning process. After coupe operation is over, the area will be planted at the cost of department. However, for further maintenance of the planted area among other

components, water requirement for wild animals is much essential. Hence it is proposed to create a percolation pond to improve the quality of the habitat by ensuring soil moisture conservation and improve the ground water table the percolation, which shall be created at the cost of the use agency.

5. GENERAL MITIGATION MEASURES FOR PROTECTION OF FOREST AND WILDLIFE

The following mitigation measures will be adopted during execution of the project for protection of forest and wildlife.

- a) Before start of work in the reserve forest awareness campaign will be taken up by BDO in association with Forest Department to create maximum awareness among the construction workers regarding safeguard of forest and wildlife.
- b) No work shall be allowed at nights (i.e. between sunset & sunrise) in the forest area.
- c) No permanent labour camps will be set up inside the forest area.
- d) No nearby Trees should be damaged during the execution of work.
- e) To minimize the disturbance to wildlife, no new approach road will be constructed in the forest area. The existing coupe road will be utilized for carrying materials.
- f) Eco-friendly engineering practices in the construction works and due care be taken properly so as to avoid injury to wildlife.
- g) All pollution related aspects and waste management will be duly taken care during the implementation of the project.
- h) In addition to above, any other measures as envisaged by the District Forest Officer and as per provisions of Wildlife (Protection) Act, 1972 & Tamil Nadu Forest Act, 1882 will be strictly adhered to during execution of the project

6. Budget requirements

For effective implementation of the mitigation measures as detailed above specific to safeguarding wildlife, financial implication needs to be addressed by the user agency in lieu of the forest land diversion for the project and to ensure the sustainable ecosystem on long term objective. The following budget requirement is arrived at to implement the above mitigation measures.

Rs in lakhs

Sl.no	Name of the component	Physical Qty	Unit cost	Amount
1.	Creation of fire line on either side of road to 3 m width For 2.332 km	2.332 km	0.0853	0.20
2.	Erection of Awareness boards	3 Nos	0.10	0.30
3.	Creation of Percolation Pond	1 No	2.00	2.00
	Total			2.50

(Rupees Two lakh fifty thousand only

7. CONCLUSION

Mitigation measures are the essential requirement while according diversion proposals to the various agencies for ensuring sustainable ecosystem on long term basis. for the cause of conservation and protection of forest habitat. In order to mitigatein case of any negative impact on the possible effect of the above said measures due to the project, a mitigation plan is to be put in place so that the entire lease period can be monitored irrespective of the area under diversion.

> Udhagamandalam **District Forest Officer** Nilgiris Forest Division