To,

The Member Secretary,

Expert Appraisal Committee- Thermal

Ministry of Environment, Forest and Climate Change

New Delhi

Subject- Representation regarding the 2x800 MW coal-based Ultra Super Critical Thermal Power Project by MTEUPPL at Village Dadri Khurd, District Mirzapur [File No. J-13012/12/2011-IA.II (T)]

Dear Sir/Madam,

This is in reference to the 2x800 MW coal-based Ultra Super Critical Thermal Power Project at Village Dadri Khurd, District Mirzapur, Uttar Pradesh, proposed by Mirzapur Thermal Energy (UP) Private Limited (MTEUPPL) (Proposal No: IA/UP/THE/542333/2025), scheduled for deliberation by the Expert Appraisal Committee – Thermal under Agenda No. 4 on 12 August 2025.

At the outset, the undersigned wish to draw your attention to the fact that the *Environmental Clearance* (EC) for an earlier project at the same location — a 1320 MW coalbased Thermal Power Plant proposed by M/s Welspun Energy (U.P.) Pvt Ltd — was set aside by the National Green Tribunal on 21 December 2016, citing serious irregularities in the EIA process and concealment of critical information.

In June 2024, the present proponent applied for a fresh EC. However, without awaiting its grant, they commenced large-scale illegal construction at the site. These activities included clearing and removing vegetation from forest land, extensive earthwork, land levelling, erection of boundary walls, construction of rooms, electric poles, etc. and construction of an unauthorised approach road through reserved forests. The project presently holds no valid EC, Forest Clearance. The Consent to Establish/Operate is also not valid given the change in project capacity from 1320 MW to 1600 MW.

Considering these facts and circumstance the undersigned request that MoEFCC:

- 1. Delist the EC application and initiate violation proceedings against the proponent under the EIA Notification, 2006, and the Environment (Protection) Act, 1986.
- 2. Initiate violation proceedings under the Van Adhiniyam 1980 for deliberate destruction of forest and wildlife habitats.

3. Direct the project proponent and State Government to identify an alternate site, as the activity is not site-specific and, if allowed here, will fragment an ecologically sensitive, contiguous forest — part of the Sloth Bear Conservation Reserve — which forms the catchment of several rivers and waterfalls and harbours rich wildlife.

The undersigned submits that multiple litigations are awaiting decisions before various forums against both the proponent and the State of Uttar Pradesh for violations of the EIA Notification, 2006, and the Van Adhiniyam, 1980, including issues concerning involvement of forest land, the proposed Sloth Bear Conservation Reserve, and the above-mentioned illegal construction.

Further, there has been several discrepancies and inconsistencies in listing of the EC application documents as well as their accessibility on the Parivesh Portal that limit one's capacity to timely review the project proposal and take necessary actions. That until last week, the EIA Report was not accessible on the portal.

Accordingly, this representation is being submitted based on the issues already covered under the NGT judgment dated 21.12.2016 and other legal shortcomings. The undersigned seeks liberty to submit a detailed representation to MOEFCC on the EIA studies after accessing and reviewing the EIA report at a later stage. Following are the issue-wise submissions before the MOEFC.

1. The MOEFCC And EAC Cannot Grant 'Ex-Post Facto' Environmental Clearance to This Project

The project proponent, under the guise of applying for a fresh EC, is attempting to cover up clear violations of the EIA Notification 2006, Van Adhiniyam 1980, and the Air and Water Acts (Consent provisions).

The Hon'ble Supreme Court of India, in *WP(C)* 1394/2023 Vanashakti vs Union of India (judgment dated 16 May 2025), has expressly prohibited the grant of *ex post facto* EC to any project that has already commenced construction without prior approval. The Court categorically held:

If the project proponent goes ahead with construction which requires EC under the EIA notification, it will amount to violation of the provisions of 1986 Act and 1986 Rules. It will attract penalty under Section 15 of the 1986 Act. Perusal of the provisions of Section 15 shows that even if the penalty is paid by the project proponent, it will not regularise the project. Therefore, even after the payment of penalty, if the project is under construction, the same has

to be stopped and demolished and even if operation has already commenced, the same has to be stopped and demolished. Therefore, the construction work must be demolished.

The fact that the project proponent commenced illegal construction even before the grant of EC is evidenced by the following documents and proceedings:

A. Complaint to MoEFCC (28 June 2024)

The undersigned submitted a detailed complaint, along with photographs, when construction of a boundary wall and an illegal road through forest land was underway. Despite this, MoEFCC failed to take timely action, and the project proponent continued its activities in blatant violation of law. Following this complaint and wide media coverage, two separate matters were taken up by the National Green Tribunal (NGT):

- 1. A *suo motu* case initiated by the NGT's Principal Bench based on a news article in *Hindustan Times* dated dated 03.07.2024. [OA 883 of 2024]
- 2. A contempt petition filed by the original petitioner in relation to the NGT's judgment dated 21 December 2016. [EA 29 of 2024]

During the pendency of these proceedings, the project proponent deliberately ignored the NGT's cognizance of the matter and proceeded with major construction works. These violations came to light during inspections by State and Central Government agencies in November 2024 and February 2025 as discussed below.

B. UPPCB Site Inspection Report (25 November 2024)

The Uttar Pradesh Pollution Control Board (UPPCB) inspection recorded:

"During field visit at above concerned site, construction of pre-cast boundary wall and levelling work of ground was found under progress".

The UPPCB subsequently issued a notice to the proponent for carrying out establishment work without a valid Consent to Establish (CTE) on 30th November 2025. [Annexure I]

C. Continued Construction Despite Pending NGT Cases

Even while two NGT matters were actively pending, construction work persisted. In February 2025, the undersigned was compelled to file an interim application for stay (IA 110 of 2025). On 19 February 2025, the Hon'ble NGT passed the following order directing MoEFCC to respond:

3. Learned Counsel for the Applicant has vehemently submitted the order be passed on I.A. No. 110/2025 today. This IA has been filed only on 17.02.2025. Having regard to the nature of the allegation made in the IA, we are of opinion that one opportunity should be given to the Respondent to respond to the IA. The Tribunal by the order dated 21.12.2016 passed in Appeal no. 79 of 2014 has already restrained the concerned Respondent from carrying out any development work at the project site. Hence, at this stage, we are not inclined to pass any ex-parte interim without giving an opportunity to the Respondents to obtain instructions and file reply. However, keeping in view the nature of the prayer made in the IA, MoEFCC is granted two weeks to file the reply instead of four weeks as prayed for.

D. MoEFCC Regional Office Inspection Report (25 February 2025)

The site inspection by MoEFCC's Regional Office, Lucknow, confirms that the project proponent has already undertaken extensive construction and land preparation works, causing significant physical alteration of the site. These activities have materially impacted the local environment, undermined the integrity of EIA studies, and attempted to create a fait accompli. [Annexure II]

The inspection recorded the following:

- a) Boundary wall has been constructed all around the project using precast boundary pillars/walls and by using MS profile sheets (in undulated patches), 7 to 10 feet in height.
- b) Main gate installed using MS pipe/rods
- c) One security room constructed close to the main gate
- d) One abandoned well found during the inspection
- e) A rainwater storage pond with 30,000 m³ (equal to 3 Crore Liters) capacity has been constructed in the southwest direction of the site
- f) Several MS portable site cabins fitted with Split Air Conditioners
- g) One MS portable toilet available on site
- h) Availability of industrial cables with wooden/plastic drums, and other materials
- i) Digging work for cable laying observed in some patches
- j) Readymade electricity poles with wires seen in working condition and leading to a nearby village
- k) High tension wires also passed through project land.

Notably, the proponent slowed down construction only after the above site inspection report was submitted to the NGT; until then, work had been progressing at full speed. The matter in NGT is currently awaiting final hearing.

Request to MOEFCC and EAC:

With both State and Central regulators having officially documented clear evidence of such violations prior to the grant of EC — the MoEFCC and EAC do not have the jurisdiction to consider the present EC application. The MoEFCC must initiate violation proceedings against the project proponent under the Environment (Protection) Act, 1986, and the Hon'ble Supreme Court's categorical directions in *Vanashakti v. Union of India* (judgment dated 16 May 2025).

2. Violation Of Van Adhiniyam 1980 By the Project Proponent

A. Involvement of forest inside and outside of project site

If the proposed project is established at this location, all major ancillary components — including the railway line for coal transportation, water pipeline, transmission lines, and approach road — would necessarily pass through forest land. This would require the project proponent to obtain *Forest Clearance* (FC) for each component before grant of EC and commencing any construction. This material fact was deliberately concealed when applying for fresh EC in 2024, with the clear intention of evading FC under the *Van Adhiniyam 1980* and creating a *fait accompli*.

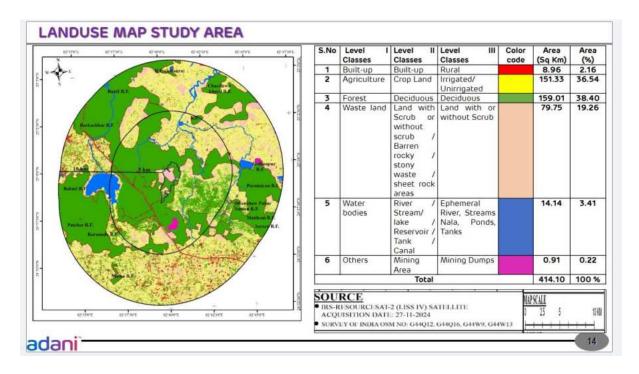
The land earmarked for the main thermal power plant lies within the Marihan Forest Range of the Mirzapur Forest Division, forming part of a contiguous forest landscape and a proposed Sloth Bear Conservation Reserve. In fact, most of the project site qualifies as "forest" land. Forests in this region comprise distinct subtypes of dry deciduous forests, often giving the appearance of barren or scrubland but representing unique forest ecotypes. As per the Champion & Seth classification, these include at least eight forest types: Southern Dry Mixed Deciduous Forests (5A/C3), Northern Dry Mixed Deciduous Forests (5B/C2), Dry Deciduous Scrub (5/DS1), Euphorbia Scrub (5/DS2), Zizyphus Scrub (5/DS3), Anogeissus pendula Forest (5/DS4), Boswellia (Salai) Forest (5/DS5), Butea Forest (5/DS6), Dry Bamboo Brakes (5/E2), and Dry Tropical Riverine Forest (5/E5).

It is important to mention that Village Dadri Khurd, where the project is proposed, was originally included in the U.P. Gazette Notification of 1952 transferring this land to the Forest Department. Although the U.P. Revenue Department has subsequently transferred the land to the proponent, there has been no lawful diversion under *Van Adhiniyam 1980* for conversion from forest to non-forest use. This amounts to a blatant violation of *Van Adhiniyam 1980* and gross contempt of the Supreme Court's binding directions. The issue was already raised by the undersigned in the original complaint to MoEFCC dated 28th

June 2025. A detailed representation regarding the involvement of forest land within the project boundary was already submitted to MoEFCC on 28th June 2024.

The Survey of India toposheet submitted by the proponent as part of the EC application — available on the *Parivesh* portal also clearly indicates forested areas within the site. The KML viewer on *Parivesh* likewise shows the land as "forest".

Most importantly, the land use map submitted by the project proponent as part of the EC Application on Parivesh portal at the file "ppt_mirzapur tpp_final _2.pdf" mentioned as uploaded on 14.07.2025 at page 14 shows 'forest' inside the land identified for the project site. A screenshot is reproduced below.



Thus, It is unequivocal that the <u>land identified for the establishment of the thermal power</u> <u>plant requires Forest Clearance</u> under Van Adhiniyam 1980 in light of the Hon'ble Supreme Court's directions in T.N. Godavarman v. Union of India W.P. (C) No. 202 of 1995, as reaffirmed in Ashok Kumar Sharma & Others v. Union of India W.P. (C) No. 1164 of 2023 [2024 SCC OnLine SC 4993]. The Supreme Court has clarified that:

"14. The decision in T N Godavarman (supra) needs to be understood from two perspectives. First, the expression 'forest' was read in a broad sense bearing in mind the object and purpose of the Forest Conservation Act 1980. While adopting the dictionary meaning of the expression 'forest', the Court intended to impart a purposive interpretation to the phrase so as to accord with the intent underlying the enactment of the law in 1980. Hence, the Court clarified that this would cover but not be confined only to lands recorded as forest in

government records. Moreover, the expression 'forest' would be independent of the nature of ownership or title."

B. Violation Of Van Adhiniyam 1980 As Observed By the Undersigned And MoEFCC Regional Office

The undersigned has repeatedly apprised MoEFCC of violations of the EIA Notification 2006 and Van Adhiniyam 1980. In 2023, following the undersigned's complaint on 24th January 2023, the State Forest Department halted construction of the approach road. However, when a new complaint was submitted on 28th June 2024 regarding the repeat violation, the State Forest Department took no action — instead, the local administration appeared to actively support the project proponent. This indicates a troubling level of connivance between the project proponent and certain local administrative officers in Mirzapur, who have ignored repeated follow-ups despite other competent authorities officially documenting the violations. The undersigned wish to submit some key facts to show the violations.

I. Illegal Use of Forest Road for Heavy Vehicle Transport and Encroachment on Forest Land

The MoEFCC Regional Office site inspection reveals that, while the proposal for diversion of 8.3581 ha of reserved forest land for the water pipeline and approach road is still pending — the project proponent has illegally occupied and used a 1.5–2 km approach road through forest land. This has been done in collusion with the local forest department by paying an arbitrary "user fee," a practice with no legal basis under Van Adhiniyam 1980.

The MOEFCC inspection clearly notes:

"It has also been found that the project land is not connected with the main road, <u>only one</u> connectivity has been found through forest land (around 1.5 to 2 km), which has been used by the PP by paying fee as forest accessed to the local forest department (Madihan Range) of Rs 5000/- on 16.08.2024 and Rs 11650 on 30.12.2024."

Van Adhiniyam 1980 clearly prohibits diversion of forest land for non-forest use without prior approval of the Central Government. This "user fee" arrangement is an unlawful attempt to bypass FC requirements and is in direct contravention of Supreme Court directions. Proceedings under Sections 3A and 3B of Van Adhiniyam 1980 are warranted against both the project proponent and the forest department.

${\it II. Suppression of FC Requirement for Railway Corridor and Transmission Line}\\$

While there is a pending FC application for the approach road and water pipeline, the project proponent has concealed the fact that the project will require a new railway line estimated at 20–30 km — which will also pass through Reserve Forest areas, critical wildlife

habitats and human settlements. Similarly, there is no information available on the transmission line yet. These being critical component of the project and cannot be separated.

III. Doubtful Conduct of Range Officer and Divisional Forest Officer, Mirzapur

Findings by the UPPCB and MoEFCC Regional Office indicate exceptional and unlawful leniency by the local forest division in allowing the project proponent to carry out illegal construction and access forest land. Granting "user fee"-based access to forest land while FC is pending is beyond their jurisdiction and constitutes contempt of the Hon'ble Supreme Court's orders.

In collusion with certain district-level officials, the project proponent has also attempted to bypass Van Adhiniyam 1980 by illegally transferring land — originally given to the Forest Department post-abolition of the Zamindari system — to itself via the Revenue Department and by constituting vague district-level committees and inspection reports in order to avoid the requirement for Forest Clearance. This is especially shocking given that, until two years ago, the same Forest Department had raised strong ecological concerns and even proposed a Sloth Bear Conservation Reserve in the same area. A letter from CCF-Mirzapur to CCF-Nodal Officer, Lucknow dated 18 July 2019 is provided as *Annexure-III*.

To our surprise, there is one more letter submitted by the project proponent on Parivesh Portal with the title 'forest noc letter no. 4229 of non involvment of forest land.pdf' which only states-

Specific ToR Condition/Point 1.19

PP shall obtain a letter from concerned forest department clearly mentioning the extent of forest land involved within and outside (other activities related to plant) plant area.

विषयक परियोजना में आरक्षित/ संरक्षित या निजी वन एवं 'वन स्वरूप क्षेत्र' प्रभावित नहीं हो रही है

It is submitted that the abovementioned letter dated 30 May 2025 is a vague without any basis as not only FC application for approach road and water pipeline is pending since 2015, the involvement of forest for transmission line and railway corridors are not even discussed. Further, the involvement of forest inside the project site is evident from the EIA documents submitted by the project proponent itself in July 2025. The letter by DFO is circulated only to misguide EAC and support the project proponent in their illegal encroachment of forest land as evident from the MOEFCC Site Visit Report and the evidence provided by the undersigned time to time. In fact, such letters and exceptional support to

such violations raises doubts over the integrity of the officers concerned which requires further investigation by the government.

The facts direct towards a deliberate and blatant violation of Van Adhiniyam 1980 and Supreme Court directions.

Request to MoEFCC and EAC:

In light of the serious irregularities involving forest land and given the past and ongoing litigations against the State of U.P. and the project proponent, the MoEFCC and EAC must refrain from processing the EC application further. Instead, violation proceedings under the EIA Notification 2006 and Van Adhiniyam 1980 should be initiated without delay to demolish the illegal construction and restore the environmental damages.

3. EIA Report Not Available in Public Domain, Inadequate Public Consultation

It is submitted that the present project falls squarely within the judgment dated 21 December 2016 of the Hon'ble NGT, which set aside the previous EC with liberty to re-apply only after rectifying all defects in strict compliance with that judgment.

I have raised important concerns on previous occasions as well which are already part of the original judgment, records of the EAC and MoEFCC during the project's earlier EC considerations in since March 2013, and subsequent submissions, including my last representation to MOEFCC dated 28th June 2024 and 11th April 2025.

However, I must record my disappointment with the way this fresh EC application is being processed—which contrary to both the letter and spirit of the law and issues highlighted in the original judgment of 2016. My concerns are as follows:

A. Non-Availability of EIA Report

Given the history of serious deliberate concealments and wrong information submitted in the earlier EIA studies and the multiple deficiencies recorded by the Hon'ble NGT in its judgment of 21 December 2016, it is imperative that the EIA Report be placed in the public domain well in advance. This ensures that shortcomings can be identified and addressed in time to prevent irreversible damage to the environment.

Yet, to date, the Draft EIA Report has not been made available on the MoEFCC website or the Parivesh Portal. The same was not there even prior to the Public Hearing, despite a formal representation being submitted on the day of the hearing. The Final EIA Report was accessible on the Parivesh Portal only after the undersigned filed an RTI application with MoEFCC on 31 July 2025, upon discovering that the project was scheduled for consideration for grant of EC by the EAC on 12 August 2025.

B. Irregularities in Public Hearing

- 1. The Public Hearing notice was not unavailable on the UPPCB website, leaving the undersigned completely unaware of the date and venue. It remains unavailable as of today, 11 August 2025.
- 2. The Draft EIA Report and its Summary were absent from all public online platforms, including the MoEFCC Parivesh and UPPCB websites, and remain unavailable as of today, 11 August 2025.
- 3. The Public Hearing was conducted in the compound of a school in *Marihan*, far from the proposed site in village Dadri Khurd. The two locations fall in different assembly constituencies—Marihan and Majhawan, respectively.
- 4. The hearing was presided over by the MLA of Marihan constituency, an open supporter of the project proponent, seated in middle on the dais alongside the ADM and representative of UPPCB [See the photo and newspaper below]. It is alleged that the MLA brought political supporters to manufacture an appearance of public backing for the project. Thus, the public hearing was conducted under the influence of the political leader with his supporters hijacking the public hearing proceedings altogether depriving the genuine participants to raise any concerns against the project proponent.
- 5. The hearing was not advertised in the letter and spirit of the EIA Notification, 2006 and other related guidelines. Affected villagers from Dadri Khurd were largely unaware, and when some did manage to reach the venue within an hour, the proceedings were deliberately concluded within few minutes to prevent them from the opportunity of participation. Reports indicate the crowd consisted largely of the MLA's political supporters and not affected people.
- 6. Local newspapers have widely reported these irregularities.

The undersigned also wish to place on record that a detailed representation was sent of the concerned authorities, including the MoEFCC, on the very day of the Public Hearing—11 April 2025 at 12:46 PM—raising similar concerns regarding the project. Some selected copies of news reports are provided below. Copy of the representation is attached as *Annexure-IV*.



मीरजापुर

पर्यावरण संकट:थर्मल पावर प्लांट पर विरोधों का साया

प्रभावित लोगों ने सुनियोजित करार देते हुए जिलाधिकारी से की शिकायत

मीरजापुर। सदर तहसील क्षेत्र के ददरों खुर्द गाँव के किसानों ने आदानी के 1600 मेगाकट बमेल पावर प्लांट को लेकर विशेष नेज कर दिया है। पिछले जनसूनवाई को गैरकानूनी करार देते हुए मुख्यमंत्री सहित जिलाधिकारों मीरजापुर से इसकी शिकायत करते हुए जांच कर अविलंब रोक लगाने की मांग की है। ग्रामीणों का आरोप है कि आपाधापी और भाड़े को भीड़ के बीच सम्पन्न हुई जनसुनवाई कार्यक्रम में प्रभावित समुदायों को पहले से कोई सुबना या जानकारी भी देना मुनासिब नहीं समझा गया है। मजे की बात तो यह है कि यूपोपीसीबी को वेबसाइट पर भी कोई सचना नहीं है। बताते चलें कि आदानी को कंपनो द्वारा मिज़ीपुर धर्मल एनजी (यूपी) प्राइवेट लिमिटेड द्वारा उत्तर

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lant at village

Mirzapur (UP).

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प्रदेश के मिनीपुर जिले के ददरों खुर्द गांव के वन क्षेत्र में 1600 (2म800) मेनावाट की कीयला आधारित अल्झ सुधर क्रिटिकल धर्मल पावर योजना स्थापित करने का प्रस्तार को लेकर 11 अप्रैल 2025 की पर्यावरणीय स्वीकृति के लिए लोक सुनवाई का आयोजन किया गया था। जिसमें उत्तर प्रदेश के पूर्व उर्जा राज्यमंत्री एवं महिहान विधायक रमाशंकर सिंह पटेल. 33727 जिलाधिकारी (वित्त एवं राजस्व) शिव प्रसाद शुक्ता, क्षेत्रीय पर्यावरण अधिकारी सोनभद्र व अहानी प्रुप के वेयर पसंन दिनेश सिंह मीजूद रहें। इस जनसुनवाई में बड़ी संख्या में क्षेत्रवासी एवं जिले के गणमान्य लोगों के उपस्थित होने का दावा करते हुए कहा । उत्तर गया कि, इस पावर शांट क राजा । अस्ति कावर जीता करूर अस्ति करता ।।। देश भ किस ११६ वर्ष राज । । जी गया कि, इस पावर प्लांट के लगने से

मेसर्स मिर्जापुर थर्मल एनर्जी (यूपी) प्राइवेट लिमिटेड

याम दादरी खुदं, तहतील मिर्जापुर सदर, जिला मिर्जापुर (5.प.)

मिर्जापुर यमेल एकजी (सूची) पहलेट लिगिटेड द्वार दावती बुदे श्रामु जिल विज्ञान

उत्तर प्रदेश में 1600 (2800) मेमान्य की कोचन आपारित अन्य सुरू विशेषक प्रान पावर पोरेचेना स्थीपत करने वा परतार्थ

पादमिक विवासय, मी

लोक सुनवाई के दौरान मौजूद विधायक।

क : 11.04.2025 (दिन शुक्रवार) समय: सुबह 11:00 बने ते

मंडिसन जनप्द-मिर्जपुर के समी<u>य, जि</u>र

छाया : आज

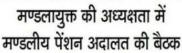
क्षेत्र के काफी लोगों को रोजगार एवं जिले का विकास होगा। महिहान के भाजपा विधायक रमार्शकर सिंह पटेल भागपात्रपात्रका दावा करते हुए ने विकास का दावा करते हुए महिताओं को रोजगार मिलने तक बात तो कह दाली, लेकिन इससे होने पर्यावरणीय नुकसान, देवरी महिद्यान के जंगलों में बास करने वाले जंगली बोव-जंतुओं के बीवन पर मंडराने वाले खतरा, जंगलों के नष्ट होने के बाद होने वाली परेशानियों तथा भू-गर्भ जल की निकट भविष्य में उत्पन्न होने वाली समस्या पर बोलना उधित नहीं समझा है। इस जनमुनवाई के बीच काफी संख्या में जुटे लोगों ने खुलकर विरोध करते हुए स्थानीय लोगों को न बुलाकर बाहरी लोगों खासकर राजगढ़ विकासखंड क्षेत्र सहित अन्य क्षेत्रों के लोगों को एक सोची-समझो रणनीति

लगाते हुए कहा है कि कंपनी के लोग शुरू से ही जनहितों की अनदेखी करती आई है। गीरतलय हो कि इसी स्थल पर पूर्व में वेलस्पन पावर एनवीं ने किसानों को भूमि को इधियाने के लिए कुचक रच धनबल-बाहुबल के बल पर अपना कानून थोपने का धरपुर प्रयास किया था, जिसे आखिरकार भारी विरोध के बाद भागना पड़ा था। अब बढ़ी काम आदानों को कंपनी मिर्ज़पुर धर्मल एनजी (यूपी) प्राइवेट लिमिटेड द्वारा किया जा रहा है। बताया वा रहा है कि इस परियोजना को लेकर पढ़ने वाले पर्यावरणीय प्रभाव की आर्शका से आरोकित लोगों ने सवाल उठाया है कि, क्या यह ईआईटी अधिसृचना, 2006 का उक्षंपन नहीं है ? इतिहास दोहराया जा रहा है। 2016 में

के तहत बुलाएं जाने का खुला आरोप

एनजोटी ने इसी स्थल के लिए पहले दी गई पर्यावरण स्वीकृति को रद कर दिया था, और इस समय गरकानुनी निर्माण को लेकर एक मामला पहले से ानामा का एक एक मानात पहल से ही ट्रिक्यूनल में लॉबत है। इसरों ओर स्थानीय ग्रामीणों के मुताबिक आदानी को कंपनी मिनीपुर धर्मल एनजीं द्वारा किये जा रहें अवध कंस्ट्रकान को लंकर एनजीटी में मामला लॉबत है, 23 मई को अगली सुनवाई भी होनी है। ऐसे में इसके पूर्व यह जनसुनवाई किस बात को ? ग्रामीण सवाल करते हैं अभी एनजोटी को रिपोर्ट आई नहीं और जनमुनवाई कर ली गई, क्यों भाई आखिरकार इतनी जल्दबाजी क्यों? ददरों खुर्द गांव के किसान रमाशंकर, क्पाशंकर, शरणशंकर सिंह, रामाज्ञा सिंह इत्यादि ने बताया कि प्रयावरणीय जनसुनवाई अनियमितता.

अपारदर्शिता एवं पर्यावरणीय नियमो के उद्यंपन का किया गया है। जिसको के उद्धर्भन का किया गया है। जिसका लेकर जिलाधिकारी मिर्जापुर च क्षेत्रीय अधिकारी, प्रदूषण निर्वत्रण चोर्ड को इस संबंध में शिकायत पत्र लिखा गया है। तथा मुख्यमंत्री पोर्टल पर भी शिकायत दर्व कराई गई है। किसानों का कहना है कि पर्यावरण प्रभाव आंकलन (छड़्दुद्ध श्ट्रु) रिपोर्ट अब तक सार्वजनिक नहीं की गई है, जबकि पर्यावरणीय जनसुनवाई से पूर्व इसका प्रकाशन एवं सार्वजनिक अवलोकन के लिए उपलब्ध कराना अनिवार्य है। वहीं उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड, वन एवं पर्यावरण मंत्रालय या किसी भी सार्वजनिक पोर्टल पर 11 अप्रैल 2025, प्रात: 11 बजे तक यह रिपोर्ट उपलब्ध नहीं



मोरजापुर। मण्डलायुक्त विन्ध्याचल मण्डल बालकृष्ण त्रिपाठी की अध्यक्षता में आयुक्त कार्यालय सभागार में राज्य सरकार के सेवानियन कर्मचरियों के सेवानियृतिक देवों से सम्बन्धित प्रकरणों के निस्तारण तेतु मण्डलीय पेंशन अदालत का आयोजन किया गया। इस अवसर पर किया गया। इस अवसर पर मण्डलायुक्त द्वारा कुल 32 दावों को सुना गया, विसमें 13 मामलों का सुनवाई स्थल पर ही निस्तारण कर धुनवाड स्वरंत पर का निरक्तरण कर दिया गया, शेष 19 प्रकरणों में से 12 प्रकरण मुख्य चिकित्तरा अधिकारी कार्यालय के जीपोएफ और एरियर भुगतान से संबंधित हैं, इस संबंध में . मण्डलावुक द्वारा मुख्य चिकित्सा अधिकारी, मीरजापुर को निर्देश दिया गया कि महालेखाकार प्रयागराज तथा

प्रकरण निस्तारित करायें एवं अन्य 07 प्रकरणों को एक मता में निस्तारित किये जाने हेतु संबंधित विभाग के अधिकारियों को निर्देशित किया गया। बैठक में जिलाधिकारी निदेशक/संयोजक पेंशन अदालत गिरीश कुमार, मुख्य कोषाधिकारी अर्चना प्रिपाठी, वरिष्ट कोषाधिकारी भदोही जी कृतेश सिंह एवं इन्द्रमान सिंह, वरिष्ठ कोषाधिकारी सोनभद्र और मुख्य चिकित्सा अधिकारी, मोरजापुर व अन्य विभागों अधिकारीगण के साथ पेंशनसे संघ के पदाधिकारीगण तथा पेंशनसं उपस्थित रहे।

विस नियंत्रक, परिवार कल्याण, उ.०००

लखनऊ से सम्पर्क स्थापित कर



4-10-11-10



Request to EAC and MoEFCC:

The Public Hearing of 11 April 2025 cannot be deemed legally valid, and the one expected under the EIA Notification, 2006. The Project Proponent must be directed to conduct a fresh Public Hearing at the project site or in village Dadri Khurd, with the UPPCB and District Administration ensuring adequate publicity and proper notice to ensure wider participation. The hearing must be held only after the EIA Report and Summary are made public and sufficient time is given for meaningful participation by affected people. The UPPCB and District Administration must also ensure the Public Hearing is free and fair and not hijacked by a political leader as happened on 11th April 2025.

