

Subject : Diversion of 57.02 ha. of Forest land in favour of M/s KERALA FOREST DEPARTMENT for Elephant Rescue and Rehabilitation Centre at Kottoor in Thiruvananthapuram District in District Thiruvananthapuram , State Kerala.

1. The State Government of Kerala vide their letter no. **No. C2/73/2019/F&WLD** and date **03-07-2019** submitted the above mentoned proposal to obtain prior approval of central Government, in accordance with Section-2 of the Forest(Conservation)Act,1980.

2. Details indicated in the proposal submitted by the Government of Kerala are as below

FACT SHEET

1.	Project Details	
(i)	Proposal No	FP/KL/Others/40384/2019
(ii)	Name of the Proposal	Elephant Rescue and Rehabilitation Centre at Kottoor in Thiruvananthapuram District
(iii)	Short Narrative of the proposal and Project/scheme for which the forest land is Required	The proposal is to divert 57.02 hectares of forest land in Kottoor reserve in Thiruvananthapuram District for the establishment of Elephant Rescue and Rehabilitation Center. 50 elephants will be housed in the Center in near natural conditions. There will be special facilities for rearing baby elepha
(iv)	Category	Others
(v)	Total Area of the Forest Land (in ha.):	57.02
(vi)	Total period for which the forest land is proposed to be diverted(in years)	99
2.	Location:	
(i)	State	Kerala
(ii)	District	Thiruvananthapuram
3.	Detail of user agency	
(i)	Name of the user agency	KERALA FOREST DEPARTMENT
(ii)	Shape of forest land proposed to be diverted	Non Linear
(iii)	Legal status of User Agency	State Government

4. Legal status of forest land proposed for diversion

S. No.	Division	Forest Land(ha.)	Legal Status
1	Thiruvananthapuram WL	57.02	Reserved Forest

5. Land use plan

Component wise breakup			
S.no	Component	Forest Land(ha.)	Non-Forest Land(ha.)
1	Facilities for Elephants	2.48385	0
2	Office Facilities and Hospital	1.0323	0
3	Water Conservation Works	1.415	0
4	Accommodation for Mahouts, Staff and Officers	0.5556	0
5	Water Supply Facilities	0.3435	0
6	Electrification	0.24175	0
7	Forest Road	1.597	0
8	Waste Disposal Facilities	0.1873	0
9	Visitor Facilities	0.6257	0
10	Chain Link Fencing	0.0675	0
Total		8.5495	0

6. Vegetation

(i) Species-wise and diameter class wise enumeration of trees

1.Division Name :Thiruvananthapuram WL

Species-wise local/scientific names and girth-wise enumeration of trees at FRL

S. No.	Scientific Name	Local Name	(0-30)cm.	(31-60)cm.	(61-90)cm.	(91-120)cm.	(121-150)cm.	(>150)cm.
1	Artocarpus Hirsuta	Anjily	0	145	147	49	119	140
2	Others	charu		30	28	49	21	42
3	Others	cheru punna						7
4	Others	Edana		189	108	21		7
5	Dalbergia Latifolia	Eetty				14	7	
6	Others	Elappatty		7				
7	Eucalyptus spp	Eucalyptus		7	21	7		
8	Others	Eyyoli		196	144	98	28	
9	Terminalia Chebula	Kadukka		7		7		7
10	Others	kaivan karadi		7	14			
11	Hopea parviflora (Kiral bogi)	Kambakom		64	14	7		28
12	Others	kambili vetty		14	21	7		
13	Others	Kara		14	7	14		
14	Others	Karivetty		14	21	14		
15	Others	Kattukoravi		7				
16	Others	Kattu punna		7	7			
17	Others	kattu rubber		772	147	56	49	
18	Others	kattu punna		50	14	21	35	35
19	Others	Konna		7	14			
20	Garcinia Combogia	Kudampuli			14	21		
21	Gmelina Aroborea	Kumbil		7	14	7		7
22	Others	Kundalapala			14			
23	Others	Malamuringa				7		
24	Others	mala punna		28	7			
25	Others	Manali		71	28		7	
26	Terminalia Paniculata	Maruthy		3607	2478	847	301	459
27	Others	Moonga pezhu		14	7			
28	Others	Mottal		177	63	14		
29	Others	Mullu venga			21		14	14
30	Others	Myla		130	155	105	56	105
31	Embllica Officianalis	Nelli		43	42		7	
32	Others	Pachotti		85				
33	Alstonia Scholaris	Pala		871	289	147	14	42
34	Others	pathiri		28	7	7		
35	Others	Pezhu		155	56	49	21	7
36	Others	Pongu		7	7			
37	Others	Poruvan		7				
38	Calophyllum Inophyllum	Punna		7	7	14	28	7
39	Terminalia bellerica	Thanni		15	56	35		7
40	Terminalia Tomentosa	Thempavu		50	70	21	29	7
41	Others	Uthi		37	42	56	49	84
42	Others	Varangu		49				
43	Others	Vatta		255	177	91	56	7

