

छत्तीसगढ़ मिनरल डेव्हलपमेंट कार्पोरेशन लिमिटेड
(छत्तीसगढ़ शासन का एक उपक्रम)

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मुख्य कार्यालय :
रोक्टर 24, तृतीय तल, ब्लॉक नं० 7 ए,
अटल नगर नवा, रायपुर
(छ.ग.)-492015

क्रमांक / 1066 / 2023

नवा रायपुर, दिनांक 08-12-2023

प्रति,

✓ अध्यक्ष,
एक्सपर्ट एप्राईजल कमेटी (EAC) नॉन कोल माईनिंग,
पर्यावरण वन और जलवायु परिवर्तन मंत्रालय,
इंदिरा पर्यावास भवन,
जोरबाग रोड नई दिल्ली
पिन:- 110003

विषय :- सी०एम०डी०सी० के जिला कबीरधाम, तहसील बोड़ला, के ग्राम मुकाम स्थित मुकाम बाक्सार्ड खदान रकबा 110.563 हे० क्षेत्र के पर्यावरणीय स्वीकृति के संबंध में।

संदर्भ:- Minutes of Expert Appraisal Committee meeting Non-Coal Mining dated 21.09.2023 to 22.09.2023

उपरोक्त विषयांतर्गत संदर्भित मिनट्स (कार्यवाही विवरण) की कंडिका 2.5 (Additional Agenda) में वर्णित Field Visit दिनांक 17,18 एवं 19.08.2023 के संबंध में मुकाम बाक्सार्ड खदान रकबा 110.563 हे० के पर्यावरणीय स्वीकृति हेतु कतिपय बिंदुओं की अतिरिक्त जानकारी उपलब्ध करवाये जाने का लेख है। उक्त के संबंध में बिंदुवार जानकारी निम्नानुसार है:-

- 1 सी०एम०डी०सी० द्वारा प्रश्नाधीन क्षेत्र अंतर्गत स्थित वृक्षों की गणना वन विभाग के माध्यम से करवाई गई है। गणना पत्रक परिशिष्ट-1 पर संलग्न।
- 2 प्रश्नाधीन खदान क्षेत्र में वनभूमि सम्मिलित नहीं है। अतः वन स्वीकृति अथवा प्रतिपूर्ति वृक्षारोपण की आवश्यकता नहीं है। सी०एम०डी०सी० द्वारा यह भी आश्वस्त किया जाता है कि खदान सीमा के अंदर स्थित वृक्षों को क्षति नहीं पहुंचाई जावेगी।
- 3 सी०एम०डी०सी० द्वारा फिल्ड विजिट के दौरान कमेटी को अवगत करवाया गया था कि खदान क्षेत्र में Hydraulic Ripper से खनन का कार्य किया जावेगा। उक्त के अतिरिक्त सी०एम०डी०सी० द्वारा यह भी अवगत करवाया गया था कि सी०एम०डी०सी० द्वारा वर्तमान में जिला-सरगुजा के तहसील मैनापाट स्थित संचालित 01 बाक्सार्ड खदान में Hydraulic Ripper के माध्यम से खनन का कार्य किया जा रहा है।
- 4 सी०एम०डी०सी० द्वारा आश्वस्त किया जाता है कि खनन से होने वाले वायु प्रदूषण के प्रभाव को न्यूनतम करने हेतु खदान क्षेत्र में नियमित रूप से जल का छिड़काव किया जावेगा। उक्त के अतिरिक्त खदान क्षेत्र के चारों ओर सेपिट जोन में सघन वृक्षारोपण भी किया जावेगा।

अवगत होना चाहे कि सी0एम0डी0सी0 छत्तीसगढ़ शासन का एक उपक्रम है एवं सी0एम0डी0सी0 में 100 प्रतिशत अंश पुंजी राज्य शासन की है। अतः सी0एम0डी0सी0 द्वारा सड़क के चौड़ा करवाने का कार्य, स्थानीय प्रशासन द्वारा जिला खनिज न्यास निधि (डी0एम0एफ0) मद के माध्यम से करवाया जावेगा। जिसके लिए 01-02 वर्ष का समय संभावित है।