4. Alternate Project Site Shall Be Explored Due To Significant Presence of Forests and Wildlife

The proposed project site lies in the heart of a Marihan Forest Range within the Mirzapur Forest Division, forming part of a contiguous forest stretch in the ecologically unique and highly threatened 'Vindhyan Kaimoor Landscape.' The project is surrounded by approx. 10 Reserve Forests and several waterfalls. In fact, there are several rivers which originate at the proposed project site.

The Marihan Forest Range where this project is proposed is a representative of tropical dry deciduous forests, bamboo brakes, rocky outcrops, grasslands, cliffs, picturesque waterfalls and many forest rivers supporting exceptional biodiversity, including several Schedule I species under the Wild Life (Protection) Act, 1972 (as amended in 2023) such as the Sloth Bear, Leopard, Striped Hyena, Fox, Rusty-Spotted Cat, Chinkara, Sambar, Spotted Deer to name a few. This forest range has the first-ever recorded population of Asiatic Wildcat (Felis lybica ornata) in Uttar Pradesh. That the ecological sensitivity of the project site can be understood from letter dated 18.07.2019 from the Chief Conservator of Forests (CCF), Mirzapur already attached in the *Annexure-III*.

A rapid camera-trap survey undertaken in pre-monsoon season of 2018 by the Mirzapur Forest Division with the assistance of the Vindhyan Ecology and Natural History Foundation, and Wildlife Trust of India documented 29 wild animal species—most now protected under Schedule I—and confirmed the area's irreplaceable wildlife habitat value. Given its role as a critical wildlife habitat and corridor, river catchment for Ganga tributaries, a 'Sloth Bear Conservation Reserve,' was proposed which included the Marihan Forest Range inside which the project site is located. An official proposal to declare approx. 400 sq.km. of the contiguous forest ranges- Marihan, Sukrit and Chunar was moved by the DFO-Mirzapur on 16.07.2019 (erroneously mentioned as 2018). The proposal is attached as

Annexure V and is already on record with MOEFCC as part of the undersigned's detailed representation dated 28th June 2024.

As per a report by <u>Wildlife Institute of India</u>, which is a premiere institution under the aegis of MOEFCC titled '*Population Status*, *Habitat and its Use by Blackbuck (Antilope cervicapra) in and around Kaimoor Wildlife Sanctuary, with reference to proposed Coal-based Thermal Power Plant of 1320 MW, Mirzapur, Uttar Pradesh' dated March 2019 and authored by Dr V.B Mathur, Dr Billal Habib, Mr Salvador Lyngdoh and Dr S.P. Goyal- all scientists of immense repute, the 8 transects were laid for 3-3.5 km range. The report also recorded geo—tagged presence of Sloth Bear, Striped Hyena, Chinkara, Jackal, Indian Fox, Indian Hare, Nilgai, Hanuman Langur from 'in and around TPP site'. The relevant chapter from the said report is attached as <i>Annexure VI*.

Request to MOEFCC and EAC:

The proposed thermal power plant is not a site-specific project and being a "Red Category" polluting industry, it represents the highest level of environmental risk. Once established, even with all pollution control measures, such a massive project along with its components will destroy wildlife habitats and fragment the contiguous Reserve Forest landscape of the Mirzapur Forest Division—part of the unique and highly threatened Vindhyan–Kaimoor ecosystem—thereby severing critical wildlife corridors, disrupting habitat connectivity, and degrading an area of exceptional ecological value.

Thus, any diversion here would cause irreversible ecological loss. In line with the precautionary principle, principle of sustainable development, and the mandate under the EIA Notification 2006 and EP Act, 1980, the MOEFCC must direct the project proponent and State of U.P. to identify alternate site for the project activity.

Based on the facts and circumstances, the project is requested to be de-listed from the EAC/MoEFCC.

5. Discrepancies On the Parivesh Portal, Affecting Transparency and Accessibility Of Critical Environmental Information

A. Two Parallel Proposal Numbers Creating Confusion

For the general public, the Parivesh Portal is the primary platform to access EIA reports and related documents for any Environmental Clearance (EC) application. Information is organised under a unique "Proposal Number," accessible via the *Track Your Proposal* tab.

The present project was originally listed under Proposal No. IA/UP/THE/467671/2024, titled "2x800 MW Coal-based Ultra Super Critical Thermal Power Project (TPP) at Village Dadri Khurd, Tehsil Mirzapur Sadar, District Mirzapur, Uttar Pradesh by Mirzapur Thermal Energy (UP) Private Limited (MTEUPPL)". Until 11 August 2025, this page displayed 61 documents, the latest being the Public Hearing Proceedings uploaded on 11 July 2025. Crucially, neither the Draft EIA Report nor the Final EIA Report are available on this page.

When attempting to obtain these reports ahead of the EAC meeting on **12 August 2025**, the undersigned could not locate them. On an RTI enquiry with MoEFCC, he was informed that the EIA Report was "already available" on the Parivesh Portal. After repeated searches he eventually discovered only through the EAC Thermal Agenda—that some of the documents of project was only listed under a separate webpage with the Proposal No. **IA/UP/THE/542333/2025** which was separate from the IA/UP/THE/467671/2024. This

IA/UP/THE/542333/2025 which was separate from the IA/UP/THE/467671/2024. This second page contained **41 documents**, including the *Final EIA Report*, but lacked several other records (including the *Public Hearing Proceedings*) that were available on the first proposal page.

It is also important to mention that many documents were duplicated across the two pages with identical dates, but critical documents were scattered between them. There was no cross-reference or link between these proposal numbers, and no public notice explaining the duplication. Without access to the EAC Agenda, the existence of the second proposal number would have remained unknown to the public. Copy of screenshots from the corresponding pages on Parivesh Portal for each Proposal Numbers IA/UP/THE/467671/2024 and IA/UP/THE/542333/2025 are attached as *Annexure VIIA* and *Annexure VIIB* respectively.

B. Inconsistencies with Date of Uploads

The landing page for Proposal No. **IA/UP/THE/542333/2025** shows a "submission date" of **19 July 2025**, yet the column corresponding to the link to download the *Final EIA Report* bears the date **14 July 2025**. However, when one opens the PDF of the actual Final EIA Report, it does not mention the actual date but only mentions 'July 2025' which raises serious doubts on the actual date of submission of the EIA Report. Further, there is no way one can sort the documents submitted as part of Project Proposal listed as per date uploaded. The order of documents are chaotic and do not follow any order of listing.

It is pertinent to mention here that till 31st July 2025, the undersigned was unable to trace the EIA Report on the Parivesh Portal and eventually filed an RTI application on **31 July 2025**. MoEFCC replied on 07 August 2025 that the EIA Report was uploaded on MOEFCC and he was advised to see the Parivesh Portal.

I wish to formally record my objection through this representation against the practice of maintaining two different proposal numbers for the same project without cross-referencing and selectively uploading different documents in both places thereby confusing and misleading the public. The delayed uploading and inconsistencies in actual date of submission of EIA documents undermines meaningful public participation and

transparency.

These actions violate the principles of transparency and procedural fairness that underpin the Environmental Impact Assessment (EIA) process, and risk preventing lawful, timely

interventions before irreversible environmental harm occurs.

Request to MoEFCC and EAC:

Consolidate all submissions and deliberations for a particular project under a single *Proposal Number* instead of multiple proposal numbers. Mandate an official, time-stamped certification showing the actual date and time of upload for each document and their subsequent revised submissions. Also arrange the documents based on reverse

chronological order.

Thank you for considering my representation on the above-mentioned matter.

Annexures I-VIIA-B are enclosed.

Regards,

Debadityo Sinha

Debatty Sinh

Vindhya Bachao Secretariat, Vindhyan Ecology and Natural History Foundation 36/30, Shivpuri Colony, Station Road Mirzapur-231001

Mobile- 9540857338, Email- debadityo@vindhyabachao.org

मा0 राष्ट्रीय हरित अधिकरण में विचाराधीन अपील नं0-79/2014 (ई0ए० नं0-364/2024) देबादित्यो सिन्हा बनाम मीरजापुर एनर्जी (यू०पी०) प्राइवेट लिमिटेड एवं अन्य में पारित आदेश दिनांक-16.08.2024 प्रकरण मेसर्स वेल्स्पन एनर्जी प्राइवेट लिमिटेड, ग्राम-ददरी खुर्द, तहसील-सदर, जनपद-मीरजापुर के विरुद्ध विचाराधीन वाद के सम्बन्ध में अद्यतन निरीक्षण आख्या:-

उक्त संदर्भित उद्योग मा० राष्ट्रीय हरित अधिकरण में विचाराधीन अपील नं0-79/2014 (ई0ए० नं0-364/2024) देवादित्यो सिन्हा बनाम मीरजापुर एनर्जी (यू०पी०) प्राइवेट लिमिटेड एवं अन्य में पारित आदेश दिनांक-16.08.2024 प्रकरण मेंसर्स वेल्स्पन एनर्जी (यू०पी०) प्राइवेट लिमिटेड, ग्राम-ददरी खुर्द, तहसील-सदर, जनपद-मीरजापुर प्रकरण में आच्छादित है। उद्योग स्थल का अद्यतन निरीक्षण दिनांक-25.11.2024 को अधोहस्ताक्षरी द्वारा किया गया। निरीक्षण के समय उद्योग प्रतिनिधि के रूप में श्री अटल पारिख, सिविल हेड उपस्थित थे। निरीक्षण के समय पाये गये तथ्यों एवं कार्यालय में उपलब्ध अमिलेखों के आधार पर विस्तृत निरीक्षण आख्या निम्नवत है:-

- 1. उक्त उद्योग ग्राम—ददरी खुर्द, तहसील—सदर, जनपद—मीरजापुर पर स्थापित किया जाना प्रस्तावित था। उद्योग का जिओ को—आर्डिनेट्स 24.980408—अक्षांश एवं 82.664966—देशान्तर है। निरीक्षण के समय उद्योग में प्रीकास्ट वाउण्ड्री वाल का निर्माण कार्य एवं भूमि की लेबलिंग का कार्य प्रगति पर पाया गया। उपस्थित प्रतिनिधि द्वारा अवगत कराया गया कि उक्त कार्य अडानी थर्मल एनर्जी पॉवर प्लाण्ट द्वारा कराया जा रहा है।
- 2. उद्योग मेसर्स वेल्स्पन एनर्जी (यू०पी०) प्राइवेट लिमिटेड, ग्राम-ददरी खुर्द, तहसील-सदर, जनपद-मीरजापुर के 2x660(1320) मेगावॉट कोयले पर आधारित तापीय विद्युत परियोजना के स्थापनार्थ दिनांक-07.04.2012 को ग्राम-ददरी खुर्द, तहसील-सदर, जनपद-मीरजापुर उ०प्र० में 'लोक सुनवाई' आयोजित की गयी थी। 'लोक सुनवाई' के कार्यवाही का विवरण कार्यालय के पत्रांक-1866/वेल्स्पन/लोक सुनवाई/2012 दिनांक-10.04. 2012 के द्वारा बोर्ड मुख्यालय प्रेषित की गयी थी (छायाप्रित संलग्न)। कार्यालय अभिलेखानुसार उद्योग को राज्य बोर्ड से अनापत्ति प्रमाण पत्र निर्गत किये जाने की सूचना उपलब्ध नहीं है।
- 3. निरीक्षण के समय उक्त उद्योग के लिये गये फोटोग्राफ्स संलग्न है:-



निरीक्षण आख्या आपके अवलोकनार्थ एवं अग्रिम आवश्यक कार्यवाही हेतु सादर प्रस्तुत है।

क्षेत्रीय अधिकारी महोदय,

26.11.00

(मनोज कुमार)
फील्ड अटेन्डेन्ट OTAR
NOORJAHAN
Gau Court
Lucknew (C.P.)

tegm 10943 :5

रहा॥ 2024 (सुशील कुमार) सहायक वैज्ञानिक अधिकारी



क्षेत्रीय कार्यालय, REGIONAL OFFICE, उ०प्र० प्रदूषण नियंत्रण बोर्ड U.P. POLLUTION CONTROL BOARD सोनभद्र SONBHADRA



संदर्भ संख्या:-

Ref.No.: G1054/Welpsun/P.H./2024

सेवा में,

दिनांक:-Date: 30.11.2024

मे० अडानी थर्मल एनर्जी पॉवर प्लाण्ट, ग्राम—ददरी खुर्द, तहसील—सदर, जनपद—मीरजापुर (पूर्वनाम—मे० वेल्स्पन एनर्जी (यू०पी०) प्राइवेट लिमिटेड धर्मल पॉवर प्लाण्ट, ग्राम—ददरी खुर्द, तहसील—सदर, जनपद—मीरजापुर।

विषय:— राज्य बोर्ड से स्थापनार्थ हेतु अनापत्ति प्रमाण-पत्र प्राप्त किये बिना मे० अडानी थर्मल एनर्जी पॉवर प्लाण्ट, ग्राम-ददरी खुर्द, तहसील-सदर, जनपद-मीरजापुर (पूर्वनाम-मे० वेल्स्पन एनर्जी (यू०पी०) प्राठलि० थर्मल पॉवर प्लाण्ट, ग्राम-ददरी खुर्द, तहसील-सदर, जनपद-मीरजापुर द्वारा निर्माण कार्य किये जाने के सम्बन्ध में।

महोदय,

कृपया उपरोक्त विषय का संदर्भ ग्रहण करने का कष्ट करें। उक्त के सम्बन्ध में अवगत कराना है कि आपके उद्योग स्थल का निरीक्षण इस कार्यालय के प्राधिकारियों द्वारा दिनांक-25.11.2024 को किया गया।

निरीक्षण के समय उक्त उद्योग ग्राम—ददरी खुर्द, तहसील—सदर, जनपद—मीरजापुर पर स्थापित किया जाना प्रस्तावित था। उद्योग का जिओ को—आर्डिनेट्स 24.980408—अक्षांश एवं 82.664968—देशान्तर है। निरीक्षण के समय उद्योग स्थल पर पर प्रीकास्ट वाउण्ड्री वाल का निर्माण कार्य एवं समतलीकरण का कार्य प्रगति पर पाया गया। उपस्थित प्रतिनिधि द्वारा अवगत कराया गया कि उक्त कार्य अडानी थर्मल एनर्जी पॉवर प्लाण्ट द्वारा कराया जा रहा है।

आप द्वारा मे0 अडानी थर्मल एनर्जी पॉवर प्लाण्ट, ग्राम—ददरी खुर्द, तहसील—सदर, जनपद—मीरजापुर (पूर्वनाम—मे0 वेल्स्पन एनर्जी (यू०पी०) प्राइवेट लिमिटेड थर्मल पॉवर प्लाण्ट, ग्राम—ददरी खुर्द, तहसील—सदर, जनपद—मीरजापुर का स्थापना राज्य बोर्ड से स्थापनार्थ पूर्व अनापित प्राप्त किये बिना किया जा रहा है, जो कि पर्यावरण अधिनियमों का उल्लंघन दर्शाता है।

अतः आपको निर्देशित किया जाता है कि उक्त उद्योग की स्थापना राज्य बोर्ड से स्थापनार्थ सहमित प्राप्त किये विना अनुमन्य नहीं है एवं उक्त के सम्बन्ध में अपना स्पष्टीकरण 07 दिवस के अन्तर्गत इस कार्यालय को प्रेषित करना सुनिश्चित करें, अन्यथा कि दशा में पर्यावरणीय अधिनियमों के अन्तर्गत आपके विरुद्ध की जाने वाली किसी भी कार्यवाही एवं मा० राष्ट्रीय हरित अधिकरण, नई दिल्ली द्वारा पारित आदेशों के अनुपालन में पर्यावरणीय क्षतिपूर्ति अधिरोपित किये जाने का सम्पूर्ण उत्तरदायित्व आपका स्वयं का होगा।

भवदीय,

(ऋतेश कुमार तिवारी) क्षेत्रीय अधिकारी

पु0सं0 एवं दिनांक उपरोक्तानुसार।

प्रतिलिपि:— मुख्य पर्यावरण अधिकारी (वृत्त—2), उ०प्र० प्रदूषण नियंत्रण बोर्ड, लखनऊ को सूचनार्थ एवं अग्रिम आवश्यक कार्यवाही हेतु सादर प्रेषित।

NOORJAHA

क्षेत्रीय अधिकारी

कार्यालय : मकान संख्या 162, उत्तर मोहाल (निकट चण्डी होटल)

राबर्ट्सगंज, सोनमद्र-231216

ई—मेल : rosonbhadra@uppcb.in

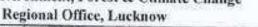
Office: House No. 162, Uttar Mohal (Near Chandi Hotel)

Robertsganj, Sonbhadra-231216 E-mail: rosonbhadra@uppcb.in



भारत सरकार पर्यावरण, वन एवं जलवायु परिवर्तन मन्त्रालय क्षेत्रीय कार्यालय, लखनऊ

Government of India Ministry of Environment, Forest & Climate Change



केन्द्रीय भवन, 11वां तल, संक्टर एच, अलोगज लखनऊ 226024 Kendriya Bhawan, 11th Floor, Sector-H, Aliganj, Lucknow-226024, Telefax-2326696 Email:rocz.lko-mef@nic.in

File no.: IV/ENV/UP/TH-41/319/2010 /1079.

Dated: 28,02,2025

To. Dr Rajesh Prasad Rastogi Scientist D Ministry Of Environment, Forest and Climate Change Indira Paryaran Bhawan, JorBagh, Aliganj, New Delhi-110003 Email: rp.rastogi@gov.in

Subject: Site inspection report of the Mirzapur Energy (U.P.) Pvt. Ltd. Regarding

References: 1. Ministry letter no. L-11011/10/2024-IA-I (T) dated 21,02.2025.

2. IA no. 110 of 2025 in execution application no. 29 of 2024 in Appeal no. 79 of 2014 titled as Debadityo Sinha Vs. Mirzapur Energy (U.P.) Pvt. Ltd. & Ors. Before the Hon'ble NGT (PB), New Delhi regard.

Sir.

I am directed to draw your kind attention to the above-referred letter of the Ministry, dated 21.2.2025, related to the captioned subject. In compliance with the above, the undersigned has been directed to inspect the project site on 25.02.2025 and submit the factual report as required by the Ministry in the referred letter. A factual report, along with the chronological status of the forest proposal for diversion of 8.3581 ha land and a photograph taken during the inspection of the project, is attached for your information and further necessary action.

Enclosed: As above (Page no.18)

Sincerely, (डॉ. ए.के.गुप्ता) अतिरिक्त निदेशक वै o





Factual Report

In compliance of the Ministry letter L-11011/10/2024-IA-I (T) dated 21.02.2025, the undersigned has conducted a site inspection of the project M/s Mirzapur Thermal Energy UP Pvt. Ltd., which is a subsidiary of M/s Adam Power Ltd.at Village Dadri Khurd, Tehsil Mirzapur Sadar, District Mirzapur (earlier, M/s Welspun Energy UP Private limited) on 25.02.2025. M/s Mirzapur Thermal Energy UP Pvt representative was present during the site inspection. Ltd, i.e., Shri R.N. Shukla, Head, Environment & Forest, Shri Dinesh Kumar, AVP Project (MP), and Shri Arun Kumar Prasad, AGM Project and Land, were also available. During the detailed discussion with the officer available during the site inspection, the chronological development of the above project is as follows:

- As per the available record, it has been found that the Ministry of Environment, Forest & Climate Change (MoEFCC) was accorded Environmental Clearance (EC) vide no. J-13012/12/2011-IA. II (T) dated 21.08.2014 to M/s Welspun Energy UP Private Limited for setting of the 2x660 MW super critical coal based Thermal Power Project at Village Dadri Khurd, Tehsil Mirzapur Sadar, District Mirzapur, Uttar Pradesh. Further, the Ministry, vide letter no. J-13012/12/2011-IA II (T) dated 20.12.2019, changed the name of the company from Welspun Energy UP Pvt. Ltd. (WEUPPL) to Mirzapur Thermal Energy UP Pvt. Ltd., which is a subsidiary of M/s Adani Power Ltd. Project proponent (PP) was also obtained NOC from Uttar Pradesh Pollution Control Board (UPPCB) vide letter no. F54116/C-9/NOC-229/2015 dated 13.01.2015.
- As per the EC dated 21.08.2024, the total land breakup mentioned in the preamble of the EC is "...The land required will be 875 acres, out of which 15.63 acres will be single crop agricultural land; 853.74 acres will be barren land; 5.44 acres will be water body; and 0.19 acres comprise of human settlements. The co-ordinates of the site are located within Latitude 24°58'41.645"N to 25°00'16.887" N and Longitude 82°39'50.425" E to 82°41'03.728" E". In addition to the above Ministry vide letter no.]-13012/12/2011-IA II (T) dated 20.12.2019 mentioned that "4. It has been noted that proposed project involves acquisition of forest land of 9.3681 ha (water pipeline, approach road, within the project boundary) which requires diversion under Forest (conservation) Act, 1980".
- Recently, the Ministry of Environment, Forest and Climate Change (MOEF&CC) accorded Term of Reference (ToR) vide file no. J-13012/12/2011-IA-II (T) dated 29.07.2024 for the Proposal of 2x800 MW Coal-based Ultra Super Critical Thermal Power Project (TPP) at Village Dadri Khurd, Tehsil, Mirzapur Sardar, District Mirzapur, Uttar Pradesh by M/s Mirzapur Thermal Energy (UP) Private Limited (MTEUPPL). As per the ToR, "...the land area of the project is 365.19 ha (Private land 364.57 ha and forest land 0.62 ha, an application was submitted for same area but after the joint inspection of DFO (forest office) & SDM (Revenue) was held on 03.04.2024 confirming that the above area is non-forest land. This area will be used for plantation/green belt purposes only.)..."

b

Page 1 of 2

Present Status of the Project:

- During the inspection, it has been found that the majority of project land is barren & undulated in nature. A very limited number of trees/shrubs etc. has been found on site.
- During the inspection of the project, it has been found that the PP had already constructed the boundary wall all around the project by using ready-made (precast boundary pillars/wall) and by using MS profile sheet (in some undulated patches) up to 7 to 10 feet height with main gate (by using MS pipe/rods etc) and one security room very close to main gate. One abundant well has also been found during the site inspection. PP has also been constructed with one rainwater storage pond with a 30,000 m² capacity for the collection of rainwater in the south-southwest direction of the site. In addition to the above, PP has placed several rectangular MS portable site cabins fitted with Split Air conditioners etc. One MS portable toilet has also been made available on-site. Several fresh industrial cables with wooden/plastic drums and other related materials etc have also been available on site. The digging work of cabling laying in some patches has also been seen. Besides, ready-made electricity poles with wires in working condition have also been seen going to near village through project land. High tension wires have also been passed through project land.
- It has also been found that the project land is not connected with the main road; only one connectivity
 has been found through forest land (around 1.5 to 2 km), which has been used by PP by paying fee
 as forest accessed to the local forest department (Madhihan Range) of Rs 5000/= on 16.08.2024 and
 Rs 11650/= on 30.12.2024. (A copy of the bill is attached in Annexure II)
- Status of the forest diversion proposal for 8.3581 ha is pending with this Regional Office; chronological status is attached as Annexure I.
- A photograph taken during the site inspection has also been enclosed as Annexure II.

g .



Page 2 of 2

(FP/UP/THE/14236/2015).

Sub: Diversion of 8.3581 ha. Reserved Forest land for WATER PIPELINE CORRIDOR AND APPROACH ROAD FOR MIRZAPUR 1320 MW THERMAL POWER PROJECT

- विशेष सचिव, उत्तर प्रदेश शासन के पत्राक पी-61/14-2-2016-800(64)2016, दिनांक 18.04.2016
 द्वारा प्रस्ताव इस कार्यालय में प्राप्त हुआ था।
- इस कार्यालय पत्र दिनांक 13 05 2016 दारा निम्न बिन्दुओं पर राज्य सरकार से सूचनाएं मांगी गयी थी.
 जो निम्न प्रकार है—
 - The proposal has not been submitted after analysing other minimum three alternatives and selection of the alternative having minimum forest area.
 - At various places seal of different officials has not been affixed.
 - The user agency is a private entity and most of the certificates/undertakings have not been counter signed by the concerned district level authorities.
 - 4. The component wise break up of forest land requirement at B-2.4 (part-I) is incorrect.
 - The project proponents /user agency have authorised three directors to sign on behalf of the company whereas the papers in hard copy has been signed by the 4th person one of the Managers. This needs clarification.
 - The proposal is without relevant undertaking regarding conditions imposed by Department of Irrigation, UP Government & Central Water Commission, Ministry of Water Resources, Government of India regarding usage water from Ganga River.
 - Form per the .kml file enclosed regarding proposed forest land diversion, location of approach
 road cannot be deciphered.
 - 8. The KML files for proposed forest land diversion are in poly-line format rather polygon format to be amenable for GIS DSS analysis. It has been noticed that only GPS coordinates of centreline has been provided in the .kml files. The forest area has been masked therefore the assessment of other ground features cannot be done.
 - As per information provided at C (ii) (b) in part I, one segment of forest patch has been mentioned whereas on the map itself many forest segments are visible.
 - 10. The justification note uploaded at D (i) mentions requirement of forest area is 7.6308 has A R whereas the proposal has been submitted for 8.3581 ha of forest land which is erroneous and misleading.
 - 11. Forest land gazette notification uploaded with the proposal has not been authenticated by the Advisor concerned DFO.
 - 12. The site suitability certificate uploaded mentions 7,6298 ha whereas proposal is for diversion of forest land to the extent of 8,3581 ha. Even mandatory requirement of equivalent non forest land to make good loss of forest has not been fulfilled. The format of site suitability certificate is not as per requisite format.
 - Topo sheet uploaded for location of approach road is hazy and without title, index & legend.
 - Uploaded forest land calculation sheet is without details and has not been signed by the concerned DFO.

