

Wildlife Mitigation Plan for diversion of 4.2339 Ha (recommended out of 8.50 Ha proposed) of forest land for widening from single lane road to double lane road from Khammampally to Bhupalpally Road from Km 12/2 to 19/6 in Bhupalpally Division of Jayashankar Bhupalpally District

Introduction:

The proposed project involves the widening of a single-lane road to a double-lane road, which will require the diversion of 4.2339 Ha of forest land. The project area is located Tadicherla RF of Koyyuru Range of Bhupalpally Division, and it is important to consider the potential impact of the project on wildlife in the area.

Objectives:

The primary objective of this wildlife mitigation plan is to minimize the impact of the project on wildlife and their habitats by implementing appropriate mitigation measures.

The specific objectives are as follows:

- ❖ Identify the potential impacts of the project on wildlife and their habitats.
- ❖ Develop mitigation measures to minimize the impact of the project on wildlife and their habitats.
- ❖ Implement the mitigation measures during the construction and operational phases of the project.
- ❖ Monitor and evaluate the effectiveness of the mitigation measures.

Potential Impacts:

The proposed project could potentially impact the following wildlife species and their habitats:

- ❖ Mammals: Indian hare, Indian wild boar, Indian pangolin, and Indian porcupine.
- ❖ Birds: Indian peafowl, Indian grey hornbill, black drongo, and Indian robin.
- ❖ Reptiles: Indian rock python and Indian cobra.
- ❖ Flora : Kanuga, Tuniki, Palakodishe, Vepa, Batteduddi, Chennangi, Nallamaddi, Thagaramogili, Billudu
- ❖ The potential impacts of the project on wildlife include habitat fragmentation, habitat loss, increased mortality due to roadkill, disturbance to breeding and nesting sites, and increased human-wildlife conflict.

Mitigation Measures:

To minimize the impact of the project on wildlife and their habitats, the following mitigation measures will be implemented:

- ❖ **Habitat restoration:** To compensate for the habitat loss, an equal area of degraded forest land will be restored to its original condition within the project area.
 - i. It is proposed for drilling of borewells (4 Nos) and installation of solar pumps connected to Percolation Tanks for an amount of Rs. 20.00 Lakhs.
 - ii. Creation of Natural Grass lands by uprooting obnoxious seed and sowing of local grass and maintenance of (3) years for an amount of Rs. 17.60 Lakhs.
 - iii. Raising of Pature / Fodder plots with wild grasses including chainlink fence (2 Ha each unit) including maintenance for (3) years for an amount of Rs. 40.00 Lakhs
 - iv. Construction of Integrated Watch Towers (2Nos) with Solar Pump with PT and a room for protection watcher for an amount of Rs. 40.00 Lakhs.
 - v. Engaging of fire protection watchers (5 Nos) for (5) Months from January to June for a period of (5) years and fire tracing on both sides

of the road to a width of 10-20 meters for an amount of Rs. 18.320 Lakhs.

- vi. Creation of view lines of 10 mts width for 20 Kms on either side of the road and maintenance for (5) for an amount of Rs. 20.00 Lakhs

❖ **Wildlife crossings:** To minimize the risk of roadkill, underpasses will be constructed at strategic locations along the project stretch. **(Separate Animal Passage Plan is attached besides this the following activities are proposed).**

- Mitigation of Man animal conflict for a period of (5) years for an amount of Rs. 10.00 Lakhs
- Monitoring of Wildlife purchase of camera traps (40Nos) for an amount of Rs. 5.00 Lakhs
- Engaging of anti poaching (03) Nos for monitoring wildlife for (5) years for an amount of Rs. 26.560 Lakhs.

❖ **Signage:** Signage will be installed at strategic locations to alert drivers to the presence of wildlife crossings and to encourage them to drive cautiously.

- Installation of sign boards (12) Nos at regular intervals of 1 kms to caution the vehicles about animal movement and sensitizing public (size 8 ft x 6 ft) for an amount of Rs. 12.00 Lakhs

❖ **Community engagement:** Awareness programs will be conducted among local communities to educate them about the importance of wildlife conservation and to encourage them to report any wildlife sightings or incidents. **For this an amount of Rs. 11.610 Lakhs is proposed under administrative cost.**

❖ Accordingly Wildlife Mitigation Plan for Rs. 226.090 Lakhs was submitted to the Spl. Chief Secretary, Government vide PCCF, TS, Hyd, Rc.No. 1574/2018/FCA2, dt:22.03.2021. The details are as follows.

