Inspection Report of Non-official Members of Regional Empowered Committee, Regional Office of MoEF&CC Ranchi -Jharkhand for widening and strengthen to convert two lanes to four lane NH 31 in Rajauli Wild Life Sanctuary, Bihar.

Proposal No. RO: FP/BH/Road/40700/2019. Diversion of **10.368 ha** of forest land from Rajauli (Nawada) Wildlife Sanctuary for widening and strengthen to convert two lines to four line of Rajauli-Bakhtiyarpur Section from Km 47+723 to Km 54+405(**6.682Km**) of NH-31 (Package-I,), Bihar.

FP/BR/ROAD/40700/2019.

Date of Inspection..... 13.12.2024

Officials/officers present

SI.No	Name	Designation/dept.
1	Shri S. Sudhakar IFS	Conservator of Forest, Gaya crl.
2	Shri Shresth Krishna IFS	Divisional Forest Officer, Nawada
3	Shri Sanjeev Reddy IFS	AIG Regional office Ranchi
4	Sri U.S. Jha IFS Rtd	Consultant, NHAI- Patna
5	Shri Gulam Quadir	Project Director, PIU Gaya NHAI
6	Diwakar Mishra	Consultant S.A. Infrastructure
7	Ramesh Singh, Project Manager	M/s KCC Infra Pvt Ltd Jaipur
7	Dr. U V Singh IFS Rtd	Non official Member REC
8	Dr. Mrs Ratna Trivedi	Non official Member REC

1. In the REC Meeting dated 25.12.2024 of Agenda Item No.73.1 -Bihar for Online/ RO Proposal No: FP/BH/Road/40700/2019 for diversion of 10.368 ha

forest land for widening and strengthening of part of NH-31, Rajauli Bakhtiarpur Section (km 47.723 to km 54. 405) falling in Rajauli Wildlife Sanctuary of Reserve Forest in favour of NHAI in Nawada district of Bihar was discussed. After having detailed discussion, on the request of all the three non- official members of REC, it was decided that Dr. U V Singh and Dr. Mrs. Ratana Trivedi will visit/inspect the site of the said proposal and submit a report. On receipt of report the proposal will be discussed for taking the decision in the matter. In this regard both the members along with others as stated above inspected the site **on 13.12.2024** of the said proposal and hence this report.

2. The Rajauli Wild Life Sanctuary is situated in hilly and rugged terrain of Hazaribagh Plateau in continuation of Koderma WLS of Jharkhand, having common forest landscape consist of variety of 27 species of mammals, 96 species of reptiles, 93 species of birds, 535 species of trees, shrubs, herbs, climbers etc, 14 species of climber/parasite/semi parasite/orchids. It is interlaced with rivers, small rivulets, nalas and gullies and it has a major watershed of Phutlahia river.

3. Rajauli Wild Life Sanctuary of an area of 2726.0 ha is part of major large forest landscape of Koderma WLS of an area of 15000.0ha that connects Sanjay Gandhi Tiger Reserve in Sidhi district of Madhya Pradesh with Bhim Bandh Wildlife Sanctuary in Munger district of Bihar. Guru Ghasidas National Park (Chhattisgarh), Tamor Pingla Wildlife Sanctuary (Chhattisgarh) , BadalKhol Wildlife Sanctuary (Chhattisgarh) , Semarsot Wildlife Sanctuary (Chhattisgarh) , Kusumi Reserve Forest (Chhattisgarh) ,Palamu Tiger Reserve (Jharkhand), Lawalong Wildlife Sanctuary (Jharkhand) - Gautam Budha Wildlife Sanctuary (Jharkhand) etc.

4. Area calculation for forest/ non forest land in the stretch of 6.682Km (includes forest and non-forest segments)

The full details in regard to proposal for four lane construction of Rajauli-Bakhtiyarpur Section from Km 47+723 to Km54+405(6.682Km) of NH31 (pakage-1) in the State of Bihar, for diversion of Forest land of 10.368 Ha under jurisdiction of Forest Nawada WLS in Nawada district of the State of Bihar has been submitted by user agency as under:

	Nawada District (Chainage 47.723 Km to 54.405 Km)						
SI.	Existing Chainage (Km) of NH-31		Length	P.F.Area	P.F.Area		
No	From	То	(m)	(m ²)	(Ha)		
1	47.723	47.891	168	2509	0.2509		
2	49.254	50.717	1463	44515	4.4515		
3	50.961	52.745	1784	53499	5.3499		
4	54.101	54.206	105	3157	0.3157		
	Grand Total in Nawada						
5	District			103680	10.368		