- 15. In part II, at Sr No.5 regarding working plan prescription it is mentioned as "No Data". Reason for not providing data may be explained.
- 16. In part II, at Sr No.6 regarding vulnerability of forest area for soil erosion, it has been mentioned that 'no soil erosion' which appears to be incorrect assessment and reason for such incorrect assessment needs to be submitted.
- 17. In part II, at Sr No.11 (i) it has been mentioned that work has been carried out in violation of FCA 1980 but the details have not been provided in 11 (i) (a), (b) & (c).
- 18. The compensatory afforestation has been proposed on equivalent non forest land for which uploaded site suitability certificate is not as per appropriate format.
- 19. The estimate for Compensatory Afforestation has been framed for 10 ha whereas the extent of CA is only 8.3581 ha. Therefore, the same needs revision as per the proposal.
- 20. The site inspection report (uploaded one) is without seal of the concerned DCF.
- 21. The NPV calculation sheet is incorrect and needs revision.
- Certificates & NOCs from Village level Committees under FRA 2006 needs compilation and submission of one abstract sheet showing relevant forest area of each village.
- 23. As per the details provided, the progress of compensatory afforestation is very low (mere 75 ha out of stipulated 360 ha). Reasons may be submitted for the same.
- 24. Pages from 120 to 194 are not relevant.
- The proposal requires submission of detailed layout plan showing specific location of each major components of Thermal power plant.
- 26. Two separate enumeration lists are required-
 - (a) Total trees standing on the proposed forest land.
 - (b) Trees required to be felled.
- Joint inspection by DFO has been done with whom because other signature is of Regional Office and if cannot be made out who is the third signatory.
- 3 विशेष सचिव, उत्तर प्रदेश शासन के पत्रांक 1639/14-2-2016-800(64)/2016, दिनांक 09:08:2016 द्वारा इस कार्यालय के पत्र दिनांक 13:05:2016 द्वारा चाही गयी सूबनाओं की अनुपालना उपलब्ध करायी गयी है--

S.No.	Conditions	Reply
1.	The proposal has not been submitted after analysing other minimum three alternatives and selection of the alternative having minimum forest area.	प्रयोक्ता अभिकरण द्वारा प्रस्तावित भूमिगत वाटर पाइप लाइन एवं सम्पर्क मार्ग निर्माण हेतु तीन विकल्प रूट मैप प्रस्ताव में संलग्न किया गया हैं। इनमें सी न्यूनतम वन क्षेत्र से सम्बन्धित विकल्प ही चयन किया गया हैं।
2,	At various places seal of different officials has not been affixed.	चयन किया गया हैं। प्रस्ताव में विभिन्न अपेक्षित पृष्ठों पर सम्बन्धित अधिकारियों की मुहर लेगा दीं। गयी हैं।
3.	The user agency is a private entity and most of the certificates/undertakings have not been counter signed by the concerned district level authorities.	प्रस्तावक संस्था द्वारा प्रस्तुत बचनबद्धेवर् प्रमाण पत्र प्रभागीय वनाधिकारी द्वारा प्रतिहस्ताक्षरित कर दिया गया है।
4.	The component wise break up of forest land	परियोजना के विभिन्न घटकों हेतु अपेक्षित

	requirement at B-2.4 (part-I) is incorrect.	वन भूमि का मदवार विवरण प्रस्तावक संस्था द्वारा पार्ट-1 के ठ. 2.4 के अनुसार अपेक्षित भूमिगत वाटर पाइप लाइन हेतु- 5.8162 हे0 एवं सम्पर्क मार्ग निर्माण हेतु 2.5419 हे0 हैं जिसे तद्नुसार संशोधित कर अंकित किया गया हैं।
Šū.	The project proponents /user agency have authorised three directors to sign on behalf of the company whereas the papers in hard copy has been signed by the 4th person one of the Managers. This needs clarification.	प्रस्तावक संस्था वेलेस्पन इनर्जी यू०पी० प्रा॰लि॰ के बोर्ड आफ डायरेक्टर का प्राधिकृत प्रतिनिधि के सम्बन्ध में प्रमाण पत्र संलग्न हैं।
6.	The proposal is without relevant undertaking regarding conditions imposed by Department of Irrigation, UP Government & Central Water Commission, Ministry of Water Resources, Government of India regarding usage water from Ganga River.	प्रस्तावक संस्था वेलेस्पन इनर्जी यू०पी० प्रा॰लि॰ द्वारा उपलब्ध कराया गया अन्डरटेकिंग मूल में संलग्न हैं।
7,	Form per the .kml file enclosed regarding proposed forest land diversion, location of approach road cannot be deciphered.	निर्देशानुसार KML File अपलोड किया गया हैं।
8.	The KML files for proposed forest land diversion are in poly-line format rather polygon format to be amenable for GIS DSS analysis. It has been noticed that only GPS coordinates of centre line has been provided in the kml files. The forest area has been masked therefore the assessment of other ground features cannot be done.	निर्देशानुसार KML File अपलोड किया गया हैं।
9.	As per information provided at C (ii) (b) in part 1, one segment of forest patch has been mentioned whereas on the map itself many forest segments are visible.	गया हैं।
10.	The justification note uploaded at D (i) mentions requirement of forest area is 7.6308 has whereas the proposal has been submitted for 8.3581 ha of forest land which is erroneous and misleading.	में क्षेत्रफल को संशोधित कर 8.3581 हेक्टेयर अंकित कर दिया गया है तथा part-1 में अपलोड कर दिया गया हैं।
11.	Forest land gazette notification uploaded with the proposal has not been authenticated by the concerned DFO.	जलापूर्ति बावत भूमि गत पाइप लाइन एव सम्पर्क मार्ग हेतु प्रस्तावित आराजी को विन्हित तथा प्रभागीय वनाधिकारी द्वारा सत्यापित कर दिया गया हैं।
12.	The site suitability certificate uploaded mentions 7.6298 ha whereas proposal is for diversion of forest land to the extent of 8.3581 ha. Even mandatory requirement of equivalent non forest land to make good loss of forest has not been fulfilled. The format of site suitability	उपयुक्तता प्रमाण पत्र निधारित प्रारूप म संलग्न हैं।

	certificate is not as per requisite format.	along over account and ref
3.	Topo sheet uploaded for location of approach road is hazy and without title, index & legend.	प्रस्तावक संस्था द्वारा उपलब्ध कराई गई टोपोशीट जिस पर Title, Index & legend अंकित है मूल में प्रभागीय वनाधिकारी द्वारा हस्ताक्षरित कर संलग्न करते हुए ऑन-लाइन अपलोड कर दिया गया है।
14.	Uploaded forest land calculation sheet is without details and has not been signed by the concerned DFO.	प्रस्ताव में प्रभागीय वनाधिकारी द्वारा हस्तातंरित लेण्ड शेड्यूल संलग्न तथा ऑन- लाइन भी अपलोड किया गया हैं।
15.	In part II, at Sr No.5 regarding working plan prescription it is mentioned as "No Data". Reason for not providing data may be explained.	भाग-2 के कम सं0-5 कार्य योजना वर्ष 2014-15 से 2023-24 के अध्याय 1 के प्रस्तर सं0-1.23 में उल्लिखित हैं कि अभिलेखों में 0 अंकित वन भूमि के गैर वानिकी कार्यों के प्रयोग हेतु वन (संरक्षण) अधिनियम 1980 के अनुमति केन्द्र/भारत सरकार की पूर्व अनुमति आवश्यक हैं।
16.	In part II, at Sr No.6 regarding vulnerability of forest area for soil erosion, it has been mentioned that 'no soil erosion' which appears to be incorrect assessment and reason for such incorrect assessment needs to be submitted.	भाग-2 के कम सं0-6 में अपेक्षित सूचना अपलोड कर दी गयी हैं।
17.	In part II, at Sr No.11 (i) it has been mentioned that work has been carried out in violation of FCA 1980 but the details have not been provided in 11 (i) (a), (b) & (c).	भाग-2 के कम सं0-11 (1) के सम्बन्ध में अवगत कराना है कि प्रस्तावक संस्था द्वारा वन (संरक्षण) अधिनियम 1980 का उल्लंघन नहीं किया गया हैं। जैसा कि पूर्व में भी अपलोड किया गया हैं। अतः 11(1) 0 (इ)-(ब) से सम्बन्धित सूचना शून्य हैं।
18.	The compensatory afforestation has been proposed on equivalent non forest land for which uploaded site suitability certificate is not as per appropriate format.	क्षतिपूरक वनीकरण हेतु समतुल्य गेर वन भूमि का उपयुक्ता प्रमाण पत्र निधारित प्रारूप में संलग्न हैं।
19.	The estimate for Compensatory Afforestation has been framed for 10 has whereas the extent of CA is only 8.3581 ha. Therefore, the same needs revision as per the proposal.	10.00 है0 के माडल प्रारूप के आधार पर तैयार किया गया हैं, न कि 10.00 है भी वृक्षारोपण हेतु । 10.00 है क्षेत्रफर्ज के माडल के आधार पर 8.3581 है। गैर वनभूमि हेतु क्षतिपूरक वनीक्रण को प्राक्कलन तैयार कर संलग्न कर दिया गया है।
20.	The site inspection report (uploaded one) is without seal of the concerned DCF.	लिस्ट-25) पर मुहर लगा दी गयी है।
21.	The NPV calculation sheet is incorrect and needs revision.	

		प्रति हे॰ की दर से किया गया था जिसको ईको क्लास व हरियाली घनत्व के आधार पर 6.26 लाख प्रति हेक्टेअर की दर से संशोधित कर दिया गया है।
22.	Certificates & NOCs from Village level Committees under FRA 2006 needs compilation and submission of one abstract sheet showing relevant forest area of each village.	वन अधिकार अधिनियम 2006 के अन्तर्गत अपेक्षित / संशोधित प्रमाण पत्र प्रस्तावक संस्था द्वारा उपलब्ध कराया गया जो प्रस्ताव में संलग्न हैं।
23.	As per the details provided, the progress of compensatory afforestation is very low (mere 75 ha out of stipulated 360 ha). Reasons may be submitted for the same.	क्षतिपूरक वनीकरण की प्रगति की अद्यतन स्थिति प्रस्ताव में अंकित कर दी गयी हैं।
24.	Pages from 120 to 194 are not relevant.	प्रस्ताव में संलग्न पेज संख्या 120 से 194 प्रस्ताव से अलग कर प्रस्ताव की कम संख्या संशोधित कर दी गयी हैं।
25.	The proposal requires submission of detailed layout plan showing specific location of each major components of Thermal power plant.	प्रस्तावक संस्था द्वारा परियोजना का ले आउट प्लान उपलब्ध कराया गया हैं जो प्रस्ताव में संलग्न हैं।
26.	Two separate enumeration lists are required- (a) Total trees standing on the proposed forest land. (b) Trees required to be felled.	बाधक समस्त 296 वृक्षों का पातन किया जाना हैं। तदनुसार प्रभावित व पातन किए जाने वाले वृक्षों की सूची समान हैं।
27.	Joint inspection by DFO has been done with whom because other signature is of Regional Office and if cannot be made out who is the third signatory.	प्रभागीय वनाधिकारी द्वारा प्रस्तावित वन भूमि का संयुक्त निरीक्षण, प्रस्तावित संस्था

 इस कार्यालय के सम-संख्यक पत्र दिनांक 01.092016 द्वारा निम्न विन्तुओं पर जानकारी मांगी गयी थी क्षिप निम्न प्रकार है-

 As per the Sr. No. 7 & 8 of the previous EDS; there is need to lay proposed forest had on Google Earth and show geo coordinates of polygon/polygons forming the proposed forest land diversion.

2. In part I (ii) (b) number of segments need correction (Sr. No. 9 of the previous EDS)

The land schedule for proposed forest land diversion should be chainage wise in a tabular form;
 (Sr. No. 14 of the previous EDS).



- Reasons for slow progress of CA (Sr. No. 23) has not been given. (Sr. No. 23 of the previous EDS).
- The kml files of minimum three alternatives examined for proposed alignment needs submission.
- 5 विशेष सचिव, उत्तर प्रदेश शासन के पत्रांक 2446/14-2-2016-800(64)/2016, दिनांक 18.12.2016 द्वारा इस कार्यात्य के पत्र दिनांक 01.09.2016 द्वारा चाही गयी सूचनाओं की अनुपालना उपलब्ध करायी गयी है-

S.No.	Conditions	Reply
1:	As per the Sr. No. 7 & 8 of the previous EDS; there is need to lay proposed forest land on Google Earth and show geo coordinates of polygon/polygons forming the proposed forest land diversion.	The geo coordinates of polygon/ polygons forming the proposed forest land diversion has been attached as annexure 1 and the same has been uploaded online in Part I.
2,	In part I (ii) (b) number of segments need correction (Sr. No. 9 of the previous EDS)	Number of segments in part I (ii) b has been corrected online.
3.	The land schedule for proposed forest land diversion should be chainage wise in a tabular form. (Sr. No. 14 of the previous EDS).	Chainage wise land schedule in Tabular form is attached as annexure 2 and the same has been uploaded online in part 1.
4.	Reasons for slow progress of CA (Sr. No. 23) has not been given. (Sr. No. 23 of the previous EDS).	Progress of CA is not slow. 100% Target (366.300 hactare) has been achieved which is also Shown in Part-2 in parra 12(4) and (5) (Copy attached)
5.	The kml files of minimum three alternatives examined for proposed alignment needs submission.	The kml files of three alternatives has

- हस कार्यालय के सम-संख्यक पत्र दिनांक 08.12.2016 द्वारा निम्न बिन्दुओं पर जानकारी मांगी गयी थी, जो निम्न प्रकार है.—
 - As per the St. No. 7 & 8 of the previous EDS; there is need to lay proposed forest land on Google Earth and show geo coordinates of polygon/polygons forming the proposed forest land diversion.
 - The .kml files of minimum three alternatives examined for proposed alignment needs submission.
- इस कार्यालय द्वारा दिनांक 05.01.2017 को क्षेत्रीय सशक्त समिति की बैठक आहूत की गयी थीं, जिसमें प्रस्ताव को ओनलाइन प्रस्तुत न किए जाने के कारण तथा प्रयोवता अभिकरण के उपस्थित न होने के कारण प्रस्ताव को स्थिगित (Deferred) कर दिया गया था।
- इस कार्यालय के सम–संख्यक पत्र दिनांक 10.01.2017 द्वारा निम्न बिन्दुओं पर जानकारी मांगी गयी थी, जो निम्न प्रकार है.–

- As per GIS DSS analysis one of the polygon i.e. polygon l is inviolate.
- KML file of minimum three alternatives examined for selection of proposed alignment also needs submission.
- In pursuance or order of Hon'ble NGT is appeal no. 79 of 2004; Department of Forest, UP may review its stand on the proposal.
- 9 दिनांक 27.092017 द्वारा इस कार्यालय के सम—संख्यक पत्र दिनांक 11.012017 द्वारा चाही सूचनाओं की अनुपालना 45 दिनों के भीतर प्राप्त न होने पर वन संस्क्षण अधिनियम 2003 के पैरा 4.14 (i) के तहत प्रस्ताव को बंद करने एवं यदि उल्लंघन हुआ है तो जिम्मेदार अधिकारी/कर्मचारी के विरुद्ध कार्रवाई करने हेतु पत्र प्रेषित किया गया था।
- विशेष सचिव, उत्तर प्रवेश शासन के पत्रांक 2711/14-2-2017, दिनांक 22.11.2017 द्वारा इस कार्यांतय के पत्र दिनांक 27.09.2017 द्वारा चांडी गयी सूचनाओं की अनुपालना उपलब्ध करायी गयी है।
- 11. इस कार्यालय के सम-संख्यक पत्र दिनांक 11.12.2017 द्वारा अनुसचिव (वन) जल्तर प्रदेश शासन को यह निर्देश दिया गया था कि इस कार्यालय के सम-संख्यक पत्र दिनांक 11.07.2017 द्वारा चाही गयी सूचनाओं की अनुपालना तथा प्रकरण में किसी भी स्तर से वन संख्यण अधिनियम 1980 का उल्लंधन तो नहीं किया गया यह सुनिश्चित करने हेतु पत्र प्रेषित किया गया था।
- इस कार्यालय के सम-संख्यक पत्र दिनांक 29.10.2021 द्वारा अतिरिक्त मुख्य सचिव को पत्र प्रेषित किया था।
- 13. इस कार्यालय के सम-संख्यक पत्र दिनांक 07.01.2022 द्वारा प्रमुख संसिव वन को पत्र प्रेषित किया था।
- 14. इस कार्यालय के सम-संख्यक पत्र दिनांक 12.01.2022 द्वारा स्थल निरीक्षण हेतु गठित समिति से निम्न अपेक्षाएं की गयी थी --
 - Whether the two Gata No.s 180 and 216 ja of Dadri Khurd village recorded as Jhari in revenue record has been included in the list of Deemed forest as Forest like area?
 - What is the criteria adopted by State of UP for declaring any area as Deemed Forest/Forest like area?
 - 3. The Geo-referenced map of the said area may be provided for DSS-analysis of the same.
 - Ascertaining the presence of biodiversity (floral and faunal) during the site visit.
 - 5. As per Para 2.1.2 of Ministry's office memorandum F.No. 7-31/2007-FC (pt.-III) dated 10-01-2014, "the Hon'ble Supreme Court in the Lafatge Judgment inter-alia directed that (in the application seeking environment clearance) if the project proponent makes a claim regarding status of the land being non-forest and if there is any doubt about the claim the site shall be inspected by the State Forest Department along with Regional Office of MoEF to ascertain the status of forests, based on which the certificate in this regard by issued. In all such cases, it would be desirable for the representative of State Forest Department to assist the Expert Appearisal Committee."
- 15. दिनांक 17.01.2022 को उप वन महानिदेशक (केन्द्रीय) की अध्यक्षता में उक्त प्रकरण पर एक बैठक आहृत की गयी, जिसमें निम्न अधिकारियों ने भाग लिया:-
 - श्री सुनील दूवे, मुख्य वन संस्क्षक भूमि अभिलेख एवं बंदोबस्त, लखनऊ।
 - 2. श्री रमेश चन्द्र झा, मुख्य वन संस्थक, मिर्जापुर।
 - श्री पी0एस0 त्रिपाठी, प्रभागीय यनाधिकारी, मिर्जापुर।



- श्री पीठकंठ शुक्ला, उप प्रभागीय वनाधिकारी, चुनार।
- 16. प्रयोक्ता अभिकरण के पत्र दिनांक 24.08.2022 द्वारा इस कार्यालय द्वारा दिनांक 17.01.2022 को बैटक में लिए गए निर्णय के अनुसार अनुपालना उपलब्ध करायी गयी है।
- 17 इस कार्यालय के सम—संख्यक पत्र दिनांक 04.11.2022 द्वारा प्रमुख सचिव वन को निम्न बिन्दुओं पर सूचना प्रेषित करने हेतु पत्र भेजा गया था :--
 - Whether the two Gata Nos. 180 and 216 ja of Dadri Khurd village recorded as Jhari in revenue record has been included in the list of Deemed forest as Forest like area?
 - What is the criteria adopted by State of UP for declaring any area as Deemed Forest/Forestlike area?
 - 3. The Geo-referenced map of the said area may be provided for DSS-analysis of the same.
- 18. मुख्य वन संरक्षक/नोडल अधिकारी, लखनऊ के पत्र संख्या 3276/11-सी-FP/UP/Thermal/14236/ 2015, दिनांक 25/04/2024 द्वारा इस कार्यालय के पत्र दिनांक 04/11/2022 द्वारा चाही गई सूचना की अनुपालना उपलब्ध करायी गयी है, जो निम्न है:-

Sr. No.	Information sought	Reply
	Whether the two Gata Nos. 180 and 216 ja of Dadri Khurd village recorded as Jhari in revenue record has been included in the list of Deemed forest as Forest like area?	ग्राम-ददरीखुर्द, तहसील-सदर, मीरजापुर का गाटा संख्या-180 एवं 216ज राजस्व अभिलेखों में झाड़ी के नाम से दर्ज है। (खतीनी की प्रति संलग्न) है। जनपद-मीरजापुर में वन स्वरूप क्षेत्रे की सूची में ग्राम-ददरी खुर्द तथा उक्त गाट संख्या-180 एवं 216 ज सम्मिलित नहीं है (जनपद मीरजापुर में चिन्हित वन स्वरूप क्षेत्रे की सूची संलग्न है।)
2	What is the criteria adopted by State of UP for declaring any area as Deemed Forest/Forest like area?	कार्यालय प्रमुख वन संरक्षक, उ०प्र० लखनऊ वे पत्रांक-275/पी०ए०/आई०ए० (वनस्वरूप लखनऊ दिनांक 20.12.2007 द्वारा वन स्वरूप क्षेत्रों के चिन्हिकरण हेतु मानक निधीरित करते हुये प्रमुख सचिव, उ०प्र० शासन, अनुभाग 2, लखनऊ को प्रेषित पत्र में राज्य स्तरीव विशेषज्ञ समिति की आयोजित बैठव दिनांक 19.12.2007 में समिति द्वारा वन स्वरूप क्षेत्र का चिन्हिकरण हेतु मानक निधीरित करने की संस्तुति की गयी है। (प्रति संलग्न)। निधीरित मानक के अनुसार वन स्वरूप क्षेत्र हेतु विन्ध एवं बुन्देलखण्ड के क्षेत्र में भूमि का न्यूनत्व क्षेत्रफल 3 हें0, जिसमें प्रति हे॰ बहुवर्षीय प्रजाि के 100 पेड़ होना चाहिये। जबिक



		में पड़ता है खसरा न0-180 का क्षेत्रफल मात्र 1.010 हे0 तथा खसरा न0 216ज/0.490 हे0 है जो वन स्वरूप क्षेत्र के लिये न्यूनतम निर्धारित क्षेत्रफल 3 हे0 के सापेक्ष बहुत कम है। 2-खसरा न0-180 तथा खसरा न0-216ज में प्राकृतिक रूप से उगे बहुवर्षीय प्रजाति के वृक्ष नहीं है। उपरोक्त तथ्यों के आधार पर स्पष्ट है कि खसरा न0-180 व 216ज वन स्वरूप क्षेत्र की सूची में नहीं है तथा वन स्वरूप क्षेत्र के पदकव्रे लिये निर्धारित मानक के परिधि के अन्तर्गत भी नहीं है।
3	The Geo-referenced map of the said area may be provided for DSS-analysis of the same.	As per DSS report the Geo-referenced map of the said area is still not resolved. The Geo-referenced map/SOI toposheet has not been provided.

19 इस कार्यालय द्वारा दिनाक 03.06.2024 को क्षेत्रीय सशक्त समिति की बैठक आहूत की गयी, जिसमें निम्न बिन्दुओं के अमाव में प्रकारण को स्थागित (Deferred) कर दिया गया—

 Details regarding KML files, CA land and other information, presented during the meeting need to be uploaded on portal and forwarded by the Nodal Officer. Accordingly, following information, as presented during meeting, need to be uploaded/provided.

a) KML file of the area proposed for diversion is still not rectified. Uploaded KML file of the

area proposed for diversion is in point format.

b) The proposed CA land has been proposed in Non-forest land under the Kaimur WLS area. This needs to be confirmed by DFO & Nodal Officer.

c) Still Geo-referenced map of the proposed forest land along with toposheet map has not

uploaded on Parivesh Portal.

d) The said project is related to lying of water pipeline and approach access to the thermal power plant but it is not clear from the uploaded kml file as well as Geo reference map.

e) Area calculation along with land schedule is not uploaded.

Comparative study of Alternatives routes has not been explored for the Project.

g) Legal Status of land and Current status of proposed Thermal Power Plant is not of

FRA certificate along with Gram Sabha resolution needs to be uploaded.

3. After detailed discussion, the committee decided that the Nodal off Phreeds negate examine the applicability of the FCA on such lands in respect of above that panel which are classified as jhari on the basis of records and accordingly, if required that age needs to submit proposal for diversion of forest land for Gata Nos. 180 and 216 of village required for construction in respect of Thermal Power plant, which is proposal for which EC has been accorded.

 मुख्य वन संरक्षक/नोडल अधिकारी के पत्र संख्या 341/11-सी-FP/UP/Thermal/14236/2015, दिनांक 05.08.2024 द्वारा इस कार्यालय के पत्र



दिनांक 24.06.2024 द्वारा चाही गयी सूचना की अनुपालना आख्या उपलब्ध करायी गयी है, जो निम्न प्रकार है:-

ह 0सं0	आपत्ति	अनुपालना आख्या
1.	Details regarding KML files, CA land and other information, presented during the meeting need to be uploaded on portal and forwarded by the Nodal Officer. Accordingly, following information, as presented during meeting, need to be uploaded/provided.	
В.	KML file of the area proposed for diversion is still not rectified. Uploaded KML file of the area proposed for diversion is in point format.	As per DSS analysis, the KML file of the area proposed for diversion has been resolved. The revised KML file has been uploaded.
ь.	The proposed CA land has been proposed in Non- forest land under the Kaimur WLS area. This needs to be confirmed by DFO & Nodal Officer.	As per DSS analysis, the CA in WLS, comments of the concerned DFO has been uploaded.
c.	Still Geo-referenced map of the proposed forest land along with toposheet map has not uploaded on Parivesh Portal.	As per DSS analysis, the revised Geo referenced map and SOI toposheet has been uploaded.
d.	The said project is related to lying of water pipeline and approach access to the thermal power plant but it is not clear from the uploaded kml file as well as Geo reference map.	map and SQI toposheet has been uploaded.
e.	Area calculation along with land schedule is not uploaded.	Area calculation is uploaded in Parivesh portal. Provided at TOC page no. 12
f.	Comparative study of Alternatives routes has not been explored for the Project.	Provided at TOC page no. 13
g.	Legal Status of land and Current status of proposed Thermal Power Plant is not clear.	Provided at TOC page no. 40
2.	FRA certificate along with Gram Sabha resolution needs to be uploaded.	n Provided at TOC page no. 15-39
3.	After detailed discussion, the committee decided that the Nodal officer needs to negate/examine the applicability of the FCA on such lands in respect of above Gata numbers, which are classified as jhari or the basis of records and accordingly, if required User agency needs to submit proposal for diversion of forest land for Gata Nos. 180 and 216 of Dadr Khurd village required for construction in respect of Thermal Power plant, which is a separate proposator which EC has been accorded.	TAOT

21. इस कार्यालय के सम-संख्यक पत्र दिनाक 17.09.2024 द्वारा प्रकरण में माननीय न्यायालय की कार्रवाई एवं निर्णय से इस कार्यालय को अवगत कराने हेतु पत्र प्रेषित किया गया था।



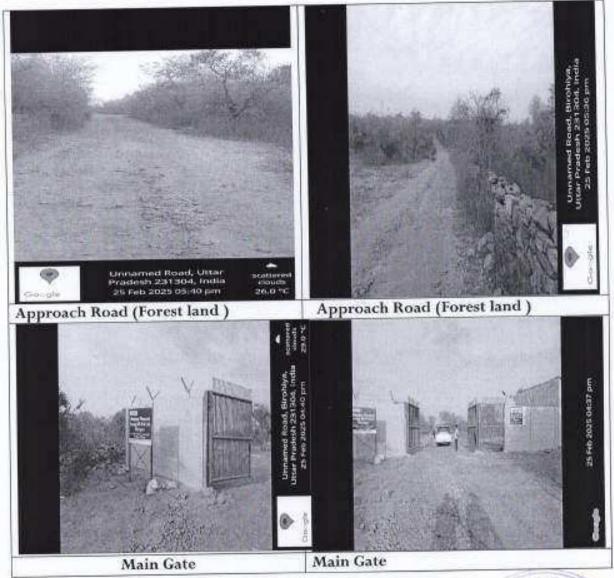
22. प्रस्तुत पत्र श्री आर०एन० शुक्ला, मिर्जापुर थर्मल एनर्जी यूपी प्राइवेट लिमिटेड से पत्र संख्या MTEUPPL/TPP/FCA/1609/2024, दिनांक 11.10.2024 द्वारा प्राप्त हुआ है, जिसके द्वारा अनुरोध किया गया है कि आगामी क्षेत्रीय संशक्त समिति की बैठक में उक्त प्रस्ताव को वन संरक्षण अधिनियम, 1980 की धारा-2 के तहत सेद्धांति स्वीकृति निर्गत करने का अनुरोध किया गया है।

यहां यह भी अवगत कराना है कि उक्त प्रकरण माननीय न्यायालय में विचाराधीन है। इस बावत में इस कार्यालय के पत्र दिनांक 24.09.2024 को प्रकरण में माननीय न्यायालय द्वारा की गयी कार्रवाई एवं निर्णय से इस कार्यालय को अवगत कराने हेतु पत्र प्रेषित किया गया था।



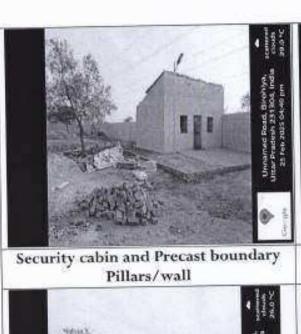


Annexure-II Photograph taken during Site inspection of the project











Precast boundary pillars/wall



Unused/damaged ready-made boundary pillars



Barren land and crossing high tension wires

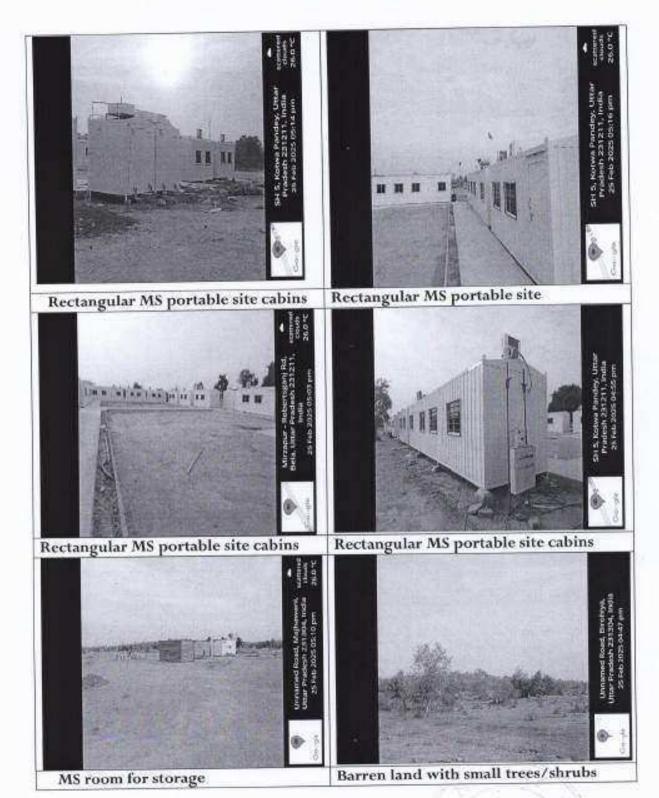


Electricity pole with wire



Abundant well

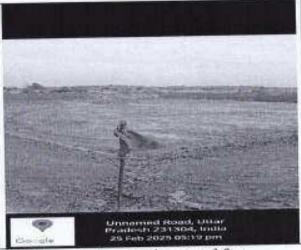




Page 3 of 5



Rain water harvesting pond for storage of rain water



Rain water harvesting pond for storage of rain water



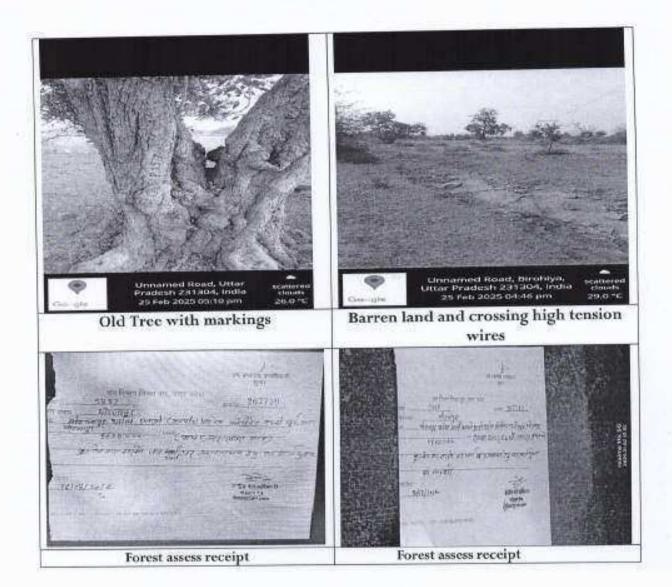
Fresh industrial cables with wooden/plastic drums and other related materials