44	Cinnamomum Zeylanicum	Vayana		64	28			
45	Others	Vetty		1682	452	70	7	
46	Others	Vella pongu		7				
47	Others	Velleety		7				
48	Pterocarpus Marsupium	Venga		7	23	119	84	21
49	Others	Venkotta		28		7		
50	Ficus Religiosa	Aal						7
51	Acacia Auriculiformis	Acacia		684	700	997	155	49
52	Others	Athi		14		14		
53	Terminalia Catappa	badam				14		
54	Others	Cila		7				
55	Mimusops Elengi	Elanji			7			
56	Bombax Ceiba	Elavu					7	
57	Others	Iruva		14				
58	Others	Izhuva		43	28		14	
59	Others	Kadambu		21		7		
60	Cassia Fistula	Kani konna		14	7	7		
61	Diasporus Melanoxydon	kari maram			7			
62	Anacardium Occidentale	kasumavu		108	98	49	35	
63	Others	kattu konna					7	
64	Others	kattu thechy		21	7			
65	Sweitinia Mahagony	Mahagany		35	115	49	77	49
66	Melia Azadirachta	Malaveppu						7
67	Adina cordifolia	Manja kadambu			7			
68	Adenantha Pavonina	Manjadi		14		7		
69	Others	manjanathy		21				
70	Others	manjium				7		
71	Others	manjium				7		
72	Others	marotti			7			
73	Mangifera Indica	mavu			7			
74	Others	Mullilavu		7				
75	Erythrina Indica	Murukku			7			
76	Others	Njara		43	21			
77	Syzigium Cumini	Njaval			14			
78	Pongamia Pinnata	Ungu		28	7			
79	Others	parijatham		14		7	7	
80	Psidium Guajava	Pera		7				
81	Ailanthus excelsa	Perumaram		242	183	63	56	42
82	Artocarpus Heterophyllus	Plavu		7		14	14	7
83	Others	Pongu				7		
84	Others	poomaruthy		7			7	7
85	Albzzia Spp.	Puloivaga						7
86	Others	punnakadambu		22	21	14	14	7
87	Red Sanders	raktachandanam			7			
88	Tectona Grandis	Teak		7				

(ii)	Density of Vegetation	S.No.	Division Name	Density	Eco Class
		1	Thiruvananthapuram WL	0.5	Eco 1
(iii)	Total numbers of trees to be filled	S.No.	Division Name	Total numbers of trees	
		1	Thiruvananthapuram WL	22153	
(iv)	Total Tree to be retained .	S.No.	Division Name	Less than 60(in cm.)	Greater than 60(in cm.)
		1	Thiruvananthapuram WL	10355	11798
7.	Vulnerability of area to soil erosion	S.No.	Division Name	Vulnerability of area	
		1	Thiruvananthapuram WL	Forest is not at present vulnerable to erosion. Minimum earth cutting is proposed during construction. So erosion will not be induced during construction.	
8.	Approximate distance of proposed site for diversion from boundry of forest (in Km.)	S.No.	Division Name	distance from boundry of forest(Km.)	
		1	Thiruvananthapuram WL	3	
9.	Significance of the forest land proposed for diversion from wildlife point of view				
(i)	Details of wildlife present in and around the forest land proposed for diversion	S.No.	Division Name	Details of wildlife diversion	
		1	Thiruvananthapuram WL	Elephant, gaur, sambar deer, wild boar and porcupine visit the northern portion of the proposed forest land.	
(ii)	Whether forms part of national park, wildlife sanctuary, biosphere reserve,tiger reserve, elephant corridor, wildlife migration corridor etc.	S.No.	Division Name	National park/Wildlife sanctuary/Biosphere reserve/Tiger reserve/Elephant corridor/Wildlife migration corridor	
		1	Thiruvananthapuram WL	No	
(iii)	Whether the forest land proposed for diversion is located within eco-sensitive zone(ESZ) of the Protected Area notified under Wildlife(Protection) Act,1972 (Note: In case, ESZ of a Protected Area is not notified,then,10kms distance from boundary of the Protected Area should be treated as ESZ)::	S.No.	Division Name	Diversion is located within ESZ	
		1	Thiruvananthapuram WL	No	
(iv)	Whether any national park, wildlife sanctuary, biosphere reserve, tiger reserve, elephant corridor, wildlife migration corridor etc., is located within 1 Km. from boundary of the forest land proposed for diversion :	S.No.	Division Name	Location of reserve/corridor within 1 Km. from boundary of the forest land	
		1	Thiruvananthapuram WL	The project is a conservation oriented project. Elephants are kept in the Rescue and Rehabilitation Centre in teh natural habitat. So the project serves purpose ancilalry to wildlife conservation.	
(v)	Whether any rare/endangered/unique species of flora and fauna found in the area :	S.No.	Division Name	flora and fauna found in the area	
		1	Thiruvananthapuram WL	No	