Table-1 showing the forest land in WLS sought for diversion under FCA

Table-2 showing the forest/non forest land in WLS sought for diversion under FCA

Village wise Forest land Diversion and Non-Forest Area statement

District		Village	Forest land Diversion (Ha)	Non Forest land (Ha)	Total (Ha)
Nawada	1	Ratanpur	0.2509	2.4605	2.7114
	2	Gopalpur	0.0000	1.8737	1.8737
	3	GarhDubaur	4.4515	0.7325	5.1840
	4	Chitrakoli	5.3499	4.0671	9.4170
	5	Parariya	0.3157	0.0000	0.3157
	6	Hardiya	0.0000	0.3660	0.3660
	7	Total	10.3680	9.4998	19.8678

Table-3 statement showing details of non -forest area involved in the proposal

D	istri p i	vision		Khasra/	Non-	Present Land
Sl. No.			Range/Tehsil /Village	Survey or Compartment	forest area involved in the proposal (HA)	Use
1	2	3	4	5	6	7
1	Na	awada	Ratanpur	47.723 - 48.629	2.4605	Agriculture
2			Gopalpur	48.629 - 49.254	1.8737	Agriculture

3 Nav	vada	Garh Dubaur	49.254 -	0.7325	Agriculture
Ind	vada		51.282		
4		Chitrakoli	51.282 -	4.0671	Agriculture
			54.422		
5		Parariya	54.422 -	0.0000	Agriculture
			54.527		
6		Hardiya	54.527 -	0.3660	Agriculture
			54.405		
7			Total	9.4998	

5. This proposal was considered in the 70th meeting held on 13th October, 2022

of Standing Committee of NBWL wherein the Standing Committee decided that the proposal shall be considered in a holistic manner together with the proposal of the highway in the State of Jharkhand (Koderma Wild life sanctuary). The User Agency shall submit proper animal passage plan in accordance with the guidance document of the Ministry on eco-friendly measures to mitigate the impacts of linear infrastructure on wildlife. And accordingly, the matter was differed.

6. As per the consolidated guide lines and clarification issued under Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980 and Rules 2023 of CHAPTER -11 for INFRASTRUCTURAL PROJECTS INCL. ROADS, RAILWAY LINES, BORDER ROADS, CRITICAL UTILITY INFRASTRUCTURE DEVELOPMENT/ RESIDENTIAL / BUILDING CONSTRUCTION to avoid fait accompli situations and for holistic evaluation of the project; the User agency is required to file single application for projects involving multiple Forest Divisions or State. The para in this regard is reproduced for ready reference: 11.2 Linear project may involve more than one Forest Division or State. To avoid fait accompli situations and for holistic evaluation of the project, PARVIESH 2.0 provides the facility for the user agency to file single application for projects involving multiple Forest Divisions. Project proponents may make the application Section/Package-wise as per their Administrative and Technical sanctions but in that case also they should submit along with the proposal salient feature of the entire project and details of status of approvals sought under the Act for other Sections/Packages of the project. To facilitate phased preparation and processing, the proposals for such projects may be prepared Forest Division/ State-wise subject to submission of a map indicating alignment of the entire project, highlighting the portions passing through forest land, along with salient features of the entire project and details of approvals already obtained and/or sought under the Act for other sections of the project.

When the proposal involves in use of Forest and nanoforest lands, the project cannot be implemented as per guidelines as under

.....The facilitation is not applicable to the roads falling in the Protected Areas and the Eco-sensitive zones around the Protected Areas where impact on wildlife is to be considered.

7. The REC is requested to take note of the above para and take appropriate action since the present proposal is in contiguous of **proposal no.**

FP/JH/Road/34304/2018 under forest conservation Act

(FCA), 1980 for diversion of 62.344 ha of forest land in Koderma Wildlife Sanctuary (WLS) on 27.06.2018. The proposed widening involves fresh construction of Koderma Bypass in 5.758 km passing through Koderma Wildlife Sanctuary, widening of existing 2-lane to 4-lane in the length of 13.84 km, again passing through Koderma Wildlife Sanctuary. Proposal for Wildlife clearance was submitted by NHAI on 06.02.2019 and the same is pending with the Forest department as on date.