Fresh industrial cables with wooden/plastic drums and other related materials







1



Page 5 of 5

कार्यालय मुख्य वन संरक्षक, मीरनापुर क्षेत्र, मीरनापुर

पत्रांकःसा0-

/मी०क्षे०/33/दिनांक, मीरजापुर, जुलाई, | हे ,

2019

सेवा में,

मुख्य वन संरक्षक/नोडल अधिकारी, उत्तर प्रदेश, लखनऊ।

विषय:--

बेलेस्पन एनर्जी यू०पी० प्रा०लि० द्वारा ग्राम— ददरी खुर्द, तहसील— सदर, जिला— मीरजापुर में प्रस्तावित 1320(2x660) मेगावाट ताप विद्युत गृह की स्थापना हेतु जलापूर्ति बावत भूमिगत वाटर पाइप लाईन एवं सम्पर्क मार्ग निर्माण हेतु 8.3581 हे० आरक्षित वन भूमि के गैर वानिकी प्रयोग एवं बाधक 296 वृक्षों के पातन की अनुमित के सम्बन्ध में।

संदर्भ-

भारत सरकार का पत्रांक—8बी / 08 / 38 / 2016 / एफ.सी. / 478 दिनांक 11.01.2017, उत्तर प्रदेश शासन का पत्रांक— 2691 / 14—2—2018—800(64) / 2016 दिनांक 27.08.2018 आपका पत्रांक 469 / 11—सी—FC/UP/Thermal/14236/2015 लखनऊ दिनांक 29.08.2018 प्रभागीय वनाधिकारी, मीरजापुर का पत्रांक—286 / मीरजापुर / 15 दिनांक 16.07.2019

महोदय,

प्रभागीय वनाधिकारी, मीरजापुर ने अपने संदर्भित पत्र द्वारा बेलेस्पन एनर्जी यू०पी० प्रा०लि० द्वारा ग्राम— ददरी खुर्द, तहसील— सदर, जिला— मीरजापुर में प्रस्तावित 1320(2x660) मेगावाट ताप विद्युत गृह की स्थापना हेतु जलापूर्ति बावत भूमिगत वाटर पाइप लाईन एवं सम्पर्क मार्ग निर्माण हेतु 8.3581 हे० आरक्षित वन भूमि के गैर वानिकी प्रयोग एवं बाधक 296 वृक्षों के पातन की अनुमित के सम्बन्ध में भारत सरकार पर्यावरण वन एवं जलवायु परिवंतन मंत्रालय क्षेत्रीय कार्यालय मध्य के पत्रांक— 8बी/08/38/2018/एफ०सी०/478 दिनांक 11.01.2017 के बिन्दु संख्या 3 पर उल्लिखित "In pursuance of order of Hon'ble NGT in appeal no 79 of 2014. Department of Forests, UP may review its stand on the proposal" अपील संख्या 79/2014 में दिनांक 21.12.2016 को मा० राष्ट्रीय हरित न्यायाधिकरण के पूरे निर्णय का संज्ञान लेते हुए दिनांक 01.05.2017 को मा० राष्ट्रीय हरित न्यायाधिकरण के निर्णय आलोक में पुनः क्षेत्र की पर्यावरणीय महत्व के क्रम में स्थिति स्पष्ट करते हुए पुनरीक्षण आख्या निम्न प्रकार प्रेषित किया गया है।

परियोजना हेतु बेलेस्पन एनर्जी यू०पी० प्रा०लि० द्वारा प्रस्तावित 1320(2x660) मेगावाट ताप विद्युत गृह की स्थापना हेतु वेलेस्पन एनर्जी यू०पी० प्रा०लि० के अधिकृत प्रतिनिधि द्वारा अवगत कराया गया कि उनके द्वारा

ग्राम- ददरी खुर्द, तहसील- सदर, जिला- मीरजापुर मे लगभग 875 एकड़ भूमि क्रय की गयी है।

अवगत कराना है कि ग्राम— ददरी खुर्द, तहसील— सदर, जिला— मीरजापुर में उ०प्र० जमींदारी विनाश अधिनियम की धारा—117 (6) के अन्तर्गत विज्ञप्ति संख्या— 617 दिनांकित 11 अक्टूबर 1952 के तहत वन विभाग को पृष्ट संख्या 1225 के क्रम संख्या 244 पर 800 एकड़ एवं पृष्ट संख्या 1225 के क्रम संख्या 248 पर 843 एकड़ भूमि विज्ञापित की गयी है उक्त विज्ञप्ति में उल्लिखत है "Particulars of uncultivated land and the extent to which they shall not vest in Gaon Samajs" (संलग्नक—1)।

धारा—4 उप धारा 1(सी) विज्ञप्ति संख्या— 5564 दिनांक 27 दिसम्बर 1955 द्वारा उक्त ग्राम की मात्र 800 एकड़ भूमि धारा—4 भारतीय वन अधिनियम 1927 के अन्तर्गत उ०प्र० गजट में विज्ञापित एवं प्रकाशित की गयी है। (संलग्नक—2)

पुनः आंशिक परिस्कार करते हुए विज्ञिष्त संख्या— 22(2)28(न) / 14 ज्य—07 विनांनर ट4 णुलाई 1967 द्वारा मात्र 423 बीघा 12 बिस्वा (264.88 एकड़) रक्षित वन धारा—4 भारतीय वन अधिनियम 1927 के अन्तर्गत विज्ञापित एवं प्रकाशित की गयी **(संलग्नक—3)**

विज्ञप्ति संख्या—4646 / 14—2—20 (41)—77 दिनांकित 20.07.1977 द्वारा 419 बीघा 9 बिस्वा (262.29 एकड़) अन्तर्गत धारा—20 भारतीय वन अधिनेयम 1927 रक्षित वन विज्ञापित किया गया (संलग्नक—4)।

उपरोक्त के आलोक में प्रस्तावित परियोजना में ग्राम ददरी खुर्द में उपयोग किये जाने वाली भूमि का सक्षम स्तर से विधिक परीक्षण इस समाधान हेतु आवश्यक है कि परियोजना हेतु क्रय की गयी भूमि धारा 117 की विज्ञप्ति से आच्छादित है अथवा नहीं। उक्त परिपेक्ष्य में शासनादेश संख्या— वी0आई0पी0—23/14—2—2019—190जी0/2018 दिनांक 28.06.2019 के अनुपालन में जिलाधिकारी मीरजापुर का निम्नलिखित प्रमाण पत्र अपेक्षित होगा:—

>

"प्रमाणित किया जाता है कि क्षतिपूरक वृक्षारोपण हेतु प्रस्तावित की गयी भूमि निर्विवाद रूप से गैर वन भूमि है एवं इसका शासनादेश संख्या— वी0आई0पी0—23/14—2—2019—190जी0/2018 दिनांक 28.06.2019 के प्रस्तर—2 में वर्णित बिन्दुओं के अनुसार परीक्षण कर लिया गया है।"

प्रभागीय वनाधिकारी, मीरजापुर द्वारा यह भी उल्लेख किया गया है कि प्रस्तावित परियोजना ग्राम—ददरी खुर्द, तहसील—सदर, जिला— मीरजापुर के सीमा से जुड़े दक्षिण में दांती आरक्षित वन (क्षेत्रफल—7985.00 एकड़), उत्तर में सुखनई आरक्षित वन तथा पूरब में दाढीराम आरक्षित वन (क्षेत्रफल—9309.52 एकड़) स्थित है। इस प्रकार उक्त परियोजना तीन ओर से सघन आरक्षित वन से घिरी हुई है। सम्पूर्ण आरक्षित वन क्षेत्र वैम्पियन एवं सेठ के वनों के वर्गीकरण के अनुसार 5बी/ई—1(एनागाईसेस पेडुला फारेस्ट), 5बी/ई—2 (बांसविलिया सेराटा फारेस्ट), 5बी/ई—5 (ब्यूटिया मोनोस्पर्मा फारेस्ट), 5बी/ई—9 (ड्राई बेम्बू फारेस्ट) शुष्क पर्णपाती वनों की श्रेणी में आता है जो विंध्यक्षेत्र की विशिष्ट वन सम्पदा है। उक्त सम्पूर्ण क्षेत्रफल जैव विविधता से परिपूर्ण है एवं वन्य जीव भालू, काला हिरन, चीतल, सांभर, लकड़बग्धा, सियार, लोमडी, विभिन्न सर्प, आगरा मानीटर लिजार्ड, जंगली बिल्ली, जंगली सूअर, विभिन्न प्रजातियों के पक्षी आदि का वास स्थल है। परियोजना का प्रस्तावित क्षेत्रफल उपरोक्तानुसार सघन आरक्षित वन से घिरा हुआ है।

- निकटतम रेल हेड सरसो प्रस्तावित परियोजना स्थल से 15.500 किमी की दूरी पर है तथा राज्य मार्ग
 1.695 किमी0 की दूरी पर है। प्रस्तावित परियोजना में रेलवे तक अप्रोच, मुख्य सड़क से सम्पर्क मार्ग एवं पाइपलाइन कोरिडोर में प्रयुक्त होने वाली भूमि सघन आरक्षित वन भूमि है।
- प्रस्तावित परियोजना में 8.3581 है0 वन भूमि सघन आरक्षित वन क्षेत्र में मुख्य सड़क से सम्पर्क मार्ग एवं पाइप लाइन कोरिडोर हेतु आवश्यक होगी। जिसका गैर वानिकी उपयोग परियोजना में किया जाना प्रस्तावित है।
- प्रस्तावित परियोजना का वन्य जीवों (वन्य वनस्पितयों तथा वन्य जन्तुओं) जैव विविधता एवं वनो की साइट क्वालिटी पर कोयले के ढुलान, पाइप लाइन कोरिडोर और सम्पर्क मार्ग के सघन आरक्षित वन क्षेत्र से गुजरने के कारण प्रतिकूल प्रभाव पड़ना स्वाभाविक है।
- सम्पूर्ण वन क्षेत्र पर्यावरणीय रूप से संवेदनशील है। सम्पूर्ण क्षेत्रफल में क्वार्टजाइट, सैण्ड स्टोन आदि खनिज की बहुतायत है जो कि विन्ध्यक्षेत्र के विशिष्ट वन क्षेत्रों के विकास में सर्वथा सहायक है एवं शरीसृप वर्ग के वन्य जन्तु तथा माइक्रोफ्लोरा की अभिवृद्धि एवं संरक्षण में सहायक है।
- प्रस्तावित परियोजना क्षेत्र के 25.00 किमी0 वाह्य परिधि के अन्तर्गत ही कैमूर वन्य जीव विहार की सीमा आती है। सम्पूर्ण वन क्षेत्र पारिस्थितकीय रूप से संवेदनशील एवं विन्ध्य क्षेत्र का विशिष्ट वन क्षेत्र है।
- प्रस्तावित परियोजना के 10.00 किमी की परिधि के अन्तर्गत ही कई टूरिस्ट स्पाट है, यथा विण्ढमफाल, खडंजा फाल, सिद्धनाथ दरी फाल, चूनादरी फाल आदि।
- मीरजापुर जनपद में स्थित शुष्क पर्णपाती वन जो की विन्ध्य क्षेत्र के विशिष्ट वन क्षेत्रों में से एक है, के उत्तरी सीमा से गंगा नदी इन्ही विशिष्ट वन क्षेत्रों के जल ग्रहण क्षेत्रों से गुजरने वाली विभिन्न सहायक नदियों के जल को समेटती हुई प्रवाहित होती है।
- प्रस्तावित परियोजना के कारण जल ग्रहण क्षेत्रों पर प्रतिकूल प्रभाव पड़ने से सतह जल भण्डारण एवं प्रवाह
 तथा सम्पूर्ण वन्य जीवन पर प्रतिकूल प्रभाव पड़ेगा और नदियों की जल वहन क्षमता तथा जल की
 गुणवत्ता दोनो प्रभावित होगी।
- प्रस्तावित परियोजना के कारण पूर्व में स्थापित विभिन्न कोयला आधारित तापीय विद्युत संयंत्रों के दुष्प्रभावों को व्यान में रखते हुये श्वासजनित बोमारिया, वनो की साइट क्वालिटी में गिरावट, वन्य जीवन व जैव विविधता में हास एवं तापमान में वृद्धि तथा भू—जल रिचार्ज में कमी जैसे दुष्प्रभाव तथा समीपवर्ती ग्रामों के निवासियों पर प्रतिकूल प्रभाव पड़ना स्वाभाविक है।
- परियोजना में उत्सर्जित फ्लाई ऐश से सम्पूर्ण पादप एवं वन्य जीवन पर प्रतिकूल प्रभाव पड़ने की आशंका से इन्कार नही किया जा सकता। फ्लाई ऐश से श्वांसजनित बीमारियां बढ़ने तथा तापीय परियोजना से क्षेत्र के तापमान में भी अनियमित वृद्धि होना स्वाभाविक है।

पूर्व में स्थापित विभिन्न कोयला आधारित तापीय विद्युत संयंत्रों के द्वारा उत्सर्जित फ्लाई ऐश एवं कार्बन डाई आक्साईड, कार्बन मोनोक्साईड एवं अन्य हानिकारक गैसो के कारण निम्नलिखित दुष्प्रभाव परिलक्षित हुए हैं—

>

क्षेत्र के तापमान में वृद्धि, वन एवं वन्य जीवों के संरक्षण में हास, वन की साइट गुणवत्ता में हास, जल संरक्षण में कमी, भू-जल रिचार्ज में कमी, सतह जल भण्डारण की गुणवत्ता व मात्रा में कमी,श्वांसजनित बीमारियों में वृद्धि, पुरातात्विक व पर्यटन के क्षेत्रों में प्रतिकृल प्रभाव, सम्पूर्ण पारिस्थितिकीय तंत्र पर दुष्प्रभाव, वन्य जीव मानव संघेष की

घटनाओं में वृद्धि, नदियों के जल वहन क्षमता व जल की गुणवत्ता में ह्रास।

ये सभी अर्न्तवलित समस्याएं है जो विभिन्न तापीय विद्युत परियोजनाओं के पूर्व के दुष्प्रभावों के अनुभवों पर आधारित है साथ ही ये अप्रत्यक्ष रूप से अगणित समस्याओं को सृजित करेंगी। इस प्रकार से प्रस्तावित परियोजना के कारण उक्त क्षेत्र की पूरी पारिस्थितिकी पर प्रतिकूल प्रभाव पड़ना स्वामाविक है। प्रभागीय वनाधिकारी, मीरजापुर द्वारा उपरोक्त के आलोक में अपील संख्या- 79/2014 में मा0 राष्ट्रीय हरित न्यायाधिकरण के निर्णय के क्रम में पुनरीक्षण आख्या संस्तुति सहित विचारार्थ एवं तद्नुसार अग्रेतर कार्यवाही हेतु संलग्न कर प्रेषित किया गया

अतः प्रभागीय वनाधिकारी, मीरजापुर द्वारा प्रश्नगत प्रकरण के सम्बन्ध में प्रेषित बिन्दुओं की आख्या पर सहमति सहित संलग्न कर अग्रेतर कार्यवाही हेतु विचारार्थ प्रेषित।

संलग्नक—उपरोक्तानुसार

भवदीय (रमेश चन्द्र झा) मुख्य वन संरक्षक मीरजापुर क्षेत्र, मीरजापुर

अ/समदिनांक।

प्रतिलिपि- प्रभागीय वनाधिकारी, मीरजापुर को उनके संदर्भित पत्र के कम में सूचनार्थ एवं आवश्यक कार्यवाही हेत् प्रेषित।

(रमेश) चन्द्र झा) १-५.०-१.१० मुख्य वन संरक्षक मीरजापुर क्षेत्र, मीरजापुर

11 April 2025

To,

- The Member Secretary, Uttar Pradesh Pollution Control Board, Govt. of Uttar Pradesh
- 2. The Commissioner-Mirzapur Govt. of Uttar Pradesh
- 3. The District Magistrate-Mirzapur, Govt. of Uttar Pradesh
- The Deputy Director General of Forests (C)
 Integrated Regional Office, Lucknow
 Ministry of Environment, Forest & Climate Change
 Govt. of India
- The Secretary (EF&CC)
 Ministry of Environment, Forest & Climate Change
 Govt. of India

Subject: Complaint/ Objection Regarding 'Illegal' Public Hearing Conducted by Mirzapur Thermal Energy (U.P.) Pvt. Ltd. in Violation of EIA Notification, 2006 on today 11 April 2025

Dear Sir/Madam,

It has come to my notice that a *Public Hearing* is being conducted today by Mirzapur Thermal Energy (U.P.) Pvt. Ltd. for the purpose of environmental clearance the EIA Notification, 2006, for the proposed 2x800 MW Coal based Ultra Super Critical Thermal Power Project (TPP) at Village Dadri Khurd, Tehsil, Mirzapur Sardar, District Mirzapur, Uttar Pradesh.

At the outset, I wish to raise the following serious concerns regarding the legality and transparency of this process:

- Lack of Proper Public Intimation: There has been no prior public notice or outreach about the scheduled public hearing as required under the law. As a result, affected individuals and stakeholders have been deprived of the opportunity to participate meaningfully or submit objections/suggestions.
- 2. Non-Availability of EIA Report in Public Domain: As of 11th April 2025, 10:00 AM, the Draft EIA Report and Executive Summary are not available on the websites of:
 - Uttar Pradesh Pollution Control Board,
 - o Ministry of Environment, Forest and Climate Change (MoEFCC), or
 - Mirzapur District Administration

In the absence of these critical documents in the public domain, the fundamental purpose of the public hearing — enabling informed public participation — is entirely defeated. There exists no scope for critically examining the project proposal or submitting objections based on its environmental impact.

I would also like to bring to your attention that I am the original petitioner in the matter Debadityo Sinha v. Union of India (Appeal No. 79/2014), wherein the Hon'ble National Green Tribunal (NGT) had set aside the Environmental Clearance dated 21st August 2014, previously granted to Welspun Energy U.P. Pvt. Ltd. for a thermal power plant at the same site. The Hon'ble NGT had made serious observations on the deficiencies in the public hearing conducted for that project.

Furthermore, I wish to inform you that a separate matter regarding the violation of the EIA Notification, 2006 — specifically, undertaking construction without an environmental clearance — is already pending before the Hon'ble Tribunal. I also called the District Administration today morning including Commissioner-Mirzapur and District Magistrate- Mirzapur on their landline their secretaries informed me they were busy in meeting and should call on mobile. The mobile number of Commissioner weas received by their secretary who informed they are busy in meeting and cannot speak now. The mobile phone of District Magistrate was switched off.

Considering the above, I strongly urge that the public hearing being held today be suspended immediately, as it fails to meet the legal requirements under the EIA Notification, 2006. Proceeding with the public hearing in the current manner would not only violate the EIA Notification, 2006 but also undermine the judgment of the Hon'ble National Green Tribunal.

Annexure- Photo of the public hearing from today 11 April 2025

Yours sincerely,

Detally Silve

Debadityo Sinha,

Vindhya Bachao Secretariat, Vindhyan Ecology and Natural History Foundation 36/30, Shivpuri Colony, Station Road Mirzapur-231001

Mobile- 9540857338 Email- debadityo@vindhyabachao.org



Photo of the public hearing from today 11 April 2025

कार्यालय प्रभागीय वनाधिकारी,मीरजापुर वन प्रभाग, मीरजापुर पंत्राक 266 /मीरजापुर/ 23 दिनांक, मीरजापुर जुलाई, 16 2018.

सेवा में,

मुख्य वन संरक्षक, मीरजापुर क्षेत्र, मीरजापुर।

विषय – SLOTH BEAR CONSERVATION RESERVE IN MARIHAN— SUKRIT- CHUNAR LANDSCAPE OF MIRZAPUR FOREST DIVESION, UTTAR PRADESH.

महोदय,

मीरजापुर वन प्रभाग के मिड़हान, सुकृत एवं चुनार रेज अन्तर्गत भालू सर्वेक्षण, अध्ययन Vindhyan Ecology and Natural History Foudation, Station Road, Mirzapur के सहयोग से कराया गया, अध्ययन से प्राप्त निष्कर्षों को पुस्तक के रूप में संकलित कर अग्रेतर कार्यवाही हेतु आपकी सेवा में प्रेषित हैं।

(राकेश चौधरी) प्रभागीय वनाधिकारी, मीरजापुर वन प्रभाग मीरजापुर।



Wildlife Inventory and Proposal for

SLOTH BEAR CONSERVATION RESERVE

in Marihan-Sukrit-Chunar Landscape of Mirzapur Forest Division, Uttar Pradesh

DEBADITYO SINHA & RAKESH CHAUDHARY Foreword by Dr Asad Rahmani



My congratulations to the authors for this much needed landmark achievement. This is a great contribution to wildlife conservation which I am sure will open many doors to the little known and undiscovered part of Mirzapur jungles. The report exposes the status... the challenges... and the current state of this enigmatic region...sadly like many places in India...the diversity and rich wildlife of Mirzapur is facing threats of extinction.

There is an urgent need for protection and immediate action. The government and stakeholders need to come together and in a united effort to address the various issues. I am hopeful and confident that the efforts put into this study would be instrumental in preserving this landscape.

-Mike H. Pandey

Brand Ambassador- Govt. of Uttar Pradesh (Wildlife and Environment) Chairperson, Earth Matters Foundation

~

Much of the wildlife of Mirzapur has vanished...unsung. Once flush with cheetahs, tigers and caracals, this little known, threatened wilderness still harbours endangered animals like the sloth bear, Indian wolf, leopard, rusty-spotted cat among others. It is hoped that this well-researched and timely report of a neglected but important wildlife area, will lead to its protection for posterity.

-Prerna Bindra

Wildlife Conservationist & Writer Former Member, Standing Committee on National Board of Wildlife

~

The proposed area is rich in wildlife diversity and provides crucial habitat connectivity to maintain the genetic diversity between Protected Areas and other forests in the landscape. Considering the location of the proposed area, rich biodiversity and impending threats in due course of time the proposal offers an opportunity to policymakers to contemplate the issue in all sincerity which will not only secure wildlife in long run but also award local communities with a healthy environment, availability of water and future tourism opportunities.

-Dr. Harendra Singh Bargali Co-Chair, IUCN/BSG Sloth Bear Expert Team Deputy Director, The Corbett Foundation

~

I congratulate the authors and the team for this much needed work. I am sure this work will fill the gaps of science based information on wildlife in underappreciated areas like Mirzapur. This information will be very helpful to us, the Bear Specialist Group of IUCN, while updating the sloth bear distribution map, where we do not have authentic information about the presence of sloth bear in many of the forest areas. The report reveals the needs for formulating science based conservation strategies for the wildlife and habitats in this area. I have no doubts that this report can be a model for other parts of India to unveil the ecological health and habitat condition of the forest.

-Dr. Nishith Dharaiya

Co-Chair, IUCN-SSC Sloth Bear Expert Team Associate Professor, HNG University, Patan (Gujarat)

~

The dry tropical deciduous forest of Mirzapur is known to be dominated by *Anogeissus latifolia, Lagerstroemia parviflora, Terminalia tomentosa, Hardwickia binata, Boswellia serrata, Acacia catechu* etc. along with patches of *Shorea robusta* as major tree species, making three storey forests at some places. These forests have been home for most of the typical ungulates found in a dry deciduous forest along with many carnivores such as Leopards, Sloth bear and other lesser cats. I congratulate the team for bringing out a detailed report and providing much needed baseline data of this region. I am sure that the findings of the report shall be very useful for the Forest Department to prepare a long term conservation strategies of the region.

Dr. Faiyaz A. Khudsar Scientist Incharge, Yamuna Biodiversity Park, CEMDE, University of Delhi

~

One of the takeaways from the 21st International Conference on Bear Research & Management, November 2012, New Delhi was the lack of scientific research on four species of bear found in India despite being large charismatic mammals. Globally there are just eight species of bear. Thus, this report is an important milestone in highlighting a least studied species in an area off the conservation radar despite its rich ecological heritage.

-Ananda Banerjee
Wildlife Conservationist & Author

Wildlife Inventory and Proposal for SLOTH BEAR CONSERVATION RESERVE in Marihan-Sukrit-Chunar Landscape of Mirzapur Forest Division, Uttar Pradesh

Authored by Debadityo Sinha & Rakesh Chaudhary

Foreword by Dr Asad Rahmani











July 2019

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DECLARATION FROM AUTHORS

This is to certify, that this report titled 'Wildlife Inventory and Proposal for Sloth Bear Conservation Reserve in Marihan-Sukrit-Chunar Landscape of Mirzapur Forest Division, Uttar Pradesh (2019)' including but not limited to the camera trap survey has been carried out in the Mirzapur Forest Division. The information given in this publication are true and correct to our best of knowledge and all the errors in the report are inadvertent and author's alone.

All the external sources from which the ideas and extracts have been taken are duly cited. The references to third party publications including link to websites given in this publication are for convenience and informational purposes only. The authors bear no responsibility for the accuracy, legality or content of all third party information cited.

مرکز استران کارکن کار Debadityo Sinha

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16 March 2019



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ABBREVIATIONS

CITES Convention on International Trade in Endangered Species of Wild Fauna

and Flora

CR Conservation Reserve

DSWF David Shepherd Wildlife Foundation

ESZ Ecosensitive Zone FD Forest Division

GPS Global Positioning System

ISRO Indian Space Research Organization

IUCN International Union for Conservation of Nature

km Kilometer

LULC Land Use Land Cover

m Meter

M.P. Madhya Pradesh

mm Millimeter

NT Near Threatened PA Protected Area

Sch Schedule

SH State Highway sq.km. Square Kilometer

TDF Tropical Deciduous Forest

U.P. Uttar Pradesh

VENHF Vindhyan Ecology and Natural History Foundation

VU Vulnerable

WLS Wildlife Sanctuary

WPA Wildlife (Protection) Act, 1972

WTI Wildlife Trust of India

WWF Worldwide Fund for Nature

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FOREWORD

I am delighted to write the foreword for the important report "Wildlife Inventory and Proposal for SLOTH BEAR CONSERVATION RESERVE in Marihan-Sukrit-Chunar Landscape of Mirzapur Forest Division, Uttar Pradesh". I am always interested to work and study neglected ecosystems and neglected species. There is plethora of literature on well-known protected areas and almost hysterical concern for few mega-vertebrates but not many conservationists give attention to species like Sloth Bear and habitats like Mirzapur Forest landscape. I had the privilege to visit Mirzapur Forest a decade ago and was amazed to see that some good patches of tropical thorn and dry-deciduous forest still survive, despite huge population and mining pressures.

I am happy that the report is jointly written by Debadityo Sinha of Vindhyan Ecology and Natural History Foundation and Rakesh Chaudhary of the Forest Department – an exemplary combination of an NGO working closely with the government. This is the way forward for achieving conservation results. I am also happy that five organizations have come forward to jointly sponsor this report: Wildlife Trust of India, David Shepherd Wildlife Foundation, Earth Matters Foundation, Forest Department and Vindhyan Ecology and Natural History Foundation.

The report is very thoroughly researched and result well presented. Besides the two lead authors, the three contributors, Avinash Kushwaha, Mohit Chauhan and Sudhanshu Kumar, also need to be appreciated. Interestingly, they come from two leading institutions of our country: TERI School of Advanced Studies, New Delhi, and Banaras Hindu University.