Sl No	Item of work	Qty	Rate	Per	Amount (In Lakhs)
1	Implementation of Animal passage plan by constructing underpasses at the locations indicated by DFO, Bhupalpally, duly following the specifications of Wildlife institute of India, Dehradun.	To be executed by the User Agency at their own cost (Detailed animal passage plan attached herewith)			
2	Drilling of bore well and installation of Solar Pumps connected to PTs	4	5.00	Each	20.000
3	Creation of natural grass lands by uprooting obnoxious weeds and sowing of local grass and maintenance for three years	50	0.35	Per Ha	17.600
4	Raising of pature / Fodder plots with wild grasses including chainlink fence (2 Ha each unit) Including maintenace for 03 years .	4	10.00	Ha	40.000
5	Construction of integrated watch tower with solar pump with PT and a room for protection watchers	2	20.00	Each	40.000
6	Engaging of fire protection watchers for 5 months from January to June for a perious of 5 years and fire tracing on both sides of the road to a width of 10 to 20 mts	5 members x 5 years	3.664	per year	18.320

7	Creation of view lines, of 10 mts, width on either side of the road and maintenance for 5 years (Kms)	20	0.200	per km per year	20.000
8	Mitigation of Man Animal Conflict	5 years	2.000	per year	10.000
9	Monitoring of Wildlife purchase of camera traps	40	0.250	Each	10.000
10	Installation of sign boards at regular intervals of 1 km. to caution the vehicles about animal movement and sensitizing public (Size 8ft x 6ft) and maintainance	12	1.000	Each	12.000
11	Engaging anti poaching (03) Nos for monitoring wildlife for 5 years	5	5.312	per year	26.560
Total					226.090

The year wise mitigation plan is as follows.

SI No	Item of work	Amount (In Lakhs)	YEAR WISE MITIGATION PLAN Rs. in lakhs				
			2024-25	2025-26	2026-27	2027-28	2028-29
1	Implementation of Animal passage plan by constructing underpasses at the locations indicated by DFO, Bhupalpally, duly following the specifications of Wildlife institute of India, Dehradun.	To be executed by the User Agency at their own cost. (Detailed animal passage plan attached herewith)					
2	Drilling of bore well and installation of Solar Pumps connected to PTs	20.000	10.000	10.000	0.000	0.000	0.000
3	Creation of natural grass lands by uprooting obnoxious weeds and sowing of local grass and maintenance for three years	17.600	6.000	6.600	2.000	2.000	1.000
4	Raising of pature / Fodder plots with wild grasses including chainlink fence (2 Ha each unit) Including maintainance for 03 years .	40.000	15.000	15.000	5.000	3.000	2.000
5	Construction of integrated watch tower with solar pump with PT and a room for protection watchers	40.000	20.000	20.000	0.000	0.000	0.000
6	Engaging of fire protection watchers for 5 months from January to June for a perious of 5 years and fire tracing on both sides of the road to a width of 10 to 20 mts	18.320	3.000	3.300	3.630	3.993	4.392
7	Creation of view lines, of 10 mts, width on either side of the road and maintenance for 5 years (Kms)	20.000	10.000	3.000	3.000	2.000	2.000
8	Mitigation of Man Animal Conflict	10.000	2.000	2.000	2.000	2.000	2.000
9	Monitoring of Wildlife purchase of camera traps	10.000	5.000	5.000	0.000	0.000	0.000
10	Installation of sign boards at regular intervals of 1 km. to caution the vehicles about animal movement and sensitizing public (Size 8ft x 6ft) and maintainance	12.000	4.000	4.000	2.000	2.000	0.000
11	Engaging anti poaching (03) Nos for monitoring wildlife for 5 years	26.560	4.350	4.785	5.264	5.790	6.369
12	Administrative cost (5%)	11.610	4.368	4.174	1.145	1.039	0.888
Total		226.090	83.718	77.859	24.038	21.822	18.649

Implementation:

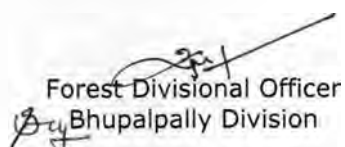
The mitigation measures will be implemented during the construction and operational phases of the project. The User Agency will work closely with the forest department and local communities to ensure the effective implementation of the mitigation measures.

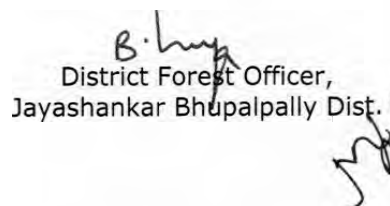
Monitoring and Evaluation:

The effectiveness of the mitigation measures will be monitored and evaluated regularly during the construction and operational phases of the project. The User Agency will work closely with the forest department to monitor the impacts of the project on wildlife and their habitats and to make any necessary adjustments to the mitigation measures.