8. It was also decided in the meeting dated 29.12.2022 of Standing Committee that the Ministry would issue an advisory to all State/UTs to submit proposals for linear projects in a holistic manner and not in separate packages.

9. It may be noted that as per the para 12.4 of the Handbook of Forest (Conservation) Act, 1980 and Forest Conservation Rules, 2003 (Guidelines & Clarifications) the linear proposals should when falling into one or more PAs the guide lines are as under:

"In case the entire forest land involved in the proposal, is located within one or more PAs, the Central Government shall refer such proposals, complete in all respect, along with site inspection reports, wherever necessary, to the Forest Advisory Committee (FAC) or Regional Empowered Committee, as the case may be, only after use of such forest land for non-forestry purpose has been recommended by the Standing Committee of NBWL."

10. It is surprised to note that the NHAI has already awarded the construction contract on 15.03.2024 to M/s KCC Infra Pvt Ltd Jaipur for the RajauliBhaktiyarpur Section from Km.47+723 to 54+405 (package-1)of NH-31 even before the proposal is processed by Regional office. Ranchi. As per the records, the Nodal officer Bihar has sent the proposal on 21.02.2024 to Regional office Ranchi.

11. Subsequently, this matter was again placed before the Standing Committee only for the Rajauli part of wildlife sanctuary area leaving the part of Koderma wildlife sanctuary on 29.12.2022 in 71st meeting and Minutes were issued on 27.01.2023. The decision taken in the said meeting is reproduced as under:

The Chief Wild Life Warden, Bihar mentioned that the sanctuary consists of three segments. It was part of Koderma Wildlife Sanctuary and in the year 2019, the State Government of Bihar Notified the Bihar part of Koderma sanctuary as Rajauli (Nawada) sanctuary. The road passes through one of the segments of the sanctuary for about 6.5 kms and the proposal is for widening this road from 2-lane to 4-lane. The widening of this national highway is being taken up in three packages and the executing agencies in all these packages are different. In light of the decision taken by the Standing Committee in the last meeting, the User Agency has submitted a revised animal passage plan which includes 3 bridges of 30 m length and 5 m height, 3 animal underpasses of 30 m length and 5.5 m height for larger animals, 10 box culverts (3m X 3m), 67 numbers of Hume pipe culvert of 1.2 m diameter, one at each 100m for smaller animals. The User Agency also agrees to comply with other mitigation measures if suggested by the Standing Committee.

Dr. Sukumarand Dr H S Singh stated that as the Chief Wild Life Warden is satisfied with the animal passage structures, the proposal may be recommended.

Director General of Forests and Special Secretary said that proposals should be submitted in a holistic manner and not in separate packages.

12. **Decision Taken in the Meeting:** After discussions, the Standing Committee decided to recommend the proposal subject to the following conditions:

1. Animal Passage Plan will be prepared for the wildlife in the inner areas of the path. Animal Passage Plan for the movement of wild animals will be an essential part of the plan.

- 2. After the construction of the said path, necessary control and regulations on the speed limit and the use of horn etc. from the point of view of wildlife conservation and management shall be done by Nawada Wildlife Administration (Nawada Forest Division). According to the instructions of Nawada Zoological Administration for speed limit control and other protection measures construction and installation of information board, etc. shall be done by the user agency at its own expense.
- **3.** The amount proposed for Management Action Plan presented in the mitigation plan prepared by the Divisional Forest Officer for mitigatingthe impacts of construction works will be deposited by the spokesperson agency, which will not be more than two percent of the amount of proportionate project cost falling within the Sanctuary.
- 4. For the interests of wildlife conservation by the Chief WildLife Warden, Bihar, may impose other practical conditions or regulations.
- 5. The user agency shall prepare and implement the animal passage plan in the road length inside the sanctuary.
- 6. The user agency shall not harm, exploit or destroy any wildlife in the sanctuary area and shall strive to ensure the same.
- 7. The user agency shall bear the cost of mitigation measures as per the estimate submitted and appended by the Divisional Forest Officer-cum- Wildlife Warden, Nawada to ensure wildlife and wild flora/ fauna conservation through preconstruction, construction and post- construction phases. This amount of Rs.90.17 lakhs, which is less than 2% of the project cost inside sanctuary, shall be deposited by the user agency with the department.
- 8. The legal status of the proposed area will remain as part of thesanctuary and will remain under control of the Environment, Forests and Climate Change Department, Bihar.
- **9.** Every possible effort will be done to minimize the effect of construction on wildlife in that area and noise shall be kept under limits.
- *10. The construction debris will be disposed off outside the sanctuary and at a safe distance.*
- *11. The work will be executed in day time from dawn to dusk.*