The report proves the presence of rich biodiversity in this neglected region. I hope the concern authorities will take appropriate measures, as suggested in the report, and make Marihan-Sukrit-Chunar Landscape of Mirzapur Forest Division as Sloth Bear Conservation Reserve. It will be a fitting acknowledgement of the hard work that the Vindhyan Ecology and Natural History Foundation did for the last five years.

Asad R. Rahmani

Lucknow
2 July 2019

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ACKNOWLEDGEMENTS

First and foremost, the authors would like to thank Dr Prabhakar Dubey, Chief Conservator of Forest-Mirzapur Mandal, for his continuous encouragement, guidance and mentorship throughout the work.

Our sincere gratitude to Dr Asad Rahmani, Mike Pandey, Prof L.S. Shashidhara, Dr H.S. Bargali, Prof A.S. Raghubanshi, Dr Laxmi Goparaju, Mr Firoz Ahmad, Ananda Banerjee, Kanchi Kohli, Dr Pankaj Sekhsaria, Peeyush Sekhsaria, Gautam Pandey, Doel Trivedi, Shiva Kumar Updadhyaya, Dr Anil Pandey, Dr Vijai Krishna, Raghav Saraswat, Vipul Maurya, Raza Kazmi, Tarun Nair, Kumar Ankit, Vikas Tiwari and Rahul Nishad for their help and input.

We are grateful to Forest Range Officers, Shashi Kant Pandey (Range Officer, Marihan), Santlal Kanaujia (Range Officer, Sukrit), Ram Dhani Yadav (Forester, Marihan), Ram Shringar Tiwari (Forester, Sukrit), Satguru Ram Yadav (Forester, Sukrit); Forest Guards-Vishal Gond, Rahul Pachauri (Marihan), Jai Pratap Patel and Pramod Kumar (Sukrit) for their support during the field survey.

Special thanks to forest watchers- Om Prakash, Ram Govind, Jhagru, Ramesh Chandra Singh, Santosh Kumar Patel, Ram Vriksh Bharati and Shankar for their assistance during field survey which have made tremendous difference to the study.

The authors are thankful to Wildlife Trust of India, David Shepherd Wildlife Foundation, Earth Matters Foundation and Bitgiving for supporting this work.

We would also like to thank all those who could not be named here, our well-wishers, our nearest ones, family members and friends for their support.

-The Authors

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EXECUTIVE SUMMARY

The forests of Mirzapur Forest Division of Uttar Pradesh is classified as Tropical Deciduous Forest (TDF) characterised by long and intensely hot summer, low rainfall and a short mild winter with attractions of waterfalls and short to medium height hills. The major part of this forest division comes under Vindhyan plateaus of Mirzapur, elevation ranging from approx. 70 meters near river Ganga to as high as 400 meters.

The summer temperature goes up to 48° C in May-June. The rainfall varies from 750 mm. to about 1200 mm. Many small rain fed streams and rivulets passes through the entire hilly terrains which are almost dry during the hot summer. It shows mixed type of forests, dominated by shrubs and medium height trees. The flora is dominated by tree species such as *Diospyros melanoxylon, Butea monosperma, Shorea robusta, Boswellia serrata, Acacia catechu, Zizyphus mauritiana* etc. According to a study by Allahabad University, there are 183 plant species belonging to 158 genera and 60 families in Mirzapur which are used by local tribes to treat various ailments.

There are very few records and literature on the wildlife of Mirzapur. Some of the historical record reveals about the pride hunting in this region. Percy Wyndham, who was District Collector of Mirzapur, and good friend of Jim Corbett is believed to have killed more than 500 tigers in his lifetime mostly in Mirzapur. Rough estimates of wildlife of Mirzapur published by regional forest offices from time to time give an indication of diverse wildlife and future prospects of discovering new species in this region. Sloth bears can be termed as the flagship species found in Mirzapur Forest Division. However, the overall trend of wildlife population shows a declining trend.

The wildlife richness of Mirzapur and the threat to their habitats can be understood from various incidents of human-animal conflicts which is very common in some areas. Wild animals like sloth bear, leopard, hyena, jackal, deer and mugger (crocodile) straying in villages are often reported by local newspapers. Trafficking and smuggling of animals and their parts have been reported from this region in past.

Some of the major threats are land use change and other anthropogenic disturbances in the region. Stone quarrying activities and encroachment of land within the forest areas has increased the porosity and disturbance in some portions.

Majority of the animals such as sloth bear, leopard, hyena, porcupine, civets, sambar are known to be nocturnal and elusive. They generally avoid movement during day time to avoid exposure to heat as well as human contact. Therefore, sighting of the wildlife during day-time is rare. Census data published by Mirzapur Forest Division provides a good inventory of wildlife in this region which is based on indirect evidences, and there is a possibility that several elusive animals may have not been recorded at all. Therefore, a camera trap study was undertaken in few selected forest ranges to collect objective and

direct evidences of sloth bears and other elusive wild animals inhabiting these forests. The camera trap survey was carried out in three forest ranges Marihan, Sukrit and Chunar between May 2018 and July 2018. A total of 15 camera traps were deployed at 50 different locations selected randomly covering different habitat types and at locations likely to be used by animals. The camera trap survey showed a very good variety of wild animals in the forests. The result indicates a very good representation of all trophic levels indicating a functional ecosystem in existence. Most of the camera trap images were captured after sunset, with few instances of daytime images indicating nocturnal movement of animals.

There are three cat species captured by the cameras: Asiatic Wild Cat, Rusty Spotted Cat and Leopard; all of which are first time record in this Forest Division and are all protected as Schedule I of WPA. However, the discovery of Asiatic Wild Cat is special as the known easternmost range of Asiatic Wild Cat has been up to Bagdhara Wildlife Sanctuary in Sidhi District of Madhya Pradesh which shares its border with Mirzapur at Kaimoor Wildlife Sanctuary's Halia range.

The Schedule I (WPA, 1972) animals recorded from these forest ranges are Sloth Bear (Melursus ursinus), Leopard (Panthera pardus), Asiatic Wild Cat (Felis sylvestrisornata), Rusty Spotted Cat (Prionailurus rubiginosus), Indian Wolf (Canis lupus), Indian Gazelle (Gazella bennettii), Blackbuck (Antilope cervicapra), Peafowl (Pavo cristatus), Bengal Monitor (Varanus bengalensis) and Mugger Crocodile (Crocodylus palustris) etc. Other important species recorded here are Striped Hyena (Hyaena hyaena), Jungle Cat (Felis v chaus), Red Fox (Vulpes vulpes), Golden Jackal (Canis aureus), Sambar Deer (Rusa unicolor), Spotted Deer (Axis axis), Ruddy Mongoose (Herpestes smithii), Grey Mongoose (Herpestesedwardsii), Palm Civet (Paradoxurus hemaphroditus), Small Indian Civet (Viverricula indica), Bluebull (Boselaphus tragocamelus), Wild Boar (Sus scrofa), Indian Crested Porcupine (Hystrix indica), Indian Hare (Lepus nigricollis), Five-striped Palm Squirrel (Funambulus pennantii), Hanuman Langur (Semnopithecus entellus), Rhesus Macaque (Macaca mulatta), Painted Spur Fowl (Galloperdix lunulata), Red Jungle Fowl (Gallus gallus) and many other birds.

The forest ranges Marihan, Sukrit and Chunar is an ideal representation of the vindhyan landscape and connects *Eastern Kaimoor landscape* (Ranipur WLS in U.P. and Son Gharial WLS, Sanjay Dubri Tiger Reserve and Bagdhara WLS in M.P.) with *Western Kaimoor landscape* (Chandraprabha WLS of U.P. and Kaimur WLS of Bihar). There are several waterfalls namely Alopi Dari, Jogia Dari, Pahiti Dari, Panchsheel Dari, Chuna Dari, Lekhania dari and Siddhanath ki Dari which are places with exemplary natural beauty and locally popular sites for recreation and tourism. However, these forest ranges are also facing severe threats from activities like mining, logging, hunting, unsustainable construction and infrastructure development, encroachment of forests and watersheds and forest fires.

Therefore, a Conservation reserve is proposed in Mirzapur Forest division which will include Marihan, Sukrit and some parts of Chunar and Lalganj ranges with area of approx. 408 sq.km.

The location of the proposed conservation reserve is shown below.



The proposed boundary of the Conservation Reserve and locations of adjacent PAs

The majority of the land proposed for the conservation reserve are recorded as Reserve Forests of Mirzapur Forest Division with few rural agricultural settlements in between. By declaring these forests as Conservation Reserve, it will elicit responsibility and long-term participation of local people in conservation of this landscape.

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1. INTRODUCTION

1.1 The Landscape

A. Climate and Topography

Mirzapur district is surrounded by districts: Allahabad, Sant Ravidas Nagar, Chandauli, Varanasi, Sonbhadra of Uttar Pradesh and districts: Rewa and Siddhi of Madhya Pradesh. River Ganga flows through the northern boundary of the district. District Mirzapur is divided into two biogeographic zones- Gangetic plains in northern portion and Vindhyan mountain range which constitutes majority of the district. The Vindhyan plateaus of Mirzapur are known for their dry deciduous forests, waterfalls and wildlife. The elevation ranges from approx. 70m near river Ganga to as high as 400m near Dramadganj forest range. The terrain is undulating with small and medium height hills in between. There is rocky sandstone layer beneath the soil and in some places they are exposed to surface. Many small streams and rivulets passes through the entire hilly terrains.



Map 1: Terrain Map of District Mirzapur (http://bhuvan.nrsc.gov.in)

The forests of this region can be classified as tropical dry deciduous forest (Champion & Seth, 1968). According to the Champion and Seth's classification of forests types of India, the various types and sub-types of forests of Vindhyan region witness Southern and Northern Tropical Dry Deciduous Forests respectively (FRI, 2016).

The biogeographic sub-zone is called Vindhya under zone Deccan plateau. The climate of the area is characterized by long and intensely hot summer, low rainfall and a short mild winter. The summer temperature goes up to 48°C in May-June. The rainfall varies from 750 mm to about 1200 mm. Most of the rainfall occurs in the months of June, July and August. There are little winter rains, which occurs generally in January and February and are sometimes substantial, fairly regular as compared with other parts of Uttar Pradesh (FRI, 2016).

B. Vegetation

These forests occur on underlying rocks, which are, generally, sand stone and shale (FRI, 2016). In some places old growth can be seen in the elevated areas (~200 m and above) with tree height reaching up to 10-15 m. The areas in elevations lower than 190 m shows mixed type of forests, dominated by shrubs and medium height trees. There are several patches where clearings of forests can be easily observed.

Most of the plant species are known for medicinal importance and have been traditionally used for treating ailments. Singh & Narain (2009) reported 183 plant species belonging to 158 genera and 60 families in Mirzapur which are used by local tribes to treat various ailments.

Some of the common plants reported by Forest Department, U.P. (FRI, 2016) are as follows:



Image 1: Salai (Boswellia serrata) forest in Sukrit

Trees: Dhau (Anogeissus latifolia), Asna (Terminalia tomentosa), Tendu (Diospyros melanoxylon), Jhingan(Lanea coromandelica), Kakor(Zizyphus xylopyra), Khair (Acacia catechu), Piyar (Buchanania lanzan), Siddha (Lagerstromia parviflora) and Salai (Boswellia serrata), in patches, is commonly noticeable feature. Other species found locally in irregular mixtures are- Kurraiya (Holarrhena antidysentrica), Amla (Emblica officinalis), Amaltas (Cassia fistula), Beejasal (Pterocarpus marsupium), Parsiddha (Hardwickia binnata), Palash/Dhak (Butea monosperma), Kardhai (Anogeissus pendula), Semal (Bombax ceiba), Arjun (Terminalia arjuna), Bahera (Terminalia bellerica), Papad (Gardena latifolia), Kurlu(Sterculia urens), Sal (Shorea robusta), Harr (Terminalia chebula), Jamun (Syzygium cumini), Neem (Azadirachta indica), Haldu (Adina cordifolia), Chilbil (Holoptelia integrifolia), Mamar (Eleodendronglaucum), Domsal (Miliusavellutina), Ber(Zizyphus

mauritiana), Kathmahuli (Bauhinia racemosa), Khaja (Bridelia retusa), Phaldu (Mitragyna parviflora), Dhusar (Ficus ornotiana), Galgal (Kaklospermum religiosum), Farhad (Erythrina suberosa) and Bel (Aegle marmelos) etc.

Shrubs- Kharhar (*Gardenia turgida*), Sehur (*Euphorbia nibulai*), Marorphali (*Helicteres isora*), Bhela (*Semecarpus anacadium*), Karaunda (*Carissa spinarum*), Kataiya (*Flacourtia indica*) etc. are found in preponderance.

Grasses- Churanth (*Heteropogon contortus*), Kans (*Sacchrum spontaneum*), Dhavlu (*Crysopogon fulvus*), Khus (*Vetiveria zizanoides*), Bagai (*Eulaliopsis binata*). Main climbers are- Makoi (*Zizyphus oenoplia*) and Kuchi (*Acacia piñata*).

C. Socio-economic dependence

People living in and around these forests are dependent on the forests for fuelwood, grazing as well as a number of forest produce for their sustenance. There are number of commercially important fruit bearing trees which are found naturally growing in the forests such as *Buchanania lanzan* (Chiraunji) also known as Cuddaph Almond. The fruits of trees like *Madhuca longifolia* (Mahua) is traditionally harvested by tribal communities to produce an indigenous wine and is also dried for use as raisin. Leaves of *Diopsyros melanoxylon* (Tendu) is used for production of *bidi* (a type of indigenous cigarette).

Photographs from the landscape





Image 2: Bamboo thicket (left) and forests on hill-top (right) in Marihan forest range





Image 3: An access road in Sukrit range (left) and a Savannah ecosystem in Marihan range (right)





Image 4: Jogia Dari, Marihan range (left) and Lekhania Dari, Sukrit range (right) in dry season

1.2 Wildlife Conservation in Mirzapur- Background and History

Most of the historical account of the wildlife distribution in Mirzapur region has been from the colonial era, all of which also gives a historical background of pride-hunting which has been prevalent here. Post-independence, there are very few literatures on wildlife of Mirzapur region except very few mentions in some policy reports and records of Forest Department.

20th Century-Legacy of Percy Wyndham

"If one talked about Mirzapur one had to talk about Percy Wyndham"- Y.D. Gundevia

When we talk of wildlife of Mirzapur, we cannot simply begin without the mention of Percy Wyndham- the District Collector and Magistrate of Mirzapur between 1901-1915 who was also a good friend of Jim Corbett. He is believed to have killed more than 500 tigers in his lifetime mostly in Mirzapur (Jaleel, 1997). Jim Corbett in his autobiography 'Man Eaters of Kumaon (Corbett, 1944)' revered Percy Wyndham as the person who knows about tigers than any other man in India. Though criticized for his love for games, Wyndham during his tenure as District Collector initiated a series of rules for the preservation of game, which he himself strictly followed, and which eventually came to be accepted by the forest departments all over India that time. Some of his rules were prohibition on shooting the cheetal, or the sambar or the tiger and any other species of wild game in their prescribed mating season. The present day Mirzapur-Robertsganj Road and the district's first canal irrigation project-Dhanraul canal were work of 'Wyndham Saahib', as he was popularly known by the villagers. The Wyndham fall, which is one of the district's popular water fall and major tourist attraction is named after him. (Gundevia, 1992)

A very good description of the wildlife heritage of Mirzapur can be seen in the book '*In the Districts of the Raj, 1992*'. The author *Y. D. Gundevia*, who was posted as District Collector of Mirzapur (October 1939- June 1942) gives a beautiful description of the wildlife of the district, an excerpt reproduced below:

All over the Vindhyan plateau-if one traversed by car from Mirzapur to Robertsganj-there was plenty of game. There was any amount of sambar and cheetal, any amount of wild boar and everything else in the antelope family. As one reached the Kaimur ranges one even came upon the black sloth bear here and there."

Tiger, Cheetah and Caracal

Gundevia in his book claimed that the Mirzapur region had a very large population of tigers compared to other popular tiger areas in the country. Following is one of his statement from his book:

"Jim Corbett had shot all his man-eaters in Nainital. But I am sure there must have been more tigers in and around Mirzapur than in all the tarai districts put together....."

There are several other documents and reports where tigers were specifically stated to be resident in Mirzapur and has been claimed to once support a very large number of tigers. One such report is of *IUCN Eleventh Technical Meeting-New Delhi*, 1969 where the following excerpt gives a brief status of the tiger population in the forests of southern U.P. including Mirzapur:

All along the base of the Vindhya plateau, there runs a bamboo belt about 50 meters wide. These bamboo thickets and the spaces between sandstone blocks, which remain shaded for the greater part of the day, are ideal habitats of tigers. The forest blocks of Mirzapur, which were once considered to be an inexhaustible source of tigers, support hardly ten tigers now.

There are several other cats which used to be found in Mirzapur. While the Cheetah is now extinct, but the very elusive 'Caracal' is still believed to be possibly resident in the forests of Mirzapur. In the 'Journal of Bombay Natural History Society, 1918 (Allen, 1919)', presence of Caracal and Cheetahs in Mirzapur were explicitly described, an excerpt reproduced below:

"The following notes on two uncommon mammals in Mirzapur District may perhaps be of interest in connection with the Survey. On 28th December 1912, during a sambhar beat in light jungle about 25 miles S. of the Ganges, a small animal that I did not recognize came out at very close range. I blew a large piece of its back away with a 500 Express but it made off and took refuge in a small nala where it was shortly afterwards despatched with a shotgun. It proved to be a female lynx (F caracal) My measurement maele it 34 inches long (body 27 and tail 7) apparently a rather small example. Unfortunately, the only memento I have of it are the claws, as shortly after I got the head mounted it was destroyed in a bungalow fire. This is considered locally a distinctly rare animal. I saw not long ago in the possession of a friend a very fine skin of a cheetah (C. jubatus) that had been killed in 1916 by villagers about 30 miles South of Mirzapur, which is on the Ganges near Benares. I think about 5 have been obtained in the last 25 years, one being shot while it was in the act of stalking a sambhar. The one whose skin I saw had been killed in the neighbourhood of a grassy plain which held some Black buck."

Similar account of Cheetah can be found in the book *Sterndale's Mammalia of India, by Frank Finn, 1929* where he writes:

"One specimen, which from its skin must have been very old, was killed by villagers in the Mirzapur district (which borders on Rewah) about two years ago"

According to wildlife historian Raza Kazmi, the Cheetahs must have been extinct from the district Mirzapur by circa 1930 (Kazmi, 2012).

21st Century- Recognition as Sloth Bear Habitat

Despite all these historical accounts of the rich wildlife presence in the district, there is hardly any scientific exercise ever taken to get into details of the faunal diversity in the district. Only source of wildlife presence in Mirzapur has been the wildlife censuses published by regional forest offices which provided rough estimates of their population giving an indication that the forests of Mirzapur has still lot of wildlife remaining and lot more to be discovered. However, the presence of wildlife in Mirzapur was never completely out of discussion, especially when it comes to Sloth Bears, which can be termed as the flagship species of this particularly unique dry deciduous vindhyan landscape. Occasional incidents of man-bear conflicts in the district and some estimates by forest department shows the district has one of the last remaining resident habitats of Sloth Bear, a species of bear endemic to Indian subcontinent and which is also protected under Schedule I of Wildlife (Protection) Act, 1972.

The National Bear Conservation and Welfare Action Plan, published by Ministry of Environment and Forests, 2012 recognized Mirzapur Forest Division as an important sloth bear habitat. Following is one excerpt from the chapter on Uttar Pradesh:

"Central Highland regions of U.P. hold scattered populations of sloth bear but are in continuous threat from mining activities and increasing anthropogenic pressures. Sloth Bear is reported to occur in good numbers in Kaimoor WS, Ranipur WS, Kashi WS, Chandraprabha WS and areas of Mirzapur FD."

The report identified 8 forest divisions in the state where sloth bears have been reported but it also acknowledged a drastic decrease in sloth bear population in the state.

Mirzapur Forest Division, in particular has undertaken several censuses of the wild animals in the district in past. Wildlife estimates for some of the important species obtained from the department for the years 2011 and 2013 is presented below:

Species	2011	2013	% Decrease
Chinkara	277	117	58
Blackbuck	129	82	36
Sloth Bear	211	114	46
Sambar	248	88	65
Chital	203	179	12

The 2016 Sloth Bear Distribution Survey in Mirzapur

Vindhyan Ecology and Worldwide Fund for Nature-India conducted a sign based survey of sloth bears in five forest ranges of district Mirzapur. The results showed very good presence of sloth bears in the district and provided a first ever distribution map and assessment of the sloth bear habitats in the district Mirzapur which is shown on the map below:



Map 2: Sloth Bear distribution in Reserve Forests of district Mirzapur (Sinha et.al. 2017)

A total area of 1110 sq.km. in forest ranges-Marihan, Sukrit, Chunar, Patehara and Dramadganj were identified as areas with good wildlife presence and were suggested to be conserved by elevating the protection status.

Based on the wildlife presence, the district can be broadly divided into two landscapes. Forest ranges *Patehara* and *Dramadganj* which are continuous with the Kaimoor Wildlife Sanctuary is also part of a larger landscape contiguous with Bagdhara WLS, Son Gharial WLS, Sanjay Dubri Tiger Reserve (M.P.) which is further connected by forests till Ranipur WLS (U.P.) which can be termed as **Western Kaimoor Landscape**.

The remaining three forest ranges- *Marihan, Sukrit* and *Chunar* which are contiguous with another landscape is connected with Western Kaimoor landscape via the degraded forests of Lalganj Forest Range and some rural settlements and agricultural fields. Chandraprabha WLS lies on the east of Sukrit range but separated by four lane Varanasi-Robertsganj road (also known as SH-5A). The proposed eco-sensitive zone of Chandraprabha Wildlife Sanctuary includes a small area of Sukrit forest range on its western side. The Chandraprabha Wildlife Sanctuary is contiguous with Kaimur Wildlife Sanctuary of Bihar which can be referred as the **Eastern Kaimoor landscape**.

Thus, these 3 forest ranges-Marihan, Sukrit and Chunar serves as a very critical wildlife refuge and connecting forests between the Western Kaimoor Landscape and the Eastern Kaimoor Landscape.

1.3 Human-Animal Conflicts

Human-wildlife conflicts are frequently reported in regional newspapers. There have been several incidents of wild animals like sloth bear, leopard, hyena, jackal, deer and mugger crocodile straying in villages which often resulted into human-animal conflict situation. There are also reports of elephant and tigers straying into villages, however these incidents are rare and they are believed to be moving in from protected areas in neighbouring states. A list of dates when man-wildlife conflicts are reported by newspapers and available online for the year 2017 are provided below:

S. No.	Reported on	Name of Reported Animal (alphabetical order)	Village/Place	Source
1	27-03-2017	Hyena	Gorakhi	Daily Hunt
2	23-02-2017		Rehi	Amar Ujala
3	13-02-2017	Jackal	Ahraura	Hindustan
4	08-08-2017		Hamidpur	Amar Ujala
5	11-05-2017	Leopard	Manoharpur	Patrika
6	24-04-2017		Banjari	Nav Bharat Times, Mirzapur samachar
7	13-04-2017		Devhat	Amar Ujala
8	17-03-2017		Shishta Khurd	AmritPrabhat
9	20-02-2017		Badwar	Amar Ujala
10	16-12-2017	Mugger Crocodile	KonBharuhawa Rajgarh	Mirzapur Samachar
11	28-11-2017		Nadihar	Patrika
12	15-11-2017		Harsad	Hindustan
13	11-09-2017		Sadar	Patrika
14	30-08-2017		Mirzapur	Daily Hunt
15	20-08-2017		Bhawa	Bhaskar
16	30-07-2017		Devpura	Hindustan, Mirzapur Samachar
17	21-07-2017		Nadihar Rajgarh	Akhand Bharat News
18	12-07-2017		SemraGaon	Patrika
19	14-01-2017		Lahangpur	Patrika
20	06-01-2017		Dhamauli	OneIndia
21	06-12-2017	Nilgai	Jigna	Amar Ujala
22	18-11-2017		Vijaypur	Dainik Jagran
23	25-07-2017	Python	Lekhaniya dari Ahraura	Hindustan, Patrika, Amar Ujala
24	24-11-2017	Sambar deer	Dramadganj	Mirzapur Samachar

25	23-10-2017	Sloth Bear	Bhavanipur	Hindustan, Ahimsa Express	
26	21-09-2017		Bhavanipur	Mirzapur Samachar	
27	17-07-2017		Gahira Nakati	Raftaar, News 5, Amar Ujala	
28	11-02-2017		Banjari	Patrika	
29	05-02-2017		Songada	Amar Ujala	
30	06-08-2017	Snakes(other than	Bajhav	Mirzapur Samachar	
31	26-07-2017	Python)	NeguraJigna	Mirzapur Samachar	
32	03-07-2017		Behranganj Chunar	Mirzapur Samachar, Political Punch	
33	12-06-2017		Ganeshganj	Mirzapur Samachar	
34	05-12-2017	Spotted Deer	Gadbada	Amar Ujala	
35	18-03-2017	Tiger	Shishta Kala	Dainik Jagran, The Times of India, DainikBhaskar, Mirzapur Samachar, Navbharat Times, Amar Ujala	
36	31-07-2017	Wild Boar	Ramgarh	Amar Ujala	
37	06-07-2017		Bhagdeval	Mirzapur Samachar	

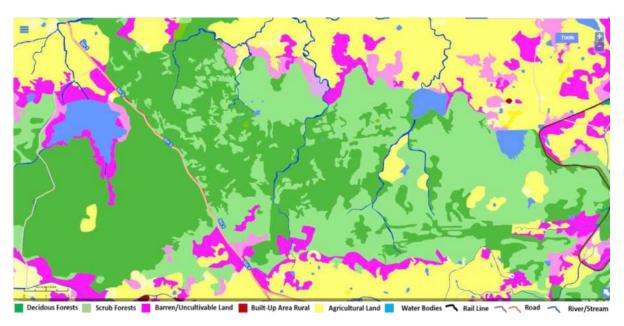
 $The \ news \ articles \ related \ to \ human-animal \ conflicts \ in \ Mirzapur \ can \ be \ read \ from \ https://goo.gl/4CgMLk$

In the beginning of the year 2017, few smugglers were nabbed by local police transporting six wild cats, five of which were later identified by Forest Department with assistance of VENHF to be the rare cat species of India- 'Caracal'. There were high speculations that the cats were poached from forest areas in and around Mirzapur, but the exact origin of these cats remained uncertain. In another famous incident, in June 2016, a leopard was trapped inside a villager's house which was saved after 36 hours of rigorous rescue operation (Hindustan, 2016).

2. DESCRIPTION OF THE STUDY AREA

2.1 Marihan Forest Range

The forests of Marihan constitute a variety of habitats ranging from grassland, savannah, scrub forests, mixed deciduous forests and dense deciduous forests interspersed with short heighted hills and numerous rivers, some of which originate here. The total area under the Marihan forest range is 145 sq.km.



Map 3: Land Use Land Cover Map of Marihan Forest Range (http://bhuvan.nrsc.gov.in)

A. Topography

This landscape has short to medium height hills, with less steep slopes. The elevation varies between 170-250 m. Though the sub-surface layer is rocky sandstone, but soil layer is still found intact in most places. Dense canopy can be seen in most of the hills. In some pockets, old growth forests are also found. Most of the plain areas in between the hills were found to be degraded/mixed deciduous forests interspersed with grasslands and scrub forests dominated by *Zizyphus, Acacia catechu* and bamboo. *Hyptis suaveolens* (bantulsi/bush mint) invasion is very common in this forest range.

B. Sources of Water

There are several small order rain fed seasonal rivers, and naturally collected rainwater within the aquifers which flows year-round through some rock crevices, which serves the drinking water requirement of wild animals. The forest range forms important catchment and source of many such rivers. This landscape has several waterfalls and rivers which

stores water as series of ponds in dry seasons, and thus becomes very critical for survival of the wildlife. Some of the lesser known water falls/rivers found inside the forests are Jogia Dari, Alopi Dari, Jamithwa Dari, Pahiti dari, Nagari Jharna etc.

Several small check dams could be found in villages near the forests. Forest department staff has also created few small ponds and check dams to facilitate collection of rainwater for use in dry season by the wild animals. Dhekwah dam, Nanauti dam and Upper Khajuri dam are the major irrigation dams built in this forest range which are now integral part of the ecosystem and are important drinking water sources in dry seasons.