6 सी0एम0डी0सी0 द्वारा खनन का कार्य आई0बी0एम0, रायपुर द्वारा अनुमोदित माईनिंग प्लान के अनुसार ही किया जावेगा।

7 PCCF, Madhya Pradesh & CCF, Chhattisgarh द्वारा प्रमाणित फ्लोरा एंड फौना की सूची परिशिष्ट 02 पर संलग्न।

8 मुकाम बाक्ससाईट खदान में सी0एम0डी0सी0 द्वारा किसी भी तरह का अवैध उत्खनन नहीं किया गया है के संबंध में डी0जी0एम0, छत्तीसगढ़ का प्रमाण पत्र परिशिष्ट 03 पर संलग्न।

9 खदान क्षेत्र से स्कूल एवं गांव की दूरी को प्रदर्शित करता हुआ। नक्शा परिशिष्ट 04 पर संलग्न।

अतः उपरोक्तानुसार जानकारी प्रेषित है तथा सी0एम0डी0सी0 को प्रश्नाधीन क्षेत्र पर पर्यावरणीय स्वीकृति प्रदान करने का अनुरोध है।

संलग्न:- उपरोक्तानुसार।

(उपेन्द्र कुमार)
अधिकृत हस्ताक्षरकर्ता

पृ0क्रमांक / 1066⁽¹⁾ / 2023

नवा रायपुर, दिनांक 8-12-2023

प्रतिलिपि:-

- 1 सदस्य सचिव एक्सपर्ट एंप्राईजल कमेटी (EAC) नॉन कोल माईनिंग, पर्यावरण वन और जलवायु परिवर्तन मंत्रालय, इंदिरा पर्यावास भवन, जोरबाग रोड नई दिल्ली पिन:- 110003 की ओर सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

Upenbra Kumar
(उपेन्द्र कुमार)
अधिकृत हस्ताक्षरकर्ता

—:: कार्यालय वनमंडलाधिकारी कवर्धा वनमंडल कवर्धा (छ.ग.) ::—

Tel No.: 232230

E-mail : dfokabirdham@gmail.com

क्रमांक/तफ.अधि./..... 11012

कवर्धा, दिनांक :- 20/10/2023

प्रति,

छत्तीसगढ़ मिनरल डेव्हलपमेंट कार्पोरेशन लिमिटेड,
रायपुर, सेक्टर 24, तृतीय तल,
ब्लॉक नं. 07 ए, अटल नगर, नवा रायपुर

विषय :- जिला कबीरधाम, तहसील बोड़ला, के ग्राम मुकाम रकबा 110.563 हे. क्षेत्र के पर्यावरण स्वीकृति हेतु EAC की 20वीं बैठक के माध्यम से चाही गई वांछित जानकारी उपलब्ध कराने बाबत।

संदर्भ :- आपका पत्र.क्र./916/बाकसा./2023 दिनांक 04.10.2023।

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उपरोक्त विषयांतर्गत संदर्भित पत्र के संबंध में स्थल निरीक्षण अधिनस्थ अधिकारी/कर्मचारियों के द्वारा कराया गया है। उन्होंने अपने जांच प्रतिवेदन में लेख किया है कि ग्राम मुकाम के रकबा 110.563 हे. क्षेत्र में विभिन्न प्रजाति के वृक्ष पाये गये हैं। उक्त क्षेत्र के अंदर वनभूमि शामिल नहीं है।

क्र.	वृक्ष की प्रजाति का नाम	संख्या
01	सेन्हा	18 नग
02	कुम्ही	23 नग
03	बरगद	18 नग
04	जामुन	17 नग
05	साजा	09 नग
06	बहेड़ा	05 नग
07	हरा	12 नग
08	कुसुम	02 नग
09	साल	34 नग
10	तेन्दू	01 नग
11	बीजा	01 नग
12	पकरी (गरती)	03 नग
13	बांस	01 नग
14	धावड़ा	03 नग
	कुल	147 नग

वनमंडलाधिकारी
कवर्धा वनमंडल कवर्धा

MUKAM BAUXIT MINES

M/s. Chhattisgarh Mineral Development Corporation Ltd. (CMDC)