- 12. The project proponent / user agency shall comply with any additional conditions imposed by Chief Wild Life Warden, Bihar as deemed necessary in the interest of wildlife protection and management in the sanctuary area.
- **13.** An annual compliance certificate on the stipulated conditions shall be submitted by the project proponent to the State Chief Wild Life Warden and an annual compliance certificate shall be submitted by the State Chief Wild Life Warden to Government of India.

It was also decided that the Ministry would issue an advisory to all State/UTs to submit proposals for linear projects in a holistic manner and not in separate packages.

13. Based on the decision taken in the meeting dated 29.12.2022 of Standing Committee, the Government of India ,Ministry of Environment, Forest and Climate Change (Wild Life Division) had communicated the decision of Standing Committee vide letter dated 02.02.2023 to Principal secretary Forest Patana retreating all the conditions 01 to 13 as stated in minutes of meeting above.

14. The forest landscape wherein the NH-31 is passing through in both the Wild life Sanctuaries is a single block of very high biodiversity forest. We were told by the forest officers present there that this is one of the best forest bock/stretch in Bihar- Jharkhand States. This stretch of forest block is combined of Rajouli and Koderma wild life sanctuaries which were bifurcated during the separation of Bihar State into Bihar and Jharkhand. A separate notification was issued on 10.05.2019.

15. During the site inspection of project proposal for construction of four lane of Rajauli-Bakhtiyarpur Section from Km47+723 to Km54+405(6.682Km) of NH-31 (pakage-1) in the State of Bihar, it is noted/observed that this proposal IS basically for relaying of four lane National Highway in contiguous with another proposal no. FP/JH/Road/34304/2018 under Forest Conservation Act (FCA), 1980 for diversion of 62.344 ha of forest land in Koderma Wildlife Sanctuary (WLS) dtd 27.06.2018. This proposal of Koderma involves fresh construction of Koderma bypass of 5.758 km passing through Koderma Wildlife Sanctuary, widening of existing 2-lane to 4-lane in the length of 13.84 km, again passing through Koderma Wildlife Sanctuary. Proposal of Koderma for Wildlife clearance was submitted by NHAI on 06.02.2019 and the same is pending with the Forest department with various reasons as on date.

16. It is pertinent to note that the Standing Committee of NBWL has considered the project structures for mitigation purposes submitted by the User Agency only (table-6 of user agency) and not the recommendations made by the DFO Nawada and Conservator of Forest Gaya Circle during 2020-21. In both the cases, they have recommended for construction of Flyover on piers for entire stretch of the proposal submitted under Forest Conservation Act 1980. The details submitted by User Agency before Standing Committee are as under:

 Table-4: List of Structure Proposed for construction in Wildlife Sanctuary

 Area and found on inspection dtd 13.12.2024.

Sl. No.	Chainage	Length (m)	Height (m)	Proposed Type	Locations of structures as per inspection dated13.12.24
1	49+175	30	5	Minor Bridge	Non-forest
2	50+785	30	5	Minor Bridge	Non-forest

3	52+080	30	5	Minor Bridge	Forest
4	48+550	30	5.5	Underpass	Non-forest
5	51+260	30	5.5	Underpass	Forest
6	53+580	30	5.5	Underpass	Non-forest
7	48+542	3	3	Box Culvert	Non-forest
8	48+560	3	3	Box Culvert	Non-forest
9	50+588	3	3	Box Culvert	Forest
10	51+232	3	3	Box Culvert	Forest
11	51+438	3	3	Box Culvert	Forest
12	49+260	3	3	Box Culvert	Non-forest
13	49+760	3	3	Box Culvert	Forest
14	52+560	3	3	Box Culvert	Forest
15	52+800	3	3	Box Culvert	Non-forest
16	53+960	3	3	Box Culvert	Non-forest

In regard to table above, it may also be read with Minutes of Meeting of Standing Committee dated 29.12.2022.