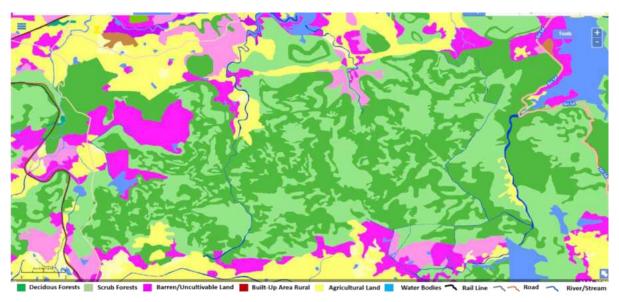
C. Continuity

The Marihan forest range in itself is quite large in area, scattered with grasslands, scrub forests, hills and gorges. There are few agricultural fields and fallow lands near peripheral parts. In between the Darhiram beat and Sarson beat, there are few agricultural settlements with large fallow lands. The villages like Sarso, Semri and Rajapur, are infamous for man-bear conflicts.

There is a continuous stretch of hills with good forest cover in Darhiram, most of which are not easily accessible and which extends up to Sarso and Lahaura beat. This continuous stretch of forests seems to be the core wildlife habitat of Marihan range. This small area is naturally protected because of the difficult terrain and fear of wild animals. However, in recent times there has been increased human disturbances in this portion as well.

The northern side of the range is densely populated rural settlements and the underconstruction Ban Sagar canal acts as the northern boundary of the forests. The south of the range is traversed through SH-5, beyond which there are forests of Patewar which runs alongside the Upper Khajuri reservoir. The forests of Patewar joins the forests of Lalganj range beyond which there are some human settlements. Towards south of Marihan range, the SH-5 bends towards south east from where it is joined by Chunar road which may be termed as eastern boundary of Marihan forest range. Towards east of Chunar road lies the Chunar range and Sukrit range. There is little vegetation cover on western side of Chunar road which are interspersed with agricultural settlements and villages. The forests of Chunar and Sukrit range shares boundary with Chunar road on eastern side, but they are disturbed by mining activities and the forests are degraded in peripheral areas. One railway line called Chunar-Churk link also goes through this range.

2.2 Chunar and Sukrit Forest Range



Map 4: Land Use Land Cover Map of Chunar and Sukrit Forest Range (http://bhuvan.nrsc.gov.in)

A. Topography

Chunar and Sukrit are two contiguous forest ranges. Chunar range starts from the south of River Ganges and extends till forest ranges-Wyndham fall, Marihan and Sukrit. Sidhanath Dari, is a popular waterfall in this range due to religious beliefs. The elevation of the forest areas varies between 200-300 m. These two forest ranges are continuous chains of hills, some of which has very dense forest cover. The total area of Sukrit forest range is 125 sq.km. and that of Chunar forest range is 131 sq.km. in area.

The eastern side of Chunar and Sukrit forest ranges which adjoins SH-5A (Varanasi-Robertsganj road) is highly porous and disturbed due to stone quarrying activities and encroachment of land within the forest areas. *Lantana camara* is the major invasive species here, especially the areas near the mining stretch. Canopy cover increases while we move 6-7 km interior to forests from SH-5A. Salai (*Boswellia serrata*) trees are very common on the hills. Some patches of the forests were found to be less disturbed with very good quality of forests.

Unlike the southern portion of Chunar range which is continuous with Sukrit, the northern portion of Chunar forest range towards the river Ganges is disturbed by human activities like quarrying and logging.

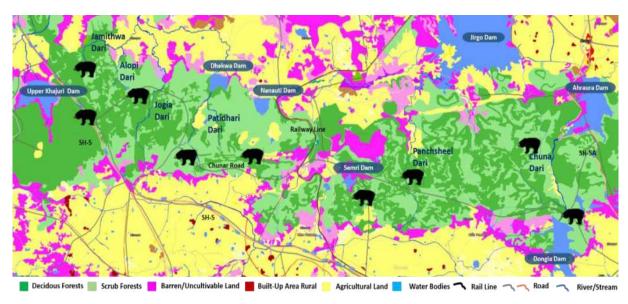
B. Sources of Water

Jirgo dam and Ahraura dam are the major irrigation reservoirs in this region in northern side. Chuna Dari, Lekhania dari and Panchsheel Dari are some of the important natural waterfalls inside the forests. Dhanraul irrigation canal runs through Bhavanipur, which according to forest range officers is also connected with Panchsheel dari which helps maintaining availability of drinking water in forests around Panchsheel dari even during dry seasons. There are several small streams which impound water within their valleys in small ponds like structure. However, unlike Marihan forest range, in Sukrit range, most of them were dried up during our survey in May and June.

C. Continuity

Southern portion of Chunar range is continuous with Sukrit forest range. There are several rural settlements in the periphery of the forest ranges. The Sukrit and Chunar forest range is bordered by SH-5A on eastern side and Chunar road on western side. There is a portion of the Sukrit range which is on the other eastern side of the SH-5A and extends till Chandraprabha WLS in district Chandauli. The proposed 1 km eco-sensitive zone of Chandraprabha Sanctuary includes a small portion of the eastern part of the Sukrit range (MoEFCC, 2018).

2.3 Map of Important Rivers and Dams in the landscape



Map 5: Map showing different rivers and reservoirs in Marihan, Sukrit and Chunar forest ranges (Sinha et.al. 2017)

3. WILDLIFE INVENTORY OF MARIHAN AND SUKRIT LANDSCAPE

In human dominated dry forest landscapes of Mirzapur Forest Division, generally the wild animals avoid day time movement to avoid exposure to heat as well as human contact. Majority of the animals such as sloth bear, leopard, hyena, porcupine, civets, sambar are also known to be nocturnal and elusive. Therefore, sighting of the wildlife during day-time is rare.

The 2013 census data published by Mirzapur Forest Division which used information from Range Forest Offices provides a good inventory of the common wild animals found here. The 2016 sloth bear survey conducted by VENHF & WWF-India was also based on sign survey. All such information was based on indirect evidences, and there is a possibility that several elusive animals may have not be recorded at all. For instance, the wildlife censuses conducted before could not ascertain presence of leopards in the forest division although there were several reports of man-leopard conflicts from areas around the forests in the past. Therefore, a camera trap study was planned to collect objective and direct evidences of sloth bears and other elusive wild animals which are found in this area. This was not a census study to estimate the population, but to create an inventory of different small and medium sized animals occupying the forests of Marihan, Sukrit and Chunar.

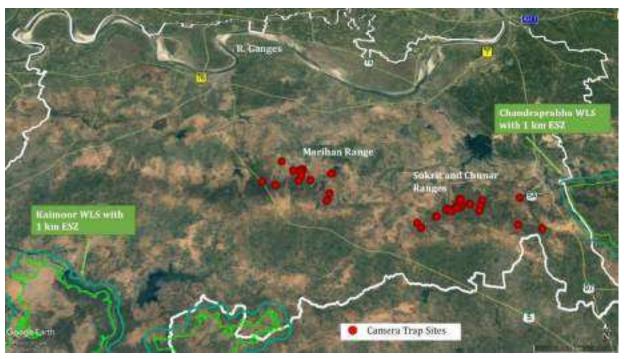
3.1 Methodology

Camera trapping is one of the most reliable method of recording presence of animals which are not seen commonly. Camera traps causes minimum disturbance to the wildlife, and can be left unattended for several days which makes them ideal for capturing photographic evidences of elusive, and nocturnal animals which avoid human presence. Various studies show that camera trapping is an efficient method for inventorying the community of medium to large terrestrial mammals, with 57 to 86% of species detected using survey effort of 1035 to 3400 camera trap days (Rovero et.al., 2010). However, despite the relatively large proportion of species that can be recorded, some species may not be detected even after several thousands of camera trap days (Tobler et al., 2008). Other important considerations while conducting a camera trap exercise is that, large camera trap effort does not guarantee survey completeness, and failure to detect a species does not mean the species is absent (Rovero et.al., 2010).

For species inventories, spatial arrangement of camera traps is flexible and there are no requirements on minimum distances between camera traps or total survey area to be covered. Inventories can therefore be conducted in a relatively small area assuming this is representative of the total study area (Rovero et.al., 2010).

A rapid camera trap survey was carried out in selected areas of forest ranges Marihan, Sukrit and Chunar from 20 May 2018 till 14 July 2018. A total of 15 camera traps were deployed at 50 different locations covering different habitat types and at locations likely to be used by animals. One camera got stolen in June from Sukrit range, and thereafter the rest of the survey was carried out using 14 camera traps. The cameras (model: Cuddeback Silver Series) were equipped with passive infrared sensor system which gets triggered by body heat and movement as the animal passes in front of the sensor. The day time images were captured using natural light and therefore producing coloured images, while during night time the infrared red flash was used to illuminate the object capturing black and white images. The cameras were calibrated to record both images and video clips of the objects to help identify the species with greater certainty.

The camera trap survey was mainly carried out in Marihan and Sukrit forest ranges along with a small portion of Chunar forest range which is contiguous with Sukrit range. The location of the camera traps is shown in the map below.



Map 6: Locations of Camera traps installed in Marihan, Sukrit and Chunar forest ranges on Google Earth

3.2 Inventory of the Wild Animals in the Study Area

S. No.	Species	Scientific Name	WPA, 1972, IUCN Status	Camera Trap#	Mirzapur FD^
1	Asiatic Wild Cat	Felis sylvestris ornata	Sch I	Marihan & Sukrit	Not Listed
2	Bengal Monitor	Varanus bengalensis	Sch I	Marihan & Sukrit	All
3	Common Leopard	Panthera pardus	Sch I, VU	Sukrit	Not Listed
4	Indian Gazelle	Gazella bennettii	Sch I	Marihan & Sukrit	Chunar & Sukrit
5	Peafowl	Pavo cristatus	Sch I	Marihan & Sukrit	All
6	Rusty Spotted Cat	Prionailurus rubiginosus	Sch I, NT	Sukrit	Not Listed
7	Sloth Bear	Melursus ursinus	Sch I, VU	Marihan & Sukrit	All
8	Golden Jackal	Canis aureus	Sch II	Marihan & Sukrit	All
9	Grey Mongoose	Herpestes edwardsii	Sch II	Marihan & Sukrit	Not Listed
10	Hanuman Langur	Semnopithecus entellus	Sch II	Marihan & Sukrit	Chunar & Sukrit
11	Palm Civet	Paradoxurus hemaphroditus	Sch II	Marihan	Not Listed
12	Rhesus Macaque	Macaca mulatta	Sch II	Marihan & Sukrit	All
13	Ruddy Mongoose	Herpestes smithii	Sch II	Marihan & Sukrit	Not Listed
14	Small Indian Civet	Viverricula indica	Sch II	Marihan & Sukrit	Not Listed
15	Bluebull	Boselaphus tragocamelus	Sch III	Marihan & Sukrit	All
16	Indian Wild Boar	Sus scrofa	Sch III	Marihan & Sukrit	All
17	Sambar	Rusa unicolor	Sch III, VU	Marihan & Sukrit	All
18	Spotted Deer	Axis axis	Sch III	Marihan	All
19	Striped Hyena	Hyaena hyaena	Sch III, NT	Marihan & Sukrit	Chunar & Sukrit
20	Five-striped Palm Squirrel	Funambulus pennantii	Sch IV	Marihan & Sukrit	Not Listed
21	Indian Crested Porcupine	Hystrix indica	Sch IV	Marihan & Sukrit	All

22	Indian Hare	Lepus nigricollis	Sch IV	Marihan & Sukrit	Not Listed
23	Painted Spurfowl	Galloperdix lunulata	Sch IV	Marihan & Sukrit	Not Listed
24	Red Jungle Fowl	Gallus gallus	Sch IV	Sukrit	Not Listed
25	Blackbuck	Antilope cervicapra	Sch I	Not Captured	Marihan & Chunar
26	Mugger Crocodile	Crocodylus palustris	Sch I, VU	Not Captured	Marihan
27	Indian Wolf	Canis lupus	Sch I	Not Captured	Chunar & Sukrit
28	Red Fox	Vulpes vulpes	Sch II	Not Captured	All
29	Jungle Cat	Felis chaus	Sch II	Not Captured	Chunar & Sukrit

[#] For the purpose of camera trap, we have not listed Chunar as separate. Anything reported in Sukrit can be considered to be found in the areas of Chunar range (southern portion) adjoining Sukrit range.

[^]The data from Mirzapur Forest Division is listed for each ranges separately.

3.3 Images from Camera Trap

1. Asiatic Wild Cat/ Desert Cat (Felis sylvestris ornata)। एशिआई जंगली बिल्ली





2. Bengal Monitor (Varanus bengalensis) | गोह





3. Common Leopard (Panthera pardus) । गुलदार/ तेंदुआ



4. Indian Gazelle (Gazella bennettii) |चिंकारा





5. Peafowl (Pavo cristatus) । मोर





6. Rusty Spotted Cat (Prionailurus rubiginosus) । रस्टी बिल्ली





7. Sloth Bear (Melursus ursinus) | स्लॉथ भालू/रीछ





8. Golden Jackal (Canis aureus) | सियार/गीदड़





9. Grey Mongoose (Herpestes edwardsii) । धूसर नेवला





10. Hanuman Langur (Semnopithecus entellus) । लंगूर





11. Palm Civet (Paradoxurus hemaphroditus) | काला मुश्कबिलाव





12. Rhesus Macaque (Macaca mulatta) । बंदर





13. Ruddy Mongoose (Herpestes smithii) । सुर्ख नेवला





14. Small Indian Civet (Viverricula indica) । छोटे भारतीय मुश्किबलाव





15. Bluebull (Boselaphus tragocamelus) | नीलगाय





16. Indian Wild Boar (Sus scrofa) | जंगली सूअर





17. Sambar (Rusa unicolor) | सांभर





18. Spotted Deer/Chital (Axis axis) | चीतल/ हिरण



19. Striped Hyena (Hyaena hyaena) | লক্ডৰুঘা





20. Five Striped Palm Squirrel (Funambulus pennantii) | पांचधारीदार गिलहरी





21. Indian Crested Porcupine (Hystrix indica) । साही





22. Indian Hare (Lepus nigricollis) । खरहा





23. Painted Spur Fowl (Galloperdix lunulata) । पेंटेड जंगली मुर्गी





24. Red Jungle Fowl (Gallus gallus) । लाल जंगली मुर्गी



3.4 Discussion on the Camera Trap Results

The camera trap survey showed a very good diversity of wild animals in the forests. This may not be considered as a complete list of wild animals found in this landscape as our camera trap exercise were greatly limited to some representative samples and there is high possibility that few species may not have been captured. However, we managed to get a very good diversity of wildlife in this rapid survey which was limited in terms of both time and resources. The result indicates a very good representation of all trophic levels indicating a functional ecosystem in existence.

There are three cat species captured by the cameras -Asiatic Wild Cat, Rusty Spotted Cat and Leopard all of which are photographed in wild for the first time in this Forest Division and are all protected as Schedule I of WPA. However, the discovery of Asiatic Wild Cat is very extraordinary as the known easternmost range of Asiatic Wild Cat has been up to Bagdhara Wildlife Sanctuary in Sidhi District of Madhya Pradesh which shares its border with Mirzapur at Kaimoor Wildlife Sanctuary. Similarly, this is also the first time record of Rusty Spotted Cat.

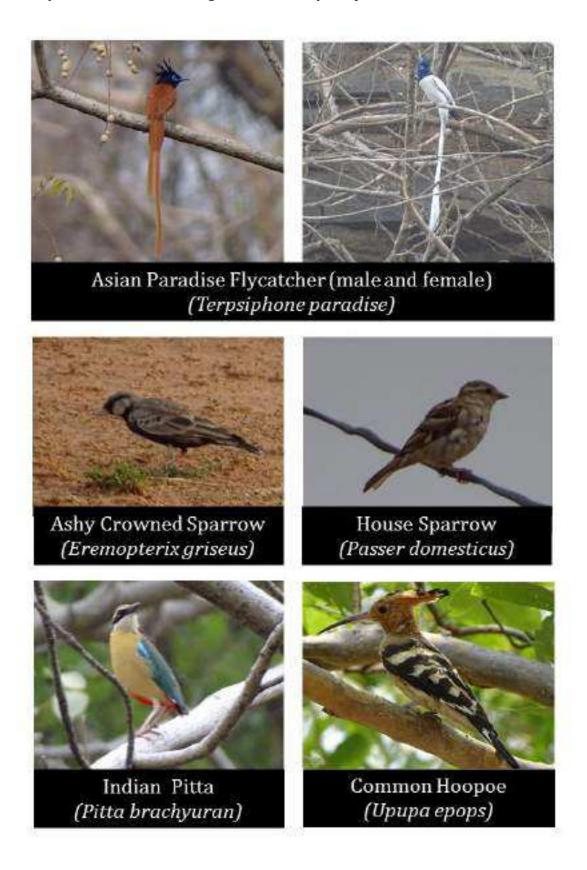
The **Asiatic Wild Cat** also known as Desert Cat (*Felis silvestris ornata*) is highly elusive and there has been photographic evidences from only Rajasthan and Madhya Pradesh in India (Pande et.al., 2013). The nearest range of Asiatic Wild Cat from Mirzapur Forest Division is Bagdhara Wildlife Sanctuary which borders Mirzapur district and is contiguous with Kaimoor Wildlife Sanctuary and Mirzapur Forest Division. We have got images of Asiatic Wild Cat from one location in Marihan forest range and two locations in Sukrit forest range. The location of the cameras from where the Asiatic Wild Cat was captured in Marihan range is approx. 16 km from boundary of Kaimoor Wildlife Sanctuary and approx. 30 km from boundary of Bagdhara Wildlife Sanctuary.

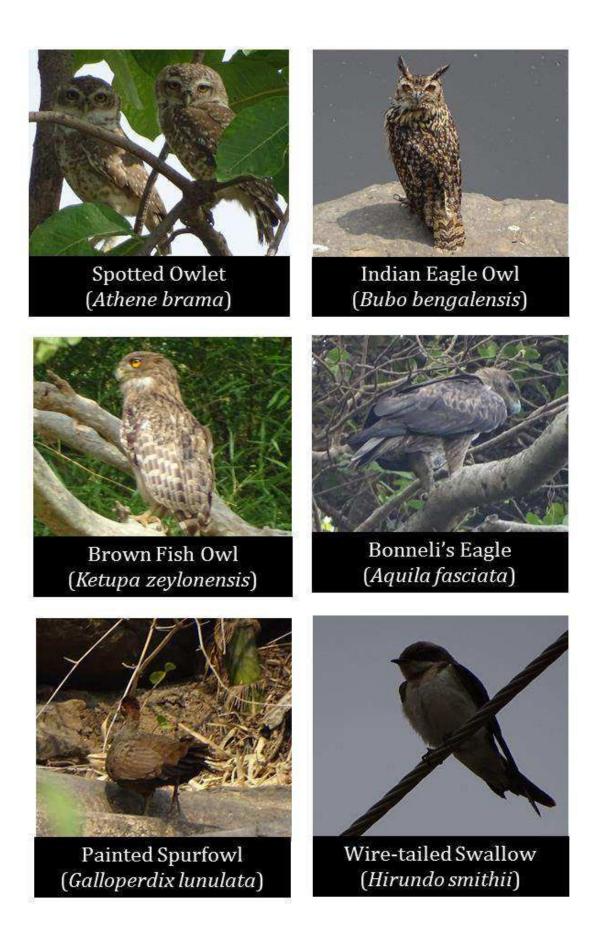
Asiatic Wild Cats are often mistaken as house cats as they both belong to same species, however, given its habitat preference, previously known areas from Kaimoor landscape of which Marihan and Sukrit ranges are part of- the Mirzapur Forest Division seems to be the probable easternmost range of this cat species.

Some other species reported for the first time in Mirzapur Forest Division are: Ruddy Mongoose, Grey Mongoose, Palm Civet, Small Indian Civet, Painted Spurfowl and Red Jungle Fowl. The main reason for so many species not being recorded earlier is because this was the first ever survey using camera trap carried out in the Division and all the previous surveys were based on indirect evidences.

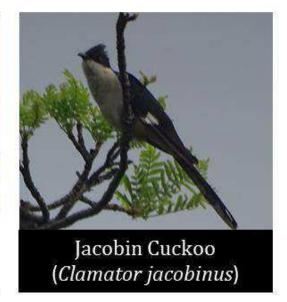
3.5 Some Common Birds Observed

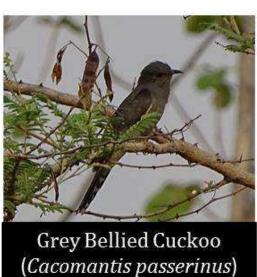
There is a very good diversity of birds in all the forest ranges. Some photographs of birds clicked by the researchers during the field survey are produced below:

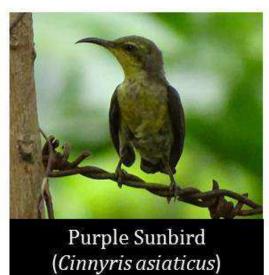


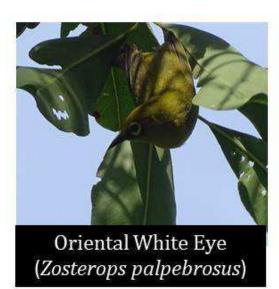










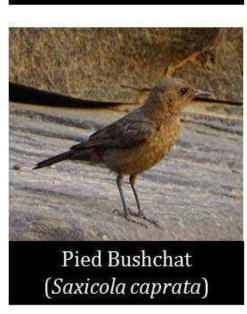






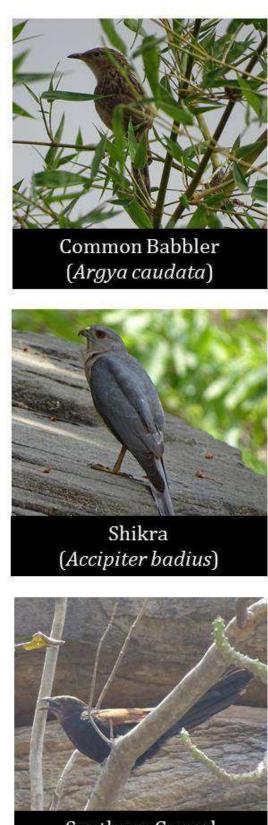






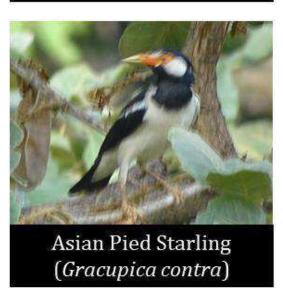




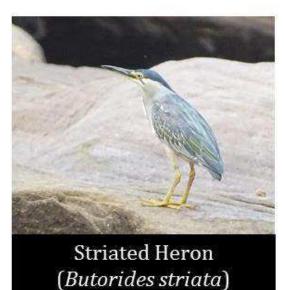




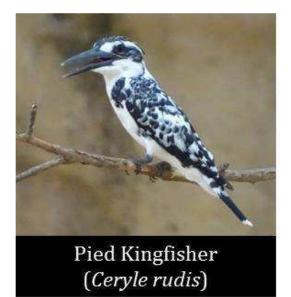


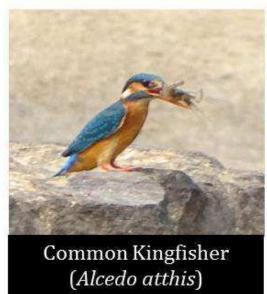




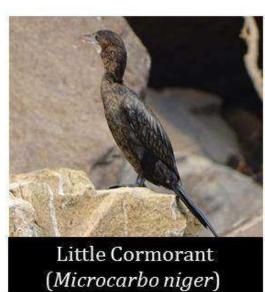




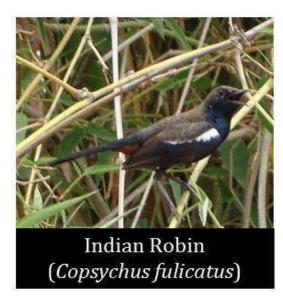












4. THREATS TO THE WILDLIFE

Human induced degradation and fragmentation of forests and wildlife habitat are the highest threat in all forest ranges of Mirzapur followed by other threats such as forest fires, replacement of native species by exotic and hunting.

Some of the major threats which are leading to loss of wildlife in forests of Mirzapur Division, especially the forest ranges Marihan, Sukrit and Chunar are discussed in the following sections.

4.1 Land Use & Land Cover Change

Landscape change is mainly induced by land use change driven by human activities. Landuse change is cited as the main driver of habitat loss and fragmentation (Sala et al. 2000; CBD 2010), thereby threatening many species (Barnosky 2008; Ehrlich and Pringle 2008; Vignieri 2014).

Whether by chance or design, small fragments of forest typically persist in the aftermath of deforestation, effectively islands within a sea of agriculture, urbanization, or other modified lands that are unsuitable for most forest species. Many of the species that originally occupied the forest will disappear from these isolated fragments, but this loss occurs over a relaxation period until a new, more depauperate equilibrium community is reached (Gibson et.al., 2013).

When large contiguous forests are perforated by small holes or broken up into edges and smaller patches to form a non-forested matrix of open spaces, the wild animals which have evolved within the ecosystems of large intact forests find it very difficult to survive in such disturbed ecosystem. Populations thus isolated face survival pressures through increased competition for food and space and face much greater threat from epidemic, natural calamities and human activities. (Olff and Ritchie, 2002; Fahrig, 2003). While some species can persist in fragmented landscapes, or even benefit from fragmentation, many species become more vulnerable because their populations are smaller (Cagnolo et al. 2006), they are more prone to overexploitation (Michalski and Peres 2005; Bennett and Saunders 2010) and edge effects (de Casenave et al. 1995; Gascon et al. 2000), and their capacity to adapt to environmental change is lower (Travis 2003; Brook et al. 2008).

The damages caused by habitat fragmentation are irreversible in nature and it may reach the upper limit of the intermediate disturbance hypothesis, where most species may go locally extinct (Anitha et.al., 2008).

Isolation of forests is one of the major factor of local extinction of sloth bears in other forest areas of India. It was found that 69% of the extirpated areas are highly isolated (>20 km) or moderately (5-20 km) isolated. Isolation results into decline or extirpation of sloth bear population due to several induced impacts such as human caused habitat degradation and

killing, and by limiting growth of populations and immigration of Sloth Bears from adjacent areas (Yoganand et.al. 2006).

The main drivers of land use changes in Mirzapur has changed in recent years, where outside drivers are now more dominant than internal drivers. Since last decade this region is undergoing phenomenal change and rapid developmental pressures. There has been considerable land use/land cover change in Mirzapur. Increasing urbanization and agricultural expansion have been the main reasons and have increased pressure on the forests of Mirzapur (Goparaju & Sinha, 2015).

The main reasons for landscape change in this forest division are further explained below.

A. Mining

Mining causes irreversible damage to the forests by creating permanent scar on land by removing vegetation and topsoil from a site and also affecting the hydrology. The noise pollution from open-cast mining activities has also significant impact on the biophonical soundscape of a neighbouring forest.

High sound pressure levels through exploratory and production drilling, blasting, cutting, handling of materials, ventilation, crushing, conveying, ore processing and transportation (Donoghue, 2004). Many species exhibit behavioural changes including avoiding noisy areas during foraging (Miksis-Olds et al., 2007; Schaub et al., 2008) and other daily activities (Sousa-Lima and Clark, 2009; Duarte et al., 2011). Area avoidance and acoustic compensatory mechanisms to reduce or offset the effects of noise may alter the acoustic complexity of a community in a given location, resulting in a decrease in species' abundance (Bayne et al., 2008) and/or diversity (Proppe et al., 2013) at noise-polluted sites.

Illegal mining was once very much common in all across the district. After a massive campaign by Police and Forest Department in recent years, the intensity has been significantly reduced. Due to no barriers at the entry and exit points on forest roads, and shortage of forest staff in range offices-round the clock monitoring is a great challenge.

Following are satellite images from Marihan and Sukrit areas to show damage caused by stone quarrying.

Google Earth Images showing mining induced land use land cover changes:



Image 5: Location: Near SH-5, Marihan; 24°56'46.91"N82°40'20.50"E



Image 6: Location: Near SH-5A, Sukrit; 24°54′59.97″N83° 2′42.02″E



Image 7: Remains of stone quarry near Khoradih, Sukrit forest range

B. Encroachments of Forests for Agriculture and Infrastructure

Encroachment of forests is one of the serious problem in Mirzapur, particularly in the scrub forests, grasslands and near rivers and reservoirs.

As the forest land is fertile and in some areas year round water is available in streams, local people often engage in activities of clearing the forests for cultivation of crops. These activities have a great cascading effect on forests, as these agricultural farms soon turns into human settlements after which the natural resources in surrounding areas are also encroached by people. There are several initiatives taken by the Forest Department to vacate these encroachments; but due to limited monitoring capacity of the forest department and political pressures, the areas are often reclaimed by the encroachers.

Such encroachments have many cumulative impact- first it comes after clearing forests and wildlife habitats, which is followed by mass exploitation of natural resources from surrounding forests creating more pressure on remaining forests & water streams and thereafter causing high degree of disturbance to wildlife by creating new roads, air and noise pollution by vehicles & generator sets etc.