10.	Whether any protected archaeological/ heritage site/ defence establishment or any other important monument is located in the area. if so, the details thereof with NOC from competent authority, if required.	S.No.	Division Name	Details of with NOC from competent authority	
		1	Thiruvananthapuram WL	No	
11.	Whether the requirement of forest land as proposed by the User Agency is unavoidable and bare minimum for the project.if no,recommended area item-wise with details of alternatives examined.	Yes			
12.	Whether any work in violation of the Act has been carried out(yes/No).if yes,details of the same including of the work done,action taken on erring officials. Whether work in violation is still under progress.	Details of violation(s), if any ,committed			
		Division Name	Details of violation(s)	Period of Work done(year)	Area of forest land involved in violation (in ha.):
		Thiruvananthapuram WL	No	No	No
13.	Details of compensatory afforestation scheme				
(i)	Patch wise details of non-forest or Revenue forest land to be provided by User Agency for CA				
	Patch Wise Details				
	S.no	District Name	Village	Area(in ha.)	
	1	Thiruvananthapuram	Mannoorkkkara	55.57	
	Total	Area :55.57			
(ii)	Patch wise details for Degraded Area (To be earmarked by DFO)				
	No Data				
(iii)	Total Financial Outlay for C.A(lacs):	S.No.	Division Name	Total Financial Outlay for C.A(lacs)	
		1	Thiruvananthapuram WL	34.83	
(iv)	Whether the land identified by User Agency is suitable for CA and from management point of view:	S.No.	Division Name	Land is suitable for CA	
		1	Thiruvananthapuram WL	Yes	
14.	Documentary evidence in support of settlement of rights in accordance with the provisions of the scheduled Tribes and other Traditional Forest Dwellers(Recognition of forest Rights) Act,2006 on the forest land proposed to be diverted enclosed.	Not given			
15.	Whether the project requires environment Clearance	No			
16.	Catchment Area Treatment Plan	--			
17.	Rehabilitaion of Outstee				
(i)	Number of SC Families	0			
(ii)	Number of ST Families	0			
(iii)	Number of Backword Families	0			
(iv)	Copies of R&R Plan	--			
18.	Cost Benefit Analysis	Given			
19.	Total cost of the project(in crore):	10822			
20.	Employment Potential	Permanent Employee : 215 Temporary Employee : 64500 Total Employee : 64715			
21.	Details of Mining lease	No			
22.	Undertaking to bear the cost of CA and NPV	--			

23. District Profile

S.no	District Name	Geographical area of the district (in ha.)	Forest area of the district (in ha.)	Total forest area diverted since 1980 (in ha.)	No. of Approved Cases	Forest Land including penal C.A. (in ha.)	Progress of compensatory afforestation as on(date)	Forest land (in ha.)	Non-forest land (in ha.)
1	Thiruvananthapuram	219200	46383.41	232.180853	30	433	31/05/2019	5304.5	0