Conclusion:

The proposed wildlife mitigation plan aims to minimize the impact of the project on wildlife and their habitats by implementing appropriate mitigation measures. The effective implementation of the mitigation measures will help to ensure the sustainable development of the project while safeguarding the biodiversity of the project area.


Forest Divisional Officer
Bhupalpally Division



District Forest Officer,
Jayashankar Bhupalpally Dist.

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2	Drilling of bore well and installation of Solar Pumps connected to PTs	4	5	Each	20.000	10.000	10.000	0.000	0.000	0.000
3	Creation of natural grass lands by uprooting obnoxious weeds and sowing of local grass and maintenance for three years	50	0.35	Per Ha	17.600	6.000	6.600	2.000	2.000	1.000
4	Raising of pasture / Fodder plots with wild grasses including chainlink fence (2 Ha each unit) Including maintenance for 03 years .	4	10.00	Ha	40.000	15.000	15.000	5.000	3.000	2.000
5	Construction of integrated watch tower with solar pump with PT and a room for protection watchers	2	20	Each	40.000	20.000	20.000	0.000	0.000	0.000
6	Engaging of fire protection watchers for 5 months from January to June for a period of 5 years and fire tracing on both sides of the road to a width of 10 to 20 mts	5 members x 5 years	3.664	per year	18.320	3.000	3.300	3.630	3.993	4.392
7	Creation of view lines, of 10 mts, width on either side of the road and maintenance for 5 years (Kms)	20	0.2	per km per year	20.000	10.000	3.000	3.000	2.000	2.000
8	Mitigation of Man Animal Conflict	5 years	2	per year	10.000	2.000	2.000	2.000	2.000	2.000
9	Monitoring of Wildlife purchase of camera traps	40	0.25	Each	10.000	5.000	5.000	0.000	0.000	0.000
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Forest Divisional Officer,
Biy Bhupalpally Division


District Forest Officer,
Jayashankar Bhupalpally District

**U.O.Note to Prl. Chief Conservator of Forests & Nodal Officer
(FCA),
O/o the PCCF(HoFF), TS, Hyderabad.**

U.O.Note No. 5870/2021/WL-1,

Dated:28/05/2023

Sub:TSFD- WL - Diversion of 4.2339 Ha of forest land for widening of
- single lane road to double lane road from Khammampally to Bhupalpally from km 12/2 to 19/6 in Bhupalpally division in favour of District R&B Jayashanker Bhupalpally- Wildlife Mitigation Plan and Animal Passage Plan – Communicated – Regarding.

Ref: 1. DFO JS Bhupalpally Rc.No. 300/2018-TO, dated 24.4.2023.
- 2. PCCF office Rc.No.5870/2021/WL-1, dt.11.04.2023.

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It is to inform that, the proposal in the subject cited was discussed during the 14th REC meeting and the REC has opined that:

"WL Mitigation Plan shall include details of flora and fauna presence in and around the Forest Area proposed for diversion and mitigation measures shall be prepared according to the requirement as per the species present and their habitat requirement and also include suitable animal passage plan".

Accordingly, the this office in reference 2nd cited, had requested the DFO, JS Bhupalpally to furnish a Wildlife Mitigation Plan and suitable animal passage plan duly following the observations of REC.

As requested by this office, the DFO, JS Bhupalpally vide reference 1st cited has furnished a Wildlife Mitigation Plan for an amount of Rs. 226.090 lakhs and an Animal Passage Plan including construction of 7 underpasses. The Wildlife Mitigation Plan and Animal Passage Plan submitted by the DFO are approved by the Chief Wildlife Warden and are enclosed herewith for taking further necessary action in the matter.

Encl:- As above

Rakesh Mohan Dobriyal
Prl. Chief Conservator of Forests HoFF & Chief
Wildlife Warden (FAC)

Signed by Rakesh Mohan
Dobriyal
Date: 28-05-2023 18:50:40
Reason: Approved

// True Copy //


For Prl. Chief Conservator of Forests


30/5/2023

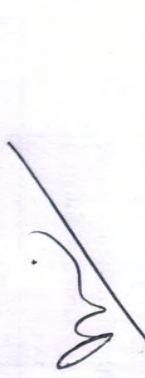
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District Forest Officer,
Jayashankar Bhupalpally District


P. Pri. Chief Conservator of Forests
9/10/23
CWN