During post-monsoon seasons, often it is observed that people from nearby villages shift to areas bordering the forests, stay there in a temporary hut for few months to graze their cattle herds. These camps often have several domestic dogs accompanying them, which further aggravates the disturbance to free ranging wild animals. There are also instances where forest like areas near forest boundaries which serves as wildlife corridors are cleared without any consideration of impact on wild animals and their movements. Some of the examples are Shine City, Spazio Smart City, Mulayam Singh Yadav University and several other institutes along the boundary of Marihan Forest Range and adjoining SH-5 near Marihan.



Image 8: The under construction veterinary department of Banaras Hindu University

Such exurban development and associated

infrastructure can lead to habitat fragmentation, homogenization of animal and plant communities, and increased human-wildlife conflict (McKinney, 2006). Habitat fragmentation from dispersed housing development can alter animal movement patterns and behaviour, cause "pileup" or overlap of home ranges, and reduce animal fitness by intensifying inter-

and intra-specific interactions (Riley, 2006). In addition, exurban development may also disproportionately impact protected lands and could decrease their conservation value (Knight et al., 1995; Leinwand et al., 2010; Radeloff et al., 2010).

Exurban development is one of the greatest threat because of the commercial stake involved of the people who often have deep political roots, administrative influence and

sometimes linking them with development for national importance. Poor planning, inaccurate demarcation of forest lands, outdated revenue records, corruption, poor knowledge of ecology and pressures from regional political leaders poses a great challenge in regulating such activities in and around the forest areas. The effects of such activities are often irreversible and cause irreparable damage to the landscape leading to local extinction of wild animals.



Image 9: The under construction Shine city on SH-5 surrounded by Marihan forest range

C. Linear Constructions

Linear constructions such as roads cause great damage to the wildlife. Most studies on the effects of roads on wildlife focus upon animal-vehicle collisions (Forman et al. 2003). However, it has also been suggested that roads act as complete or partial barriers to movement for some species (e.g. Oxley et al. 1974; Mader 1984; Swihart & Slade 1984; Brody & Pelton 1989; Burnett 1992; Rondinini & Doncaster 2002; Shine et al. 2004; Whittington et al. 2004). Such a barrier effect could fragment habitat and reduce population persistence by reducing recolonization of empty habitats and/or limiting immigration (McGregor et.al., 2008).

Jaeger et al. (2005) discussed three types of possible road avoidance and argued that the type of avoidance largely determines the mechanism and strength of road effects on a population. The three types of avoidance behaviour are:

- (i) animals may avoid the road itself as it is a hostile environment onto which they will not venture (called 'road surface avoidance');
- (ii) animals may avoid emissions from traffic such as fumes or noise, keeping them some distance away from the road ('general traffic avoidance' or 'noise avoidance'); or
- (iii) animals may avoid individual vehicles, waiting for a break in traffic before attempting to cross the road ('car avoidance').

The impact of roads cannot be attributed just to the road itself, but it also kick-starts a series of clearing of forest areas alongside the roads, for infrastructural developments, often by illegally encroaching the forest lands to set up shops, dhabas, institutes, townships etc. Thus, cumulatively the roads cause far greater damage to the wildlife connectivity than just being a linear disturbance.

While SH-5 (Mirzapur-Robertsganj) and Chunar road has severely impaired the landscape connectivity of the continuous forests of Marihan range, the SH-5A is the another linear disturbance between Chandraprabha Wildlife Sanctuary and Sukrit Range. The under construction Bansagar canal on northern and eastern side of the Marihan range will further limit the range's free connectivity with other forest ranges.

Sometimes it is argued by developers that there are so many natural rivers in the area, then how canals are causing damage? It is important to understand that the natural rivers flowing through the forests do not hinder wildlife movement as the river beds are not very deep and they often have rocky escarpments which does not obstruct movement of animals. Unlike natural streams, constructed canals not only have significant water depth round the year but they also have very steep and plain cemented banks which does not allow free movement of animals across the stream and often act as a trap if any animal falls inside them.

4.2 Hunting/Poaching

There are several instances in the past when the forest staff have successfully nabbed poachers in forests of Mirzapur. However, due to lack of resources and man power, the range offices faces lot of limitations in efficient monitoring of the forests. In nearly all the forest areas surveyed, evidences of hunting such as traps, hiding places and wire were observed. In one of the camera trap image, a Hyena's leg was found to be injured. Some of the images are shown below.



Image 10: Remains of trap



Image 11: A Hyena with injured leg





Image 12: Traps found during the survey.

4.3 Deforestation

Deforestation is one of the major threats to wildlife today. Not only deforestation causes opening up forests to many abiotic and biotic influences, but it also leads to fragmentation of forests which can affect species dispersal and migration through its effects on forest connectivity. Having evolved within the ecosystems of large intact

forests, many species are ill-adapted to life outside the forest interior, either in forest edges or in the patches carved from it (Tole, 2006). Apart from household fuelwood use, the supply of woods to commercial vendors are the major cause of deforestation here. According to local journalists, the woods logged from forests in and around Mirzapur are supplied to various traders outside the district as well as for use as fuelwood in restaurants, hotels and preparation of charcoal. Bicycles and camels are the two most commonly used transportation system for transporting the logged material from the forest interiors to outside.

Full time monitoring of the forests is limited due to lack of adequate forest staff. To control free access to wood mafia and poachers, there is an urgent need to increase check points on forest roads and the capacity of range offices.

4.4 Replacement of Native Species of Trees

Loss of native trees is a very serious concern for the health of the forest ecosystems. This change in floral species composition has numerous cascading effect on the entire food web, thus affecting survival of many wild animals. While deforestation is the main underlying cause of loss of native species, the two main driving factors leading to their replacement by new and exotic species are- plantation of non-local species and colonization by invasive alien species in open forest areas.

A. Plantation of Non-Native Trees

Katsagon (Haplophragma adenophylla) is the most preferred tree for plantation in Mirzapur which is followed by trees like Kassod (Cassia siamea), Chinaberry (Melia azedarach), White Siris (Albizia procera), Teak (Tectona Grandis), Tamarind (Tamarindus indica), Auri (Acacia Auriculiformis), Chilbil (Holoptelia integrifolia) and Arjun (Terminalia arjuna). These trees are preferred due to their resilience and quick growth potential. However, except Arjuna and Chilbil all other trees species are non-native and has very low ecological value. The non-native tree varieties might be beneficial for social forestry purpose in villages and agricultural settlements-but these trees are not suitable to be planted within the forest areas. It is particularly important to select only native and keystone species while conducting the plantations because wild animals including the Sloth Bear are highly dependent on the fruiting for their survival. Also, planting trees which have high wood demand, but less popular for minor forest produce will make them more

vulnerable to logging activities than the trees with potential to provide minor forest produce.

Some of the native trees, which are economical, easy to grow, useful to local people as well as suitable for wildlife are: Mahua (*Madhuca longifolia*), Jamun (*Syzygiumcumini*), Ber (*Zizyphus mauritiana*), Tendu (*Diospyros melanoxylon*), Amaltas (*Cassia fistula*), Bel (*Aegle marmelos*), Piyar (*Buchanania lanzan*) and Fig trees (*Ficus arnotiana, F. benghalensis, F. religiosa*).

B. Natural Invasion by Lantana and Hyptis

Invasion of species may lead to local declines (Islam, 2001) and even extinction of native species (Pimm, 1986) thus altering species richness in the forest fragment (Carey et al., 1996). Invasive species can alter ecosystem function by changing disturbance frequency or intensity (D'Antonio and Vitousek, 1992; Smith, 1994; Mullett and Simmons, 1995), altering trophic structure (Cross, 1982; Hobbs and Mooney, 1986; Braithwaite et al., 1989) and changing resource availability (Vivrette and Muller, 1977; Boswell and Espie, 1998). Among these factors, disturbance may favour invasions by disrupting strong competitive-species interactions (Fox and Fox, 1986; Crawley, 1987) and locally increasing different limiting resources (Hobbs, 1989). Lantana and Hyptis are two major invasive species in Mirzapur Forest Division.

Lantana camara

It has been ranked as the highest impacting invasive species (Batianoff and Butler, 2003), because it possesses great potential to escape cultivation and have deleterious effect on species richness (Islam, 2001). In India it was introduced in early nineteenth century as an ornamental plant (Sharma, 1988), but now it is growing densely throughout India (Sharma et al., 2005 a, b).

Lantana has spread in almost all the fragmented areas in the Vindhyan dry deciduous forest including the forest ranges Marihan, Sukrit and Chunar. The dense cover created by vertical stratification of lantana may reduce the intensity or duration of light under its canopy and thus decrease the herbaceous cover. *Sharma and Raghubanshi (2011)* reported that Lantana is not found in forests where the canopy cover was at least 63%. *Sharma and Raghubanshi, 2006 & 2007* discussed that the growth architecture pattern of lantana is such that it prevents the light penetration to the forest floor, leading to the decline of tree seedlings and possibly the herb flora.

Lantana also possesses the capability to trap wind-blown litter. This trapping of litter is also dependent on lantana cover, as denser the lantana cover, greater the trapping potential. So, more organic matter accumulates/builds up with increasing lantana cover.

Hyptis suaveolens

It is considered as one among the world's most noxious weeds, which are invading natural ecosystems across tropical and sub-tropical regions of the world (Sarmiento, 1984; Wulff and Medina, 1971). It is a native of tropical America. Because of its widespread occurrence in the tropics, it is now regarded as a pan-tropical weed. In India. Bushmint occurrence is reported from North-East India, Vindhyas, Deccan Peninsula, and Andaman and Nicobar Islands (Wealth of India, 1959; Yoganarasimhan, 2000).



Image 13: Hyptis invasion in Marihan forest range

Locally known as Bantulsi, it is an erect annual woody herb, commonly 1 m in height (maximum height = 1.5 m),and reproduces by seed (Willis, 1973). Hyptis suaveolens is a prolific seed producer and dense infestations can yield up to ~ 3000 seeds m⁻², forming persistent propagule banks within a short period. The seeds are slightly notched and they are protected by

spined burrs that help in the seeds' dispersal through animal fur (Stone 1970; Parsons & Cuthbertson 2000). It is found on a variety of habitats, like railway tracks, roadsides, foothills of open forests, and forest clearings, and can heavily invade wastelands, particularly on arid and rocky substrates (Verma & Mishra 1992; Mudgal et al. 1997).

Raizada (2006) suggested that species loss in the area occupied by *H. suaveolens* was related to its unpalatability to livestock and, thus, selective avoidance, resulting in other species being heavily used as fodder by livestock. (Sharma et.al., 2009)

In its native range, the local dominance of bushmint in savannahs was associated with the anthropogenic disturbances viz., removal of vegetation, fire, over-grazing, and tillage (Holmes 1969; Wulff 1987). In the invaded range, it is commonly found alongside roads and water courses, open forests, and the over-grazed pastures.

Bushmint forms large thickets and is believed to produce allelochemicals, which impede seed germination of native species. The traits which make bushmint a potent invader are: prolific seed production (Raizada 2006), high dispersal ability (Parsons and Cuthburtson 2000), phenotypic plasticity to a variety of habitats (Sharma and Raghubanshi 2009), proliferation from perennial rootstocks (Raizada 2006), unpalatability to livestock (Holmes 1969), and probable allelopathy effects on native species (Raizada 2006).

4.5 Over-grazing

Chaturvedi et.al., 2012 carried out a study on effect of grazing and harvesting on forests in this landscape and found that number of newly damaged juveniles was greatest in June and lowest in September. They reported that in the TDF found in this region, grazing/browsing by livestock and harvesting by humans are the major causes of damage to juvenile trees, in addition to the long drought periods within the annual cycle. The site which had the greatest level of disturbance in terms of damaged juveniles, also contained the lowest number of species and juvenile stems.

Grazing also leads to higher soil compaction and erosion of topsoil further deteriorating the soil conditions which won't support natural regeneration of forests. The conversion of forest to pasture causes changes in topsoil morphology, increased water erosion, mass movements, soil compaction by trampling and alteration of the hydrologic cycle, among others (Oram, 1990). Trampling causes changes in physical soil properties. Infiltration is reduced, while runoff, erosion and bulk density increase (Rouzi and Hanson, 1966; Van Haveren, 1983; McCalla et al., 1984; Reátegui et al., 1990). The subsurface layer (usually at 5–10/15 cm depth) can be also affected by compaction, as reported for grazed pastures in tropical conditions (Chauvel et al., 1999).

The development of tree seedlings to maturity or attaining canopy status is prevented by grazing (Hester et al., 2000), adversely affecting the continuity of entire forest ecosystems (Pulido et al., 2001; Mountford and Peterken, 2003; Plieninger et al., 2004; Dufour-Dror, 2007). According to *Pulido and Díaz (2005)*, the main direct damage seems to occur at the 'seedling emergence and establishment stage' when livestock graze, browse or trample the seedlings. This prevents recruitment of juveniles (Hester et al., 2000). When the regeneration process is continuously hampered, it may then lead to progressive decay of the forest cover (Leiva and Fernandez-Ales, 2003; Quézel and Médail, 2003; Plieninger et al., 2004; Dufour-Dror, 2007). Unlike seedlings, juveniles may not be killed straightway when browsed, however, their development can be severely hampered as the maximum efficiency of photosynthesis is reduced by having insufficient leaf area of photosynthetic tissue (Putman, 1996).

As per 19th National Livestock Census (2012) the total number of livestock in district Mirzapur is reported to be 956259 which was reported in 18th National Livestock census (2007) as 898232. This means every year 11,605 livestock are added. With increasing number livestock population and reduction in forest quality and quantity, it is imperative that the remaining forests are highly susceptible to impacts from excessive grazing.

4.7 Encroachment of Watersheds

In nearly all forest ranges we surveyed, agricultural encroachments were observed near streams and rivers. All of such encroachments observed had diesel generators to pump water from the streams. In Mirzapur, months April-June are the driest period of the year. During this time, there are only few places on the streams where water gets accumulated and provide drinking to wild animals. Water availability in such water sources inside the forests are very limited and are not favourable to support water intensive activities like agriculture. Such encroachment and clearing of forests around the water sources also damage the right of way of the wild animals. These illegal settlements also keep domestic dogs to guard their fields and these dogs create more





Image 14: Abstraction of water from Nagri Jharna (top) and obstruction created on Jogia dari with attached pump (above) in Marihan forest range

problem for the animals to reach those areas; and even if they succeed they become easy target of being hunted or injured. The problem does not stop only there, as the water which is meant for year round drinking water supply to wild animals are exhausted much before, forcing dispersal of animals to nearby villages in search of water, which results into conflict situations.

4.8 Forest Fire

Forest fires are common in the forests of Mirzapur. The forest fires occur mostly in dry seasons. In several cases the fires get accidentally ignited from the bidi/cigarette smoked by the villagers. Forest fires are also used as one of the quickest way to clear forests for putting the same to agricultural uses. Human induced forest fires is common in most tropical dry forests. Many scientists agree that almost all of them are caused by humans (Brandis 1897; Pyne 1994; Bahuguna and Upadhyay 2002; Semwal et al. 2003), some unintentionally, but the majority are assumed intentional. 95% of forest fires are caused either by negligence or unknowingly by the human being (Satyendra & Kaushik, 2014).

One of the dominant motivations to ignite fire in Indian TDFs is to increase the availability and quality of grasses for pasture use. Possibly of equal importance on a global level is the utilization of fire to facilitate hunting. Hunters use fire in two ways: (i) to drive prey to

where it can be easily killed (Lewis 1989) and (ii) to prepare hunting grounds by attracting prey to the fresh flush of grasses (Laris 2002; Mistry et al. 2005). Moreover, burned sites make hunting easier because the animals are easier to see. Fire was used by early inhabitants of India for hunting (Goldammer 1993; Satyendra & Kaushik, 2014).

The most famous and often-cited example is the use of *Diospyros melanoxylon* tree leaves (tendu leaves) that function as cigarette paper for the small Indian cigarettes called "beedis" (Saigal 1990; Goldammer 1993). Fire is applied to the forest in the dry season (mainly April–May) so that the trees produce new leaves which can be harvested once they are fully green (Hunter 1981).



Image 15: A forest fire in Marihan range observed during the survey.

There is abundant evidence that high fire frequency hinders woody plants from establishing in savannah and TDF ecosystems (e.g., Hopkins 1992; Setterfield 2002; Favier et al. 2004; Sankaran et al. 2008; Ratnam et al. 2011) while the season which fire influences the density and composition of the regenerating species (e.g., Bond and van Wilgen 1996).

Frequent fires seem to maintain a soil seed bank of short term plant species (Graminoids) over life forms with a longer-term life cycles like broad-leaved herbs and woody plants (Gashaw et al. 2002). Fire also promotes fire-tolerant species (Furley et al. 2008). This selective attribute of fire also reduces tree seedling species diversity as Saha and Howe (2003) found in a TDF in central India and Verma and Jayakumar (2015) as well as Kodandapani et al. (2009) report form TDF of the Western Ghats.

An increase in fire intensity and frequency leads to the transformation of forests to savannah or grasslands. An area locally affected by wildfires may substantially loose short-term water retention if heavy rainfall occurs after the dry period. Fire also affects the biodiversity and therefore the functions of ecosystems, especially those depending on species interaction like pollination and dispersal.

5. THE PROPOSED CONSERVATION RESERVE

Conservation Reserves are declared for the purpose of protecting landscapes, flora and fauna and their habitat outside protected areas. The main purpose is to elicit sensitivity of people towards the wildlife present in the area without affecting their rights. Conservation Reserves are often declared with a focus on flagship species such as Elephant, Tiger, Leopard etc.

Such areas are designated as conservation areas if they are uninhabited and completely owned by the Government of India but used for subsistence by communities and community areas if part of the lands are privately owned. These protected area categories were first introduced in the Wildlife (Protection) Amendment Act of 2002 – the amendment to the Wildlife Protection Act of 1972. These categories were added because of reduced protection in and around existing or proposed protected areas due to private ownership of land, and land use. There are 76 Conservation Reserves in India. The top 5 states are Jammu & Kashmir-34, Karnataka-14, Rajasthan-10, Uttarakhand-4, Punjab-4 and Himachal Pradesh-3 (WII ENVIS, 2018).

We are proposing the Conservation Reserve in Mirzapur Division which includes Marihan, Sukrit, Chunar and some parts of Lalganj forest range. The total area of the Reserve is approx. 408 sq.km. The location map on Google Earth image is shown below. Details of the boundary is discussed in following section.



Map 7: The proposed boundary of the Conservation Reserve and locations of adjacent PAs on Google Earth

5.1 Description of the Proposed Boundary of CR

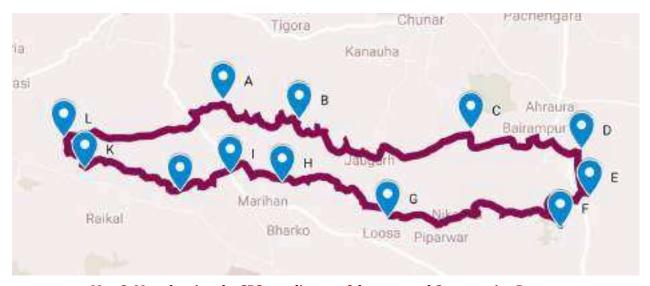
North: The northern extreme of the CR is situated in Marihan Forest Range at the newly constructed Bansagar canal near SH-5 at the GPS point 25° 1'19.77"N82°39'11.73"E (**A**) from where it extends alongside continues with the canal till Dhekwa Dam near Pahiti dari at GPS point 25° 0'9.88"N82°44'15.88"E (**B**). From there the CR extends alongwith the hills near Jirgo Reservoir at GPS point (**C**) till the boundary of the proposed Ecosensitive zone of Chandraprabha WS near Ahraura reservoir at GPS point24°58'21.61"N83° 3'4.17"E (**D**).

East: The eastern boundary runs alongside the ESZ boundary of Chandraprabha WS near Sukrit village from point **D** till 24°55'30.16"N83° 3'36.09"E (**E**).

South: The southern boundary of the CR runs through the southern border of Sukrit forest range near the Dongia reservoir at GPS point 24°53'37.04"N 83° 1'38.70"E (**F**), the Chunar road at GPS point 24°54'13.06"N82°50'9.21"E (G), near village Rajapur at GPS point 24°56'21.43"N 82°43'8.22"E (**H**) and extends all over the southern boundary of Marihan forest range till SH-5 at GPS Point 24°56'55.38"N 82°39'39.78"E (**I**).

West: The boundary of the CR extends from the point **I** at SH-5 through the border of the forests lying in south of Upper Khajuri Reservoir at GPS point 24°55'49.35"N 82°36'20.03"E (**J**) and till the forest boundary at the west of the Upper Khajuri Reservoir at GPS point 24°57'11.49"N 82°29'58.63"E (**K**). The westernmost boundary of the CR is in Lalganj range at GPS point 24°59'3.65"N 82°28'35.73"E (**L**).

Please see the map below for the geospatial marked map of the CR. The Google Earth file (.kml) can be downloaded from https://goo.gl/wfnpdb.



Map 8: Map showing the GPS coordinates of the proposed Conservation Reserve

Points	Latitude	Longitude	Points	Latitude	Longitude
A	25.02216	82.65326	G	24.903628	82.835892
В	25.002744	82.737744	Н	24.939286	82.71895
С	24.992136	82.928231	I	24.948717	82.66105
D	24.972669	83.051158	J	24.930375	82.605564
Е	24.925044	83.060025	K	24.953192	82.499619
F	24.893622	83.027417	L	24.984347	82.476592

5.3 Justification

The conditions and procedure for declaring a Conservation Reserve is explained in **Section 36A in The Wild Life (Protection) Act, 1972** which states:

36A. Declaration and management of a conservation reserve. —

(1) The State Government may, after having consultations with the local communities, declare any area owned by the Government, particularly the areas adjacent to National Parks and Sanctuaries and those areas which link one protected area with another, as a conservation reserve for protecting landscapes, seascapes, flora and fauna and their habitat: Provided that where the conservation reserve includes any land owned by the Central Government, its prior concurrence shall be obtained before making such declaration.

The forest ranges Marihan, Sukrit and Chunar is an ideal representation of the vindhyan landscape and connects Eastern Kaimoor landscape consisting of Ranipur WLS in U.P. and Son Gharial WLS, Sanjay Dubri Tiger Reserve and Bagdhara WLS in M.P. with Western Kaimoor landscape consisting of Chandraprabha WLS of U.P. and Kaimur WLS of Bihar (see Map 7: The proposed boundary of the Conservation Reserve and locations of adjacent PAs on Google Earth) These forest ranges are also habitat of several wild animals and are known for medicinal plants. There are several waterfalls namely Alopi Dari, Jogia Dari, Pahiti Dari, Panchsheel Dari, Chuna Dari, Lekhania dari and Siddhanath ki Dari. Lekhania Dari is one of the most popular tourism destination in this region due to its natural beauty attracting tourists from nearby towns. Alopi Dari and Siddhanath ki Dari are other important tourism places from religious point of view.

The **Schedule I** (WPA, 1972) animals recorded from these forest ranges are: Sloth Bear (*Melursus ursinus*), Leopard (*Panthera pardus*), Asiatic Wild Cat (*Felis sylvestris ornata*), Rusty Spotted Cat (*Prionailurus rubiginosus*), Indian Wolf (*Canis lupus*), Indian Gazelle (*Gazella bennettii*), Blackbuck (*Antilope cervicapra*), Peafowl (*Pavo cristatus*), Bengal Monitor (*Varanus bengalensis*) and Mugger Crocodile (*Crocodylus palustris*).

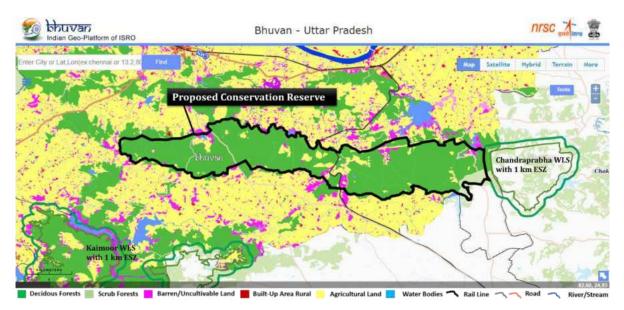
Other important species recorded here are Striped Hyena (*Hyaena hyaena*), Jungle Cat (*Felis chaus*), Red Fox (*Vulpes vulpes*), Golden Jackal (*Canis aureus*), Sambar Deer (*Rusa unicolor*), Spotted Deer (*Axis axis*), Ruddy Mongoose (*Herpestes smithii*), Grey Mongoose (*Herpestes edwardsii*), Palm Civet (*Paradoxurus hemaphroditus*), Small Indian Civet (*Viverricula indica*), Bluebull (*Boselaphus tragocamelus*), Wild Boar (*Sus scrofa*), Indian Crested Porcupine (*Hystrix indica*), Indin Hare (*Lepus nigricollis*), Five-striped Palm Squirrel (Funambulus pennantii), Hanuman Langur (*Semnopithecus entellus*), Rhesus Macaque (*Macaca mulatta*), Painted Spur Fowl (*Galloperdix lunulata*), Red Jungle Fowl (*Gallus gallus*) and many other birds.

These three forest ranges are also facing severe threats from activities like mining, logging, hunting, unsustainable construction and infrastructure development, encroachment of forests and watersheds and forest fires. A majority of the proposed Conservation Reserve is already Reserve Forests of Uttar Pradesh Government, and by declaring these forests as Conservation Reserve, it will elicit the people's responsibility and participation in conservation of wildlife without affecting their rights.

This rocky landscape with short heighted hills are particularly suitable habitat for Sloth Bears and their presence is recorded in all forest ranges surveyed in this work. Sloth Bears are endemic to Indian subcontinent and in Uttar Pradesh, Mirzapur Forest Division is one of the remaining sloth bear habitats. They are protected as Schedule-I of Wildlife (Protection) Act, 1972 and also listed in CITES Appendix-I. Therefore, it is suggested to use 'Sloth Bears' as the flagship species for the purpose of the Conservation Reserve.

5.2 Land Use and Settlement of Rights

Geospatial drawings were created using Google Earth Pro and overlaid on the LULC map (1:10,000) of District Mirzapur using ISRO's BHUVAN geo-platform. Most of the area under the proposed Conservation Reserve are 'Dry Deciduous Forests' and is recorded as Reserve Forests. There are few villages and agricultural settlements in some areas which can be also seen on the LULC map as yellow patches. This also includes some portions of SH-5, SH-5A, Chunar Road, Kotwa-Patehara Road and Chunar-Churk railway line. The Conservation Reserve is proposed only in the areas already recorded as Reserve Forests and the villages in and around these RFs. No resettlement or rehabilitation of existing villages are recommended and the Forest Division will involve the people dependent on forests for better management of forests and ensuring that the rights of people traditionally dependent on forests for livelihood are least affected. Views and concerns of different stakeholders will be duly addressed through the public consultation before finalization of the Conservation Reserve.



Map 9: The proposed Conservation Reserve on LULC map of district Mirzapur. (http://bhuvan.nrsc.gov.in)

6. THE WAY FORWARD

The forest areas in Marihan, Sukrit and Chunar are undoubtedly one of the most wildlife rich forest ranges in Mirzapur division. These forest ranges are also of strategic importance for conservation of wildlife and maintaining the genetic diversity as they are contiguous with protected areas and are part of a larger landscape used by a variety of wild fauna as habitat and meeting their resource needs. These forests also act as a huge catchment of different rivers and streams which helps in maintaining the water levels and providing water to many reservoirs and dams in this region which are critical for sustaining agriculture and other drinking water needs. However, in recent years there is increased disturbance to the forests from human activities which includes conversion of forests for infrastructure development, mining, agricultural expansion, logging etc. The losing of connectivity between different forest ranges are a matter of deep concern. Declaration of conservation reserve will be the first step towards a landscape based conservation approach and eliciting people's sensitivity towards the need of wild animals living here. A comprehensive conservation action plan shall be prepared in consultation with experts and local people to help natural restoration of the degraded forests and wildlife corridors with keeping species specific needs in primary focus. Activities such as grazing, developmental activities and other human disturbances need to be regulated in certain areas to limit impact on the indigenous and threatened flora and fauna of this region. Strict monitoring of the forests by increasing the capacity of range offices are need of the hour to control logging, poaching and activities leading to land cover land use changes such as encroachments and mining.