24.	Total area proposed for afforested since 1980 -	Degraded forest land - 433 Penal CA over Forest land - 5304.5 Non-Forest land - 0 Total- 5737.5
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25.	Total area afforested since 1980 -	Degraded forest land - 433 Penal CA over Forest land - 5304.5 Non-Forest land - 0 Total- 5737.5
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26. Site Inspection Report

Division	Circle	Site Inspection By	Date Of Visit	Brief Details of SIR at DFO
Thiruvananthapuram WL	Agastyavanam Biological Park Circle, Thiruvanantha	DFO	01/06/2019	since the area is the fringe forest of typical wild elephant habitat and is accessible through good network of roads existing outside forest and is close to Neyyar Reservoir, a perennial source of water, the site is most suited to establish Elephant Rescue and Rehabilitation Centre.
	Agastyavanam Biological Park Circle, Thiruvanantha	CF	03/06/2019	The proposed site for establishment of Elephant Rehabilitation Centre at Kottoor was inspected by the undersigned along with the Wildlife Warden and other field staff on 30th May 2019. A total area of 57.02 Ha. of forest land has been proposed to be diverted for establishment of the said centre in which the Kerala Forest Department is the user agency. The area proposed to be diverted has been identified in three units viz. rescue and rehabilitation centre requires an area of 56.8654 ha, the post mortem and crematorium area requires 0.1238 Ha and the watch tower requires 0.030897 ha. area. The area is not vulnerable to erosion as the ground cover is very thick and the slope is moderate. The proposed construction activities are confined to less than 15 percent of the total forest area. It is seen that the proposed area does not contain archaeological and heritage sites, defence establishment or any other monument of historical importance. No tribal hamlets are situated in the proposed land. It is not an area used by the tribals for collection of NTFP. The proposed area does not form part of any Protected Area or elephant corridor. Anoop K.R., I.F.S Conservator of Forests Wildlife Thiruvananthapuram
		Nodal Officer	17/06/2019	Project will not adversely affect the wildlife of area and also does not contain any monument of historical religious archeological or defense establishemnt. The requirement of forest land proposed by User Agency in avoidable and bare minimum.

27. Recommendation with Specific conditions, (if any)

DFO/CF/PCCF/Nodal Officer

Division	Circle	Recommendation By	Recommendation	Remarks/Conditions
Thiruvananthapuram WL	Agastyavanam Biological Park Circle, Thiruvanantha	DFO	Recommended	The proposal is for meeting twin objectives of managing human wild elephant conflict and welfare of captive elephants in the State. The State has about 3500 elephants in the wild and about 600 elephants in captivity.
	Agastyavanam Biological Park Circle, Thiruvanantha	CF	Recommended	The occurrences of human wildlife conflict are on a rise in Kerala. Some of the very problematic elephants need to be secured and kept in controlled conditions in order to prevent further loss of human life and property. The orphaned and abandoned elephant calves also require proper shelter and care. This centre has been designed to provide the elephants with a semi wild habitat for maintaining their natural activities as in the wild. The undersigned strongly recommends the sanction of this project. Anoop K.R., I.F.S Conservator of Forests Wildlife Thiruvananthapuram
		Nodal Officer	Recommended	The significance of the project and fact that the Kerala Forest Department is the User Agency recommend proposal for diversion of 57.02 ha of Reserve Forest land for the project

28. Specific recommendation of the State Government

State	Recommendation By	Recommendation	Remarks/Conditions

Kerala	State Secretary	Recommended	
29.	Forwording Letter for Nodal Officer	The project may be recommended to the Secretary, MoEF& CC New Delhi for its approval	
30.	Forwording Letter for State Government	The State Government of Kerala vide their letter No. C2/73/2019/F& WLD dated 03.07.2019 recomended the proposal subject to certain conditions including for renewal of approval after 20 years.	

Comments of Additional Information By :

i. DSS & GIS Division Remarks

ii. TO Remarks

The site proposed for diversion 57.02 hectares of forest land for establishing the Elephant Rescue and Rehabilitation Centre (ERRC) at Kottoor in Thiruvananthapuram Mahesh Kumar Shambhu, DIGF(Central), Regional Office, MoEF& CC, Bangalore in the presence of Shri K.T. Verghese, Retd PCCF& Consultant, Shri Anoop August, 2019. The SIR is reproduced below

1. Legal status of the forest land proposed for diversion.

The land is Reserved Forest notified under section 19 of the Kerala Forest Act.