Village-Mukam, Tehsil-Bodla, District-Kabirdham, Chhattisgarh

**AUTHENTICATED LIST OF FLORA & FAUNA
IN 10 KM RADIOUS AREA FALLEN IN MP**

ANNEXURE - II

INVENTORY OF FLORAL DIVERSITY IN THE CORE & BUFFER ZONE OF MINE SITE

Based on Actual Sighting, based on inputs from locals and Perused from Secondary Data

Habit: Tree (T), Shrub (S), Herb (H), Grass (G), and Climber (C)

(a) Floral Diversity within Core Zone - Trees

S. No.	Scientific name	Local name	Family	Habit
1.	<i>Ficus religiosa</i>	Pipal	Moraceae	T
2.	<i>Azadiracta indica</i>	Neem	Maliaceae	T
3.	<i>Mangifera indica</i>	Mango	Anacardiaceae	T
4.	<i>Cassia fistula</i>	Amaltas	Laguminosae	T
5.	<i>Albizzia lebeck</i>	Kala Siris	Fabaceae	T
6.	<i>Albizzia chinensis</i>	Kiragi	Laguminosae	T
7.	<i>Albizzia odoratissima</i>	Chichwa	Laguminosae	T
8.	<i>Anona squamosa</i>	Sitafal	Anonaceae	T
9.	<i>Albizzia procera</i>	Safed Siris	Laguminosae	T
10.	<i>Bauhinia variegata</i>	Kachnar	Laguminosae	T
11.	<i>Bauhinia racemosa</i>	Asta	Laguminosae	T
12.	<i>Pongamia Pinnata</i>	Karanj	Laguminosae	T
13.	<i>Madhuca indica</i>	Mahua	Sapotaceae	T
14.	<i>Diospyros monatana</i>	Bistendu	Ebenaceae	T
15.	<i>Eriolaena hookeriana</i>	Bothi	Sterculiaceae	T
16.	<i>Erythrina suberosa</i>	Panjra	Leguminosae	T
17.	<i>Euphorbia nivulia</i>	Thuar	Euphorbiaceae	T
18.	<i>Ficus hispida</i>	Kutummar	Moraceae	T
19.	<i>Ficus lacor</i>	Pakar	Moraceae	T
20.	<i>Flacourtia Indica</i>	Kakai	Bixaceae	T
21.	<i>Randia dumetorum</i>	Mainphal	Rubiaceae	T
22.	<i>Schleichera oleosa</i>	Kusum	Sapindaceae	T
23.	<i>Spondias pinnata</i>	Amra	Anacardiaceae	T
24.	<i>Tamarindus indica</i>	Imli	Caesalpinaceae	T
25.	<i>Tectona grandis</i>	Teak	Verbinaceae	T
26.	<i>Syzygium cumini</i>	Jamun	Myrtaceae	T
Shrubs				
1.	<i>Arbus precatotrius</i>	Gunj	Papilionaceae	S
2.	<i>Achyranthes aspera</i>	Chirchira	Amarantaceae	S