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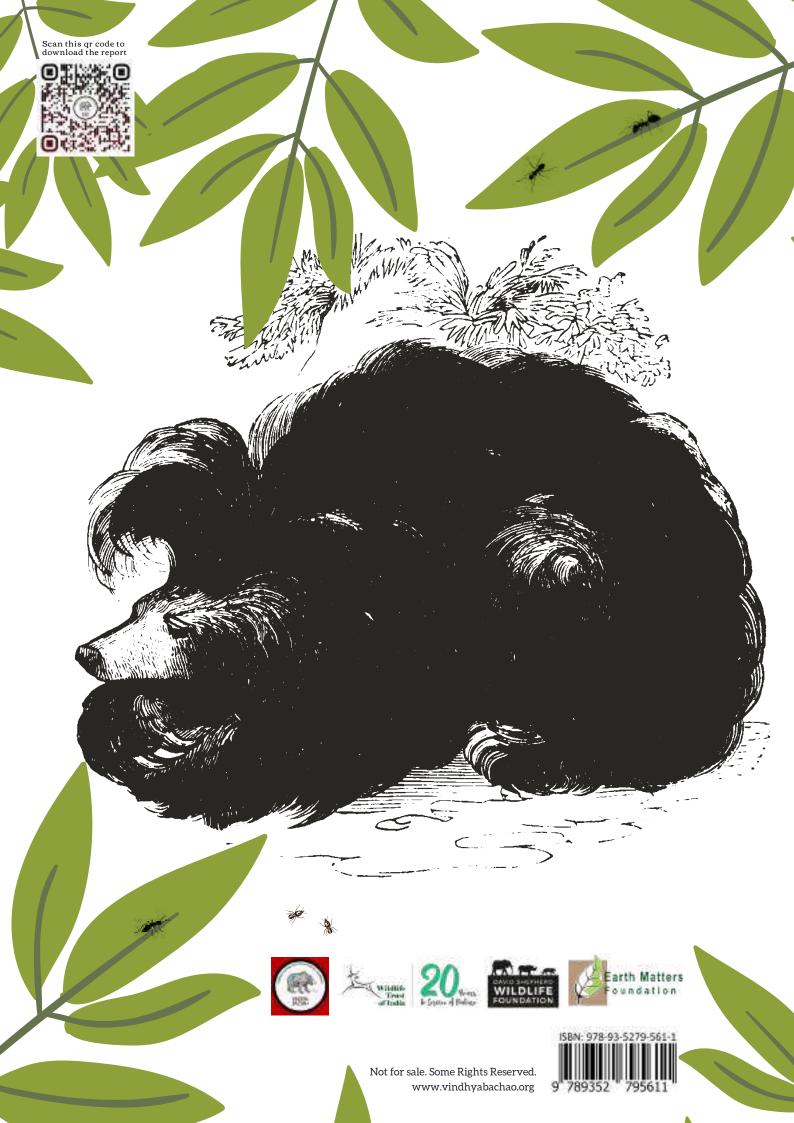
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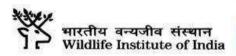




Final Report



Population Status, Habitat and its Use by Blackbuck (Antilope cervicapra) in and around Kaimoor Wildlife Sanctuary, with reference to proposed Coal-based Thermal Power Plant of 1320 MW, Mirzapur, Uttar Pradesh



March | 2019

Population Status, Habitat and its Use by Blackbuck (Antilope cervicapra) in and around Kaimoor Wildlife Sanctuary, with reference to proposed Coal-based Thermal Power Plant of 1320 MW, Mirzapur, Uttar Pradesh

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March| 2019

Chapter 6:



Floral and Faunal characteristics of proposed Thermal Power Plant site and its relation to Blackbuck conservation in Kaimoor Wildlife Sanctuary

Summary

We assessed the extent of the suitability of Blackbuck habitat at the proposed Thermal Power Plant (TPP) site using eight radial transects radiating from the site. Maximum sighted animals were livestock with an encounter rate of 44.12±8.19 per km. Among livestock species, sheep comprises maximum 34.73±15.57 encounter rate followed by cattle and goat 7.67±1.67, 1.71±0.98 per km respectively. However, the encounter rate of wild animals were low 0.40±0.12 per km during the study period. Among the wild animal, Nilgai comprises maximum encounter rate of 02.8±0.10 per km. while the minimum encounter rate was estimated for the Indian hare 0.04 per km. Vegetation quantification at TPP site indicates that dominant trees species were of Acacia catechu (15.20/ha), Butea monosperma (9.55/ha), Lagerstroemia parviflora (4.24/ha) whereas another tree species with lowdensity were Aegle marmelos, Eucalyptus sp., Cassia fistula. We recorded 20 shrub species, and most of the areas were dominated by Ziziphus oenoplea (1.97/ha), Ziziphus mauritiana (0.50/ha), Acacia catechu (0.40/ha). The area was also heavily infested with the high density (116.18/ha) of the bamboo (Dendrocalamus strictus). The nearest population of Blackbucks from all the ranges of KWLS is around 24 to 49 km from the TPP site. We did not observe large areas of habitats preferred by the Blackbucks at TPP site such as short grassland, and open scrub. Most of the areas in and around TPPsite are either surrounded by the moderate density of forests of Bamboo and other trees species which are not suitable Blackbuck habitats. We also examined the land use land cover in areas between TPP site and boundary of KWLS. Majority of the areas are dominated with a high density of human populations and under intense agriculture. Because of high anthropogenic factors including canal system, state highways, dense road, and high vehicular traffic between areas of TPP site and KWLS, we visualize the least possibility of recolonization of the Blackbucks in this landscape from the populations of Kaimoor Wildlife Sanctuary.

6.1. Introduction:

Welspun Group is a major multinational company with their business across the steel, energy and textiles industries. With an enterprises value of 15,000 crores in over 50 countries, Welspun is a rapidly growing conglomerate having clients operating in the oil, gas and retail sectors. Welspun Energy was established to setup over 5,000 MW commercial thermal power plants across various states of India. The group commits towards clean energy in the form of setting up solar, hydro, wind and biomass energy generation facilities.

Welspun Energy Limited planned to initiate two 660 MW thermal power plants in the district of Mirzapur to cater to the growing energy need of Uttar Pradesh helping the state to minimize the energy deficit. The company proposes using super critical technology minimizing adverse impact on the environment. The company plans to improve the lives of local people by generating employment in this region and would be investing in their health and education of the employee and their dependents. The proposed plant utilizes locally sourced as the primary fuel to be supplied by NCL/SECL/CCL or would import coal from Indonesia if the need arises. The plant has design life of 25 years is at the base load operation. Total land requirement for this project is 875 acres including the ancillaries – the power plant, ash pan and other auxiliaries required for day to day operations. An amount of Rs. 7500 crores are estimated as the total cost of the project

6.2. Study area:

The Welspun Energy UP Private Limited (WEUPPL) propose to setup a Greenfield Coal based Thermal Power Plant (TPP) of 1320 MW (2 x 660 MW) capacity. The project site is located at Dadri Khurd village and lies between 24°58'41.64" N to 82°39'50.42" E and 25°00'16.88" N to 82°41'03.728" E to Mirzapur Sadar Tehsil, Mirzapur district of Uttar Pradesh (Fig 6.1).

. The water requirement for the project is 36 MCM which will be sourced from river Ganga and pumped into upper Khajuri Dam located at a distance of 5.5 km from the project site. A reservoir will be built at the site to which water will be brought from upper Khajuri Dam through the pipeline. The reservoir will have a capacity of 4 days' storage.

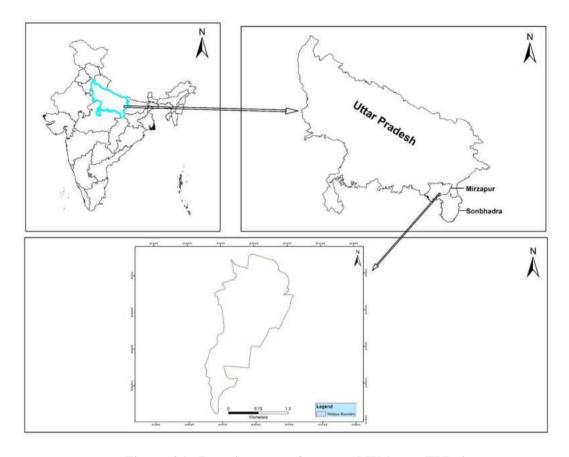


Figure 6.1. Location map of proposed Welspun TPP site.

The temperature of the area ranges between 12°C to 44°C and the average rainfall recorded is 900 mm. The minimum temperature was recorded in January while the Maximum was recorded in June. The site is about 185 meters from the mean sea level. The site is situated near the Marihan Range of Mirzapur forest Division. The topography of the area is slightly undulating, and the relative humidity was 30 % to 61% at early morning and 14 % to 45 % at evening. The nearest habitation is Dadri Khurd which has nine households. Dadri Gahira is the nearest village which has about 48 households. The Welspun Proposed Thermal Power Plant site (WPTPPs) is mostly barren and has been surrounded by plantation from all the three sides. The nearest railway stations are Sakteshgarh and Sarsongram railway station (15.5 km), while the nearest Airport is Varanasi that is about 50 km far from the site. No National Park, Wildlife Sanctuary, Biosphere reserve, wildlife corridors, Protected Forest and Eco-Sensitive Zone falling with the 10 km radius of the project site except the Kaimoor WLS which is situated around 30 km far from the boundary of the TPPs.

6.3. Methodology:

The vegetation sampling was done along radial transects by establishing sampling stations at every 250 m interval (Fig. 6.2). The tree (>20 cm GBH) was quantified in 10 m radius circular plots (Mueller-Dombosis and Ellenberg 1967, Kershaw 1973). All trees present in the plot were enumerated as to species level and their total individuals. GBH measurements of all tree individuals were taken at each plot. The canopy cover was documented at X and Y length. The shrubs and sapling (<=20 cm GBH) were quantified in 5 m radius circular plots, and all the plants were falling within these plots were enumerated to species level. The canopy cover was recorded at X and Y length axis along with the shrub height. The ground cover was assessed in four quadrats each of 25 cm x 25 cm at every sampling station with respect to grass and seedlings. Three dominated grass species and percentage of ocular grass cover along with average grass height were recorded. The disturbance factor like lopping, cutting of trees was recorded in each sampling station at in 10m radius circular plot. Moreover, presence or sign of livestock was also recorded at 5m radius circular plot. (Annexure VI).

A total of 8 transects were laid radiating from the TPP site at different bearing (i.e., 0⁰, 45⁰, 90⁰, 135⁰, 180⁰, 225⁰, 270⁰ and 315⁰). Length of the transect ranges from 3 to 3.5 km (Fig. 6.2). The sign survey has also been conducted in the same radial transects from the start point. During the transect survey, fecal samples were also collected from different localities (Annexure V).

6.4. Results and Discussion:

A total of 24 species of tree were recorded in and around the TPP site. The maximum density of tree is recorded of Acacia *catechu* (15.20/ha) followed by *Butea monosperma* (9.55/ha), *Lagerstroemia parviflora* 4.24/ha), the minimum density was of *Aegle marmelos*, *Eucalyptus hybrid*, *Cassia fistula* and other species (Table 6.2). A total of 20 species of shrub were recorded in and around TPP site. The density of shrub was estimated in 5m radius plot and was maximum for the *Ziziphus oenoplea* (1.97/ha) followed by *Ziziphus mauritiana* (0.50/ha), *Acacia catechu* (0.40) and was minimum for *Ficus sp.* (0.01/ha) respectively (Table. 6.3).

The density of the bamboo (*Dendrocalamus strictus*) was estimated separately in 5m radius plot and was (116.18/ha). The bamboo was planted by the forest department through all the neighbouring area of TPP site.

A total of 24.5 km distance was covered during the transect survey and the maximum sighted animal were livestock and encounter rate was estimated to be 44.12±8.19 per km among livestock sheep comprises maximum encounter rate of 34.73±15.57 followed by goat and cattle 1.71±0.98, 7.67±1.67 per km respectively. However, the encounter rate of wild animals was 0.40±0.12 per km. Among the wild animal, Nilgai comprises maximum encounter rate of 02.8±0.10 while the minimum encounter rate was estimated for the Indian hare 0.04 per km. The direct and indirect evidence of the presence of wild animals in and around the TPPs were given in table 6.4 & 6.5.

The aerial distance of the Blackbuck presence site to the TPP site is around 48.93 km from Robertsganj (Blackbuck Valley), 33.32 km from Halia plantation (3) and 23.83 km from the Ghorawal (Visundhari). Most of the area of the TPP site is barren land. However, vegetation type around the TPP site was Bamboo and khair plantation with a high density of *Ziziphus*. The Blackbuck prefers short grassland, open salt pans and open scrub (Menon 2014). While the TPP site is totally barren land with sparse *Butea monosperma* tree. There is a heavy anthropogenic pressure in and around the TPP site especially by livestock grazing and tree felling (Fig. 6.4 to 6.7). The encounter rate of the livestock was 44.12±8.19 per km. The nearest population of Blackbuck is around 23 km far from this area. If Blackbuck started moving towards the TPP site for recolonizing, there are several hurdles they have to face.

There are several dense settlements in between the location of current Blackbuck population and TPP site. The road and rail network are passing through the way and road density in between these areas are very high, the frequency of traffic is also high especially on SH 5

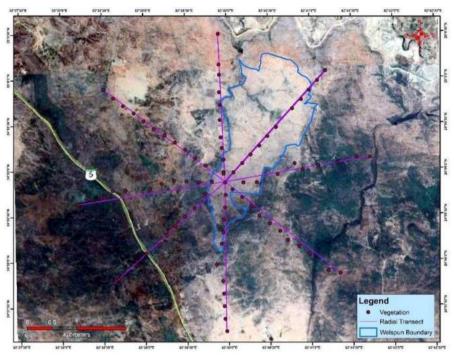


Figure 6.2. Radial transects and vegetation sampling stations within and around TPP site.

Mirzapur to Robertsganj which is passing very close proximity with the TPP site again its bifurcated from the Marihan and proceeded towards Ghorawal has high traffic pressure (Fig. 6.3). The maximum part of the total irrigated area of the country by canals is in Uttar Pradesh and Sonbhadra and Mirzapur placed high among other districts. The canal system also form hurdle to the movement of Blackbuck. Our data on LULC in areas between TPP site and boundary of KWLS and majority of the areas are dominated with a high density of human populations and under intense agriculture. Because of high anthropogenic factors including canal system, state highways, dense road density, and high vehicular traffic between areas of TPPs and KWLS, we visualize the least possibility of recolonization of the Blackbucks in this landscape from the populations of KWLS. So it is likely to be very hard for the Blackbuck to move from their present place and recolonize in and around the TPP site (Fig. 6.3).

Table 6.1. Details of the Proposed Thermal Power Plant site

(Source: EIA report – J.M. Enviro Net Pvt. Ltd.)

Sr. No	Particular		Details	
1	Location	Dadri Khurd Village, Mirzapur Sadar Tehsil, Mirzapur District, UttarPradesh		
2	Coordinate Range	Sr.No	Latitude	Longitude
A	Plant Boundary	1	25°00'16.88"N	82°4029.20"E
		2	24°59'45.11"N	82°4103.72"E
		3	24°58'41.85"N	82°4023.80"E
		4	24°58'41.64"N	82°3950.42"E
		5	24°59'08.27"N	82°4000.40"E
		6	24°59'44.58"N	82°4000.55"E
В	Ash Dyke Area	A	25°0'14.5"N	82°40'27.5"E
	(with in plant	В	24°59'57.1"N	82°40'57.8"E
	boundary)	C	24°59'54.8"N	82°40'43.5"E
		D	24°59'46.8"N	82°40'8.2"E
		Е	25°0'7.5"N	82°40'13.7"E
С	Chimney	С	24°59'35.08"N	82°40'26.15"E
3	Topo sheet No.	63K/12 &63L/9		
4	Site elevation	180 m a	bove Mean Sea Level	(MSL)
5	Topography	Slightly	undulating	
6	Climatic Conditions: IMD, Varanasi, Pre- Monsoon season	Mean Maximum Temperature: 37.6°C Predominant Wind Direction: W Relative Humidity: At 8:30 hrs: 31% to 61% and at 17:30 hrs: 14% to 45% Rainfall: 47.5mm Mean Minimum Temperature: 12.1°C		
7	Climatic conditions at site (monitored during Pre Monsoon season, 2011)	Mean Minimum Temperature: 11.6°C Mean Maximum Temperature: 42.0°C Predominant Wind Direction: W Relative Humidity: At 8:30 hrs: 32 % to 62%and at17:30 hrs:16% to 48 %		
8	Nearest habitations (Population as per Census-2001 Data)	Dadri Khurd (Population:09) Dadri Gahira (Population:48)		

9	Present land use at the site	Mostly barren
10	Nearest Major Roads/Highway	State Highway, SH-5(1.5 km, SW) National Highway, NH-7 (10.0 km, NNE)
11	Nearest Railway Line	Broad Gauge Railway line of Northern Railways (NR)
12	Nearest Railway Station	Sakteshgarh R.S. (15.5 km, ENE) Sarsongram R.S. (15.5 km, E)
13	Nearest Airport	Varanasi (50 km, NNE)
14	Nearest Seaport	Haldia
15	Nearest Town	Mirzapur–District Headquarters (18km, NW)
16	Nearest water bodies	Jamtlhwa Nadi (2.0 km, N) Jogiadar Nadi (2 kms, NE) Pahiti Nadi (3.75 kms, NE) Upper Khajuri Dam (5.5 km, W) Ganga River(17 km, NE)
17	Eco sensitive Zone (National Park, Wildlife Sanctuary, Biosphere reserve wildlife corridors etc.) Within 10 km radius of the project site.	No Eco sensitive Zone viz. National Park, Wildlife Sanctuary, Biosphere reserve, Wildlife corridors and Protected Forest falling within 10 km radius of the project site.
18	Reserved/Protected forests	Danti RF (on northern side of project site) Mirzapur RF (on southern side of project site) Bahati RF (6.0 km in SW) Karaunda RF (5 km, SW) Patehra RF (5.0 km in SW) Malua RF (8.5 km in SW) Chandlewa Khurd RF (6.0 km in NNE) Nanauti RF (7 km in E) Golhanpur RF(6.5 km in SE) Sarson RF (5.5km in SE)
19	Areas susceptible to natural hazards	No new with in10 km radius study area

20	Archaeologically important places as per Archaeological Survey of India	No new within 10 km radius study area
21	Existing Industries	No new with in10 km radius study area
22	Seismic Zone	Zone-III as per IS:1893-2000

Table 6.2. The density of tree species found in and around TPP site.

S.No.	Species	Density/hectare
1	Acacia catechu	15.20
2	Acacia pinata	1.06
3	Aegle marmelos	0.35
4	Azadirachta indica	2.12
5	Bauhinia racemosa	0.71
6	Butea monosperma	9.55
7	Cassia fistula	0.35
8	Unknown 1	0.35
10	Eucalyptus sp.	0.35
11	Ficus Species	1.06
12	Holoptleta integrifolia	0.71
13	Gmelina arborea	0.35
14	Albizia amara	0.35
15	Garuga pinnata	0.35
17	Lagerstromia parviflora	4.24
18	Unknown 2	0.35
19	Unknown 3	0.35
20	Tamarindus indica	0.35
21	Tectona grandis	1.06
22	Ziziphus oenoplia	0.35

Table 6.3. The density of shrub species found in and around TPP site.

S.No.	Species	Density/ hectare
1	Acacia catechu	0.42
2	Acacia pinata	0.10
3	Aegle marmelos	0.01
4	Butea monosperma	0.08
5	Carissa spinarum	0.18
6	Ficus sp.	0.01
7	Helicteres isora	0.10
8	Heterophragma adenophyllum	0.13
9	Holarrhena antidysenterica	0.11
10	Unknown 1	0.01
11	Unknown 2	0.01
12	Lagerstromia parviflora	0.18
13	Unknown 3	0.01
14	Unknown 4	0.01
15	Unknown 5	0.01
17	Unknown 6	0.03
18	Tectona grandis	0.03
19	Zizhiphus mauritiana	0.50
20	Zizhiphus oenoplia	1.97

Table 6.4. Detail of the direct and indirect evidences of the wild animal presence in and around TPP site.

Common Name	Scientific Name	Direct/Indirect Sign
Hanuman Langur	Semnopithecus entellus	D
Nilgai	Boselaphus tragocamelus	D
Indian Hare	Lepus nigricollis	D
Indian Fox	Vulpes bengalensis	D
Jackal	Canis aureus	D
Wild boar	Sus scrofa	Digging sign
Five striped palm squirrel	Funambulus pennantii	D
Striped Hyena	Hyaena hyaena	Footprint
Sloth bear	Melursus ursinus	Dropping
Chinkara	Gazella bennettii	Pellet

Table 6.5. The details of the indirect evidences along with coordinates of the wild animal presence signs in and around the TPP site.

Transect No.	Animal	Signs	Latitude	Longitude
RT0	Nilgai	Dung midden	24 ⁰ 58'59.63"	82 ⁰ 39'56.71"
RT0	Nilgai	Dung midden	24 ⁰ 59'14.81"	82 ⁰ 39'55.69"
RT0	Nilgai	Dung midden	24 ⁰ 59'19.73"	82° 39'55.1"
RT0	Nilgai	Pellet	25°0′10.07"	82 ⁰ 39'26.02"
RT90	Nilgai	Dung midden	24 ⁰ 58'49.4"	82° 39'55.2"
RT90	Nilgai	Dung midden	24 ⁰ 58'19.59"	82 ⁰ 39'37.03"
RT135	Nilgai	Pellet	24 ⁰ 58'30.51"	82 ⁰ 39'20.46"
RT135	Peacock	(Poaching Sign)	24 ⁰ 58'3.12"	820 39'0.04"
RT135	Sloth bear	Dropping	24 ⁰ 57'52.6"	182 ⁰ 39'2.61"
RT180	Nilgai	Pellet	24 ⁰ 58'52.8"	82° 39'28.8"
RT270	Nilgai	Dung midden	24 ⁰ 58'52.8"	82° 39'20.6"
RT270	Nilgai	Dung midden	24 ⁰ 58'51.4"	82° 39'13.2"
RT270	Hyena	Footprint	24 ⁰ 58'44''	82° 39'14"

Table 6.6. Faecal sample collected from the TPP site.

Location

Species	Sample	Latitude	Longitude
Chinkara	Pellet	24 ⁰ 58'29.97	82° 40° 23.06
Chinkara	Pellet	24 ⁰ 58'29.3	82° 39' 28.8
Chinkara	Pellet	24 ⁰ 58'29.97	82° 40' 23.06
Chinkara	Pellet	24 ⁰ 58'58.77	82° 41' 6.05
Chinkara	Pellet	24 ⁰ 58'47.8	82° 35' 49.2
Jackal	Scat	24 ⁰ 58'52.8	82° 39' 13.2
Chinkara	Pellet	24 ⁰ 58'45.82	82° 39' 58.07
Chinkara	Pellet	24 ⁰ 58'14.3	82° 39' 55.26
Chinkara	Pellet	24 ⁰ 58'53.58	82 ⁰ 39' 54
Chinkara	Pellet	24 ⁰ 58'50.34	82° 39' 59.41
Jackal	Scat	24 ⁰ 58'4.5	82 ⁰ 39' 41
Sloth bear	Dropping	24 ⁰ 58'52.6	82° 41' 12.61
Chinkara	Pellet	24 ⁰ 58'30.51	82° 40° 20.46

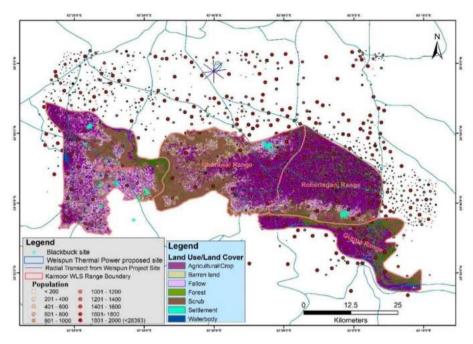


Figure 6.3. Human population density, TPP site, LULC and road network in and around Blackbuck presence location.



Figure 6.4. Plantation area used as a dumping ground near TPP site.



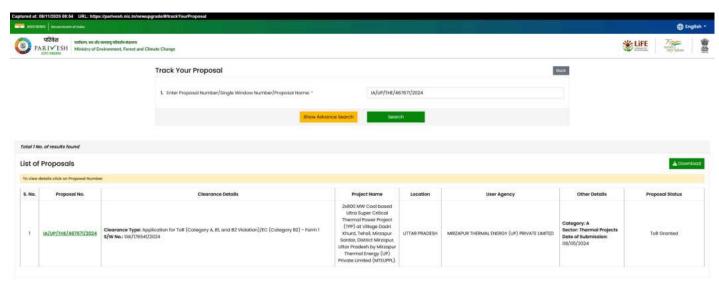
Figure 6.5. People collecting fuelwood from the plantation in and around TPP site.

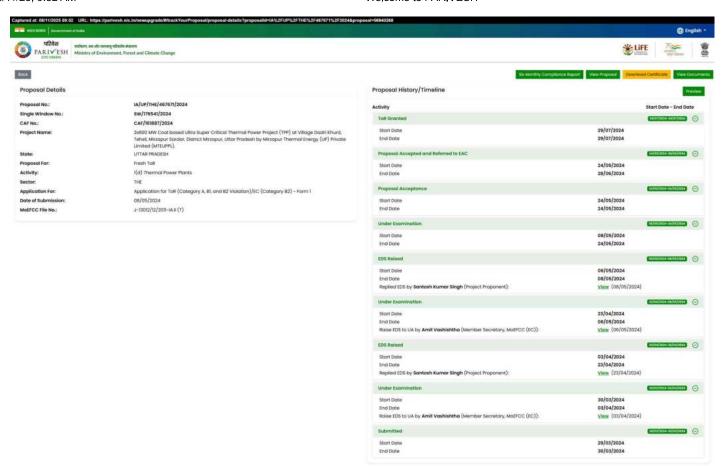


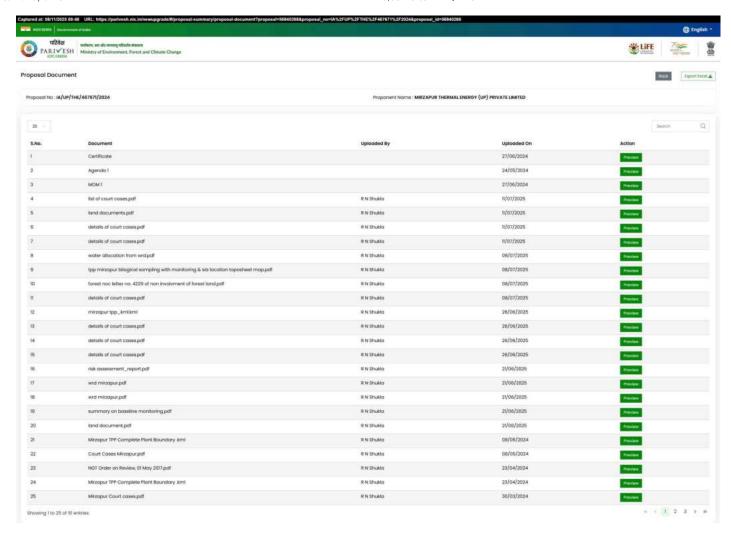
Figure 6.6. Bamboo plantation present at the southern boundary of the TPP site.

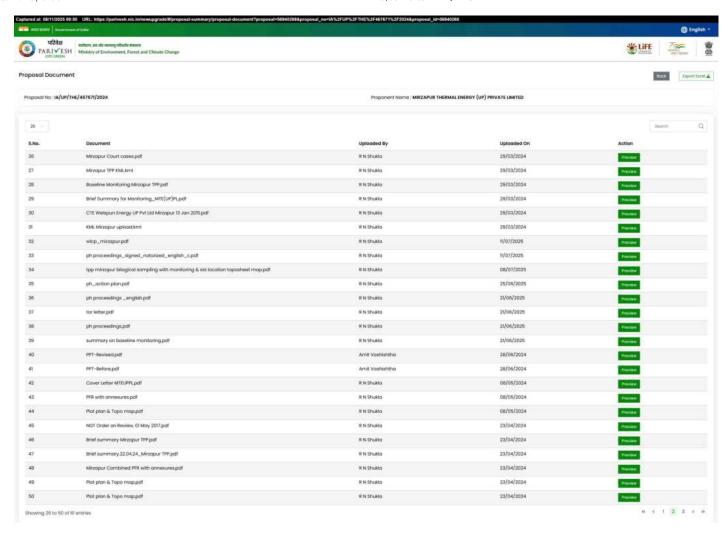


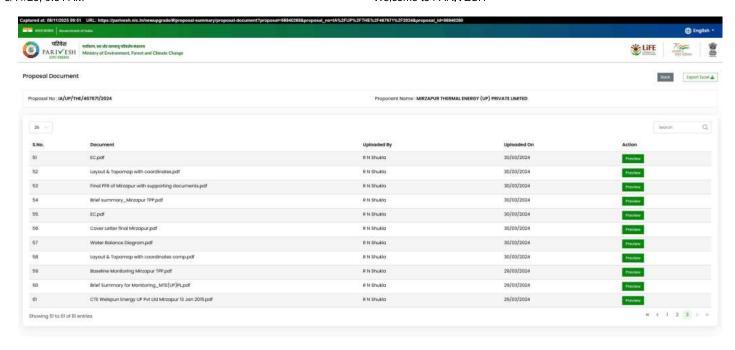
Figure 6.7. Habitat type, open scrub, barren land and transmission line passing through the proposed Thermal Power Plant Site.











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