2. Item-wise break-up details of the forest land proposed for diversion.

The detailed break-up of forest land for various facilities comes to 8.55 hectares as per the proposal. The balance area of 48.47 hectares will be used for foraging of th

Computation of Forest Area Required for Various Facilities in ERRC, Kottoor as per the proposal			
S. N.	FACILITY	Area Required in Sq. M.	REMARKS
1	ENTRANCE PLAZA	858.070516	Land for the building
2	ADMIN BLOCK	987.6656361	Do
3	R& T CENTRE	1862.876383	Do
4	ELEPHANT MUSEUM	3411.456729	Do
5	VETERINARY CLINIC	874.5261898	Do
6	STAFF QUARTERS A	695.6505216	Do
7	STAFF QUARTERS B	977.894289	Do
8	OFFICERS QUARTERS	670.3031595	Do
9	MAHOUT BACHELOR ACCOMODATION	1008.961921	Do
10	MAHOUT FAMILY ACCOMODATION	2202.857371	Land required for fou

11	LADIES HOSTEL (for trainees)	596.3522541	Land for the building
12	MENS HOSTEL (for trainees)	1051.179392	Do
13	CAFETERIA	375.7279895	Do
14	COTTAGE RENOVATION VISITORS	0	Existing Buildings. N
15	COTTAGE RENOVATION MAHOUT	0	Do
16	COMMUNITY HALL RENOVATION	0	Do
17	INTERPRETATION CENTRE RENOVATION	0	Do
18	CANTEEN RENOVATION	0	Do
19	DINING BLOCK	478.9460488	Land for the building
20	TOILET BLOCK	359.3361328	Do
21	MAIN GATE	2.109935799	Do
22	DRIVERS AMENITY	54.98961566	Do
23	HMV PARKING	105.365505	Do
24	LMV PARKING	33.75897278	Do
25	OFFICERS PARKING	61.67576777	Do
26	PARKING 1	2908.898154	Do
27	PARKING 2	1127.812261	Do
28	ELEPHANT KITCHEN AND STORE	1379.335363	Do
29	VIEWING DECK	12.1532302	Do
30	SUBSTATION	165.0251119	Do
31	RETAINING WALL	105.4967899	Area of the foundation
32	CULVERT	416.3606643	
33	CHAIN LINK FENCING	675.1794556	Total length multiplied the area.

34	FILLING OF EXISTING TRENCH	0	
35	ROAD TYPE A	0	Existing Road
36	ROAD TYPE B	2053.670844	Part of the road is exi area is included.
37	MATERIAL COLLECTION FACILITY	87.02312983	Land for the building
38	COMPOUND WALL	131.2848941	Length of the comp foundation taken.
39	SUMP 1	82.52193346	Actual land area occu
40	SUMP 2	105.9656646	Do
41	OVERHEAD WATER TANK	33.75897278	Do
42	PUMP HOUSE	5.626495463	Do
43	ETP	82.52193346	Area of the treatment
44	POND 1	2897.645164	Area covered by max
45	OPEN EXIHIBITION	1312.848941	Land for the building
46	POND 2	11252.99093	Area covered by max
47	WATER SUPPLY	3207.102414	Area covered by the t
48	SEWAGE LINE	464.1858757	Do
49	CREMATORIUM	1157.182567	Land for the building
50	DUNG RECYCLING UNIT	937.7492439	DO
51	Fodder storage shed	49.70070993	Do
52	Mahout night shelter	223.18432	Area for four units
53	Road Type C	9900	Actual length of the r
53a.	Road to elephant enclosures.	3600	Actual length of the r
54	Elephant Enclosure	0	Existing
55	Elephant Enclosure-2	0	Existing

56	Hand Rearing Centre	1462.88882	Land for the building
57	Elephant Enclosure 3	849.6008149	Length of enclosure : of pond+ area of tethe
58	Elephant Enclosure 4	839.2855733	Do
59	Elephant Enclosure 5	1238.766751	Do
60	Elephant Enclosure 6	783.0206186	Do
61	Elephant Enclosure 7	949.939984	Do
62	Elephant Enclosure 8	980.8857091	Do
63	Elephant Enclosure 9	1012.769183	Do
64	Elephant Enclosure 10	971.5082166	Do
65	Elephant Enclosure 11	986.5122046	Do
66	Elephant Enclosure 12	714.5649238	Do
67	Elephant Enclosure 13	755.4507909	Do
68	Elephant Enclosure 14	838.347824	Do
69	Elephant Enclosure 15	808.3398482	Do
70	Elephant Enclosure 16	896.4882771	Do
71	Elephant Enclosure 17	813.0285944	Do
72	Elephant Enclosure 18	825.2193346	Do
73	Elephant Enclosure 19	784.8961171	Do
74	Elephant Enclosure 20	939.6247424	Do
75	Elephant Enclosure 21	806.4643497	Do
76	Elephant Enclosure 22	943.3757393	Do
77	Elephant Enclosure 23	775.5186247	Do
78	Elephant Enclosure 24	682.6814495	Do