(a) Floral Diversity within Core Zone

S. No.	Scientific name	Local Name	Family	Habit
3.	<i>Adhatoda vasica</i>	Adusa	Acanthaceae	S
4.	<i>Andrographis paniculata</i>	Chirchira	Acanthaceae	S
5.	<i>Antidesma ghaesenbilla</i>	Jondhri	Euphorbiaceae	S
6.	<i>Azanza lampus</i>	Banakpas	Malvaceae	S
8.	<i>Carissa opaca</i>	Karonda	Apocynaceae	S
9.	<i>Calotropis procera</i>	Aak	Asclepiaceae	S
10.	<i>Cassia Tora</i>	Tarwar	Laguminosae	S
11.	<i>Clerodendron serratum</i>	Barangi	Verbenaceae	S
12.	<i>Colebrookia oppositifolia</i>	Bhandar	Labiatae	S
13.	<i>Crotalaria juncea</i>	Son	Laguminosae	S
14.	<i>Dalbergia voluvis</i>	Birach	Laguminosae	S
15.	<i>Desmodium pulchellum</i>	Chikati	Laguminosae	S
16.	<i>Dondonoea visocosa</i>	Jangli Mehandi	Sapindaceae	S
17.	<i>Embelia robusta</i>	Baibirang	Myrsiaceae	S
18.	<i>Eranthemum purpureseens</i>	Bantulsi	Acanthaceae	S
19.	<i>Gardnia lucida</i>	Dikamali	Rukbiaceae	S
20.	<i>Grewia hirsuta</i>	Gudsaki	Tiliaceae	S
21.	<i>Indigophera pulchella</i>	Neei	Papilionaceae	S
22.	<i>Ipomea spp.</i>	Besharm	Convolvulaceae	S
23.	<i>Jasminum multiflorum</i>	Kunda	Oleaceae	S
24.	<i>Jatropha curcas</i>	Rattan jot	Euphorbiaceae	S
25.	<i>Lantana camara</i>	Raimunia	Verbenaceae	S
26.	<i>Moghania semilata</i>	Banrahar	Papilionaceae	S
27.	<i>Nyctanthes arbortristis</i>	Harsingar	Oleaceae	S
28.	<i>Olax scandens</i>	Harduli	Oleaceae	S
29.	<i>Petalidion barlerioides</i>	Inderjata	Acanthaceae	S
30.	<i>Phoenix acaulis</i>	Chhind	Palmeae	S
31.	<i>Strobilanthes auricalatus</i>	Muruadona	Acanthaceae	S
32.	<i>Tephrosia candida</i>	Unhali	Leguminoceae	S
33.	<i>Trema politoria</i>	Jilmila	Ulmaceae	S
34.	<i>Tribulus terrestris</i>	Gokhru	Zygophyllaceae	S
35.	<i>Uraria labata</i>	-	Malvaceae	S

Floral Diversity within Core Zone

S. No.	Scientific name	Local Name	Family	Habit
36.	<i>Urena siuta</i>	-	Malvaceae	S
37.	<i>Zizyphus rotundifolia</i>	Jharberi	Rhamnaceae	S
Herbs				
1.	<i>Asparagus racemosum</i>	Sataori	Liliaceae	H
2.	<i>Careya herabacea</i>	Chhiti Kumbhi	Myrtaceae	H
3.	<i>Hemidesmum indicus</i>	Sarsaparilla	Asclepidaceae	H
4.	<i>Hibiscus cancellatus</i>	Ambari	Malvaceae	H
5.	<i>Lanandula burmanni</i>	-	Labiateae	H
6.	<i>Leea rotusta</i>	Korum	Ampelidaceae	H
7.	<i>Micromeria capitellata</i>	-	Labiataeae	H
8.	<i>Napeta ruderalis</i>	-	Labiataeae	H
9.	<i>Rubia cordifolis</i>	Manjeti	Rubiaceae	H
10.	<i>Tamarix ericoides</i>	Jhau	Tamaricaceae	H
11.	<i>Zingibar capitatum</i>	Randa	Zingiberaceae	H
12.	<i>Ocimum sactum</i>	Tulsi	Labiatae	H
Epiphytes & Parasites				
1.	<i>Cuscuta reflexa</i>	Amarbel	Canvolvulaceae	-
2.	<i>Laranthus logiflorus</i>	Bandha	Laranthaceae	-
Climbers				
1.	<i>Acacia caesia</i>	Gurar	Leguminosae	C
2.	<i>Acacia pennata</i>	Raoni	Mimoseae	C
3.	<i>Bauhinia vahlli</i>	Mahul	Leguminosae	C
4.	<i>Butea superba</i>	Palasbel	Leguminosae	C
5.	<i>Butea parvifolia</i>	Palasbel	Leguminosae	C
6.	<i>Dioscorea belophylla</i>	Musalkand	Dioscoreaceae	C
7.	<i>Dioscorea bulbifera</i>	Gothalu	Dioscoreaceae	C
8.	<i>Millettea auriculate</i>	Gauj	Leguminosae	C
9.	<i>Millettea recemosa</i>	Junjinar	Leguminosae	C
10.	<i>Pueraria tuberosa</i>	Ghorbel	Leguminosae	C
11.	<i>Vitis linnei</i>	Jangli angur	Ampelideae	C

Floral Diversity within Core Zone

S. No.	Scientific name	Local Name	Family	Habit
12.	<i>Vitis tomentosa</i>	Purbel	Ampelideae	C
13.	<i>Zyzyphus rugosa</i>	Churna	Rhamnaceae