17. During the site visit of the proposal, it was observed that three minor bridge and three under passes proposed in the project were found that they the expansion of the existing under passes made across the natural water streams and all they will be surface level of the Highway in a normal slandered gradient. It is pertinent to note that only one "minor bridge" and one "under pass" which are proposed to be located in the forest land and all other six will be located in the non-forest land that too near to the human habitation in agriculture lands (Table-4). All they will not be used by the wild animals and quite insufficient animal passages proposed. Hence construction of over bridge/Fly over is a minimum requirement for this stretch of 6.682 Kms

18. **Recommendations:**

With the above facts and circumstances and after having detail discussions with the officials/officers present during visit and also discussion with the Chief conservator of forest wild life Jharkhand and Divisional forest officer Koderma WLS and after thorough inspection of the proposed area for relaying of four lane National Highway; the following recommendations are made for consideration in the interest of wildlife conservation and development / construction of Highway.

- 1. After having discussion and site inspection, it is observed/noted that the project is actually relaying of four lane National Highway by using the land of existing two-lane Highway Road and not for widening and strengthen as stated in project proposal.
- 2. The Rajauli WLS of an area of 2726 Ha stand bisected due to construction of this four Lane NH 31. It divides the Sanctuary in two halves of 1625 ha on Northern side and 1101 ha on Southern side. Further, adjoining Koderma WLS of Jharkhand State of an area of 150.0 square Kms (15000.0 ha) together will have synergic pressure of wild animal movement across the NH-31. Hence, adequate animal passage is necessarily required.
- 3. It is observed that on the northern side of the highway, there is large elongated hillock with high biodiversity forest and fauna is located. On the southern side of the highway, there is seasonal Dhanarjay river flows through the Sanctuary area. The wild animals move across the highway for drinking water. Therefore, adequate animal passage is a minimum requirement across the NH -31. During the visit we observed that there is heavy vehicle traffic on the highway which will further

increase once four lane is constructed and will cause complete stopping of movement of wild animals across the NH.

- 4. In the proposal, only two Animal Passages ie one "minor bridge" and one "under pass" out of total six of 30.0 meter long and 5.0 to 5.5 m height in the Sanctuary area across the highway road are proposed which are highly inadequate for the movement of wild animals (Table4). As per the recommendations of the Standing Committee, Animal Passages will be an essential part of the plan.
- 5. After taking into considerations of all the facts and circumstances as explained in detail in this report, both the members of REC are of considered view that a single over bridge/flyover on piers of 5.5-meter height of a length of 1.350 Kms (from 51+100 to 52+450) with sound barrier of adequate height shall be constructed for safe animal passage to mitigate the complete blockade of movement of wild animals in the sanctuary and other areas due to construction of four lane NH-31. It will be a minimum requirement for the safe Animal passage. This segment of 1.350 Km from 51+100 to 52+450 is highly sensitive stretch in the Sanctuary since both the other ends are non-forest segments of proposed 6.682Km stretch. Details may be referred to Check list 04 of User Agency. The proposal may accordingly be modified.
- 6. The stretch of 1.350 Km of existing road below the over bridge shall be made disused and natural vegetation of herbs and shrubs be allowed to grow to form a continuous natural animal passage for movements of wild animals.
- 7. The user agency may be allowed to construct the other proposed structures in this proposal to maintain their slandered norms for water passage and movement of pet animals and human.

- 8. The necessary /essential other conditions as approved by Standing Committee may be made applicable/incorporated along with other additional conditions deemed fit for.
- 9. As per the consolidated guide lines and clarification issued under Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980 and Rules 2023 of CHAPTER -11 for INFRASTRUCTURAL PROJECTS INCL. ROADS, RAILWAY LINES, BORDER ROADS, CRITICAL UTILITY INFRASTRUCTURE DEVELOPMENT/ RESIDENTIAL / BUILDING CONSTRUCTION to avoid fait accompli situations and for holistic evaluation of the project; the User agency is required to file single application for projects involving multiple Forest Divisions or State. The para in this regard is stated at para 6 above in this report for ready reference.
- 10. The REC is requested to take note of the para 6 above of this report and take appropriate action since the present proposal is in contiguous of proposal no. FP/JH/Road/34304/2018 under Forest Conservation Act (FCA), 1980 for diversion of 62.344 ha of forest land in Koderma Wildlife Sanctuary (WLS) on 27.06.2018.

Sd/

Dr. U V Singh IFS Rtd Non official Member REC

Dr. Mrs Ratna Trivedi Non official Member REC