79	Kraal Type 1	270.0717822	Actual area of forest l
80	Kraal Type 2	264.4452868	Actual area of forest l
81	Biogas plant	186.6120995	Actual area of forest l
82	Material collection facility	87.21067968	Do
83	Composting Unit	28.13247732	Do
84	Electrification	2252.473684	Length of trenching fi
85	Trench renovation (Enclosure 1 & 2)	1406.623866	Area of earth cutting
86	Watch Tower	140.6623866	Actual forest area req
	Total	85495.51015 Sq. M	

3. Whether proposal involves any construction of buildings (including residential) or not Yes

It yes, details thereof.

The details of construction of buildings for office, residence and other purpose are given below, which are confined to less than 15% of the proposed area

1	ENTRANCE PLAZA	858.070516	Land for the building plus the land for court yard included.
2	ADMIN BLOCK	987.6656361	Do
3	R& T CENTRE	1862.876383	Do
4	ELEPHANT MUSEUM	3411.456729	Do
5	VETERINARY CLINIC	874.5261898	Do
6	STAFF QUARTERS A	695.6505216	Do
7	STAFF QUARTERS B	977.894289	Do
8	OFFICERS QUARTERS	670.3031595	Do

9	MAHOUT BACHELOR ACCOMODATION	1008.961921	Do
10	MAHOUT FAMILY ACCOMODATION	2202.857371	Land required for four units included
11	LADIES HOSTEL	596.3522541	Do
12	MENS HOSTEL	1051.179392	Do
13	CAFETERIA	375.7279895	Do
14	COTTAGE RENOVATION VISITORS	0	Existing Buildings. Area not computed.
15	COTTAGE RENOVATION MAHOUT	0	Do
16	COMMUNITY HALL RENOVATION	0	Do
17	INTERPRETATION CENTRE RENOVATION	0	Do
18	CANTEEN RENOVATION	0	Do
19	DINING BLOCK	478.9460488	Land for the building plus the land for court yard included.
20	TOILET BLOCK	359.3361328	Do
21	DRIVERS AMENITY	54.98961566	Do
22	HMV PARKING	105.365505	Do
23	LMV PARKING	33.75897278	Do
24	OFFICERS PARKING	61.67576777	Do
25	ELEPHANT KITCHEN AND STORE	1379.335363	Do
26	VIEWING DECK	12.1532302	Do
27	MATERIAL COLLECTION FACILITY	87.02312983	Land for the building plus the land for court yard included.
28	CREMATORIUM	1157.182567	Land for the building plus the land for court yard included.
29	DUNG RECYCLING UNIT	937.7492439	DO
30	Fodder storage shed	49.70070993	Do
31	Mahout night shelter	223.18432	Area for four units included

TOTAL	20513.92296
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4. Total cost of the project at present rates The total cost of the project at present cost is Rs. 108.21 crores as per the proposal.

5. Wildlife The area is part of the territorial Forest Range adjoining Neyyar Wildlife Sanctuary. Wild animals like elephant, gaur, sambar deer, wild boar, etc. are occasionally seen. It may be seen that the purpose of diversion is for rehabilitation of wild and captive elephants and is aimed at wildlife conservation, the same is recon forest land is part of Agasthyamala Biosphere Reserve and supplements the broad objectives of the Biosphere Reserves.

6. Vegetation -

Total number of trees to be felled 2967 Numbers, which include 366 *Acacia auriculiformis* trees

Effect of removal of trees on the general ecosystem in the area Of the total number of trees to be felled, 46 % are those below 60cm girth. Majority of the trees forming part of secondary growth as informed as the area has the history of clear felling and raising plantation in the past. The removal of the above mentioned trees will impact on the general ecosystem of the area, as the area is generally well stocked and the proposal is for the larger good of elephant rescue & rehabilitation.

Important species The important species include *Artocarpus hirsuta*, *Sweetenia macrophylla*, *Vitex pubescens*, *Terminalia paniculata*, *Persea machrantha*, *Alstonia scholaris*, *Lannea coromandelica*, *Pterocarpus marsupium*, *Antidesma lidleyana*, *Acacia auriculiformis* etc.

Number of trees to be felled of girth below 60cm 1377 numbers

Number of trees to be felled of girth above 60cm 1590

7. Background note on the proposal The Elephant Rescue and Rehabilitation Centre Project aims at establishing State-of-the-Art-Elephant Rehabilitation Centre in Kottor District. It is proposed to be developed over 57.02 hectares of forest area forming part of Kottor Reserved forest falling in ABP Territorial Forest Range in Wildlife Division, Kerala State is pioneer in bringing out Kerala Captive Elephants (Maintenance and Management) Rules, 2003, which are comprehensive rules for the upkeep and care of wild and captive elephants in the State would need rehabilitation under the following circumstances.

- a. Aged elephants in the Elephant Camps of Forest Department would require special care in the natural habitat.
- b. Even though the State has long history of using elephants during solemn occasions and elephants occupy prominent position in the culture, instances of capture and killing of elephants are on the increase. Effective enforcement of law in such cases would be possible only if such elephants are seized by the department and kept in a Rehabilitation Centre.
- c. Every year many baby elephants get stranded in forest areas and in habitations along forest fringes. Such baby elephants need rescue and rehabilitation as they are normally do not happen.
- d. Human-Wild Elephant conflict is on the increase in the State as in all other elephant States. Damage to life, crops and property due to straying of wild elephants lead to public outcry for capture and relocation. There is tendency among the public to protest against release of such captured elephants in the forest areas elsewhere of such elephants. Such elephants are generally kept in temporary kraals in Elephant Camps which is not a good practice. Such elephants need proper rehabilitation.

The Rehabilitation Centre at Kottor which started in 1997 with two rescued calf elephants is now housing 18 elephants. The problem of cruelty towards captive elephants was deliberated in detail in the State Board for Wildlife which met on 16-08-2016. A decision has been taken to enlarge the facilities in the Centre for housing elephants under the above circumstances

Facilities for housing 50 elephants in near natural conditions are proposed. Elephants will be housed individually and in groups in enclosures surrounded by steep embankments. Exclusive facilities for baby elephants and elephants in *musth* are proposed. Provision is there for taking the elephants for grazing in the adjoining forest. The entire site has water holding ponds, 2.475 kilometers of earthen road, Administrative Office, Research & Training Centre, Hostel facility for R& T Centre, Accommodation facilities for staff quarters, Veterinary Hospital, Elephant Kitchen, Elephant Natural History Museum, Cafeteria, Parking Area etc are the facilities being constructed.

The DPR and Master Layout Plan had been submitted to the Central Zoo Authority for approval in June 2018. As per F. No. 20-7/2018-CZA(PKR)/552/2019 dated 16-08-2016 conveyed in *-principle* approval under section 38 H(1A) of the Wildlife (Protection) Act, 1972 for establishment of the Elephant Rescue and Rehabilitation Centre at Kottor.

In the proposed Elephant Rescue and Rehabilitation Centre at Kottor, the elephant enclosures are separated from the visitor area by constructing 2-meter-high concrete wall. Authority. The visitors are not allowed entry to the elephant area. However, the visitors would get chance to see the elephants from a distance when the elephants are foraging.

8. Compensatory afforestation -

Whether land for compensatory afforestation is suitable from plantation and management point of view or not Yes. It is certified by the concerned Deputy Commissioner.

Whether land for compensatory afforestation is free from encroachments/ other encumbrances Yes, as per proposal submitted.

Whether land for compensatory afforestation is important from Religious/ Archaeological point of view No, as per proposal submitted

Land identified for raising compensatory afforestation is in how many patches, whether patches are compact or not The details of land for compensatory afforestation equivalent in extent i.e., 57.02 ha has been identified in Wayanad North Division. Since it is mountain grass land and tree planting is not possible, for tree planting purpose 3 patches have been identified, one in ABP Territorial Range in Thiruvananthapuram Wildlife Division and the other one in Mannarappara Forest Range in Konni Forest Division.

Sl. No.	Name of Forest Division	Name of Forest Range	Name of Location	Extent in Hectare	Present Status
1	Wayanad North	Mananthavady	Banasura mala	57.07	Non-forest land with Revenue Department- mountain
1	Thiruvananthapuram Wildlife	ABB Territorial	Nellimoodu	55.57	Open degraded forest
2	Konni	Mannarappara	Mannarappara	37.00	Open degraded forest

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Map with details Attached in the proposal.

Total financial outlay As per the norms followed by the Ministry, for establishing facilities which come under the category of Zoo and Animal Rescue Centre, on in degraded forest land having extent of in 30 % of the area diverted. Detailed scheme for compensatory afforestation has been prepared and the total cost is Rs. 40.37

9. Whether proposal involves violation of Forest (Conservation) Act, 1980 or not. If yes, a detailed report on violation including action taken against limited establishment as an elephant camp exists at the site. The present proposal seeks expansion of the same.

10. 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 ousters in and around the said forest. NA

11. Reclamation Plan Details and financial allocation. NA

12. Details on catchment and command area under the project. Catchment area treatment plan to prevent siltation of reservoir. NA

13. Cost benefit ratio The Cost-Benefit Ratio is worked out as per the guidelines issued by the Ministry. The Benefit Cost value is 1.1.

14. Recommendations of the Principal Conservator of Forests/State Government.

Principal Chief Conservator of Forests & Chief Wildlife warden, Principal Chief Conservator of Forests & Nodal Officer and the State Government have

15. Recommendations of Regional Chief Conservator of Forests along with detail reasons.

Dy. Director General (Central) forwarded the SIR done by DIGF (Central) vide his letter no.4-KLA 1202/2019-BAN/783

16. Regional Chief Conservator of Forests shall give detailed comments on whether there are any alternatives routes/alignments for locating the project.

The present proposal is an elephant rescue and rehabilitation project which is primarily a forestry (and wildlife) activity and has to be near and within the forests to avoid this proposal is basically an expansion and upgradation project of the existing elephant camp at this place which already houses 18 elephants.

17. Utility of the project. Numbers of Scheduled Castes/Scheduled Tribes to be benefited by the project As per the DPR of the Project, 215 persons will be fully operational. Out of this, 100 persons will be engaged from SC/ST population

18. Whether land being diverted has any socio-cultural /religious value. - No

Whether any sacred grove or very old grown trees/forests exists in the areas proposed for diversion - No

19. Situation w.r.t. any P.A. The nearest PA is Neyyar Wildlife Sanctuary. The preliminary notification of Eco Sensitive Zone has been issued by the Ministry. Outside the ESZ and 26.7806 ha fall in ESZ.

20. Any other information relating to the project CZA has already issued *in principle* approval to establish the Elephant Rescue and Rehabilitation (PKR)/552/2019 dated 27-03-2019.

- As per the guidelines issued by the Ministry of Environment, Forest & climate Change as per F.No11-29/2015-FC dated 30-05-2019, it is stated that *centers are established inside forest by the State Government purely for rehabilitation and recapitulation and not for public display and enjoyment then the establishment of forestry and wildlife activity within the meaning of Forest Conservation Act, 1980 as provided in explanation (b) of the section 2 of the FC Act. Provided further that part of Zoo and Safari or otherwise where wild animals are kept also for exhibition to the public, then the establishment of such facilities shall be treated as non-forest and provisions of FC Act shall be applicable.* & *rdquo*

- During the visit it was mentioned that training, and hence facilities, are proposed to Veterinary Students and Mahouts in the proposed centre on regular basis.

This is a proposal for rescue and rehabilitates the elephants and majority of the area proposed for diversion is kept aside for the foraging of the elephants. The rescued elephants. Following specific points may be noted while considering the proposal

- Alternate land equivalent to the forest area being diverted is identified, but it being grassland, plantation is not proposed there. Plantation is proposed in 92.57 ha.

- 2967 trees are proposed for felling. We may advice to cut trees only where it is essential. Tree felling may be avoided where it is not essential, like along

- FRA compliance may be insisted upon.

The facts related to the proposal may be placed before FAC in its forthcoming meeting scheduled to be held on 26th September, 2019 for their examination and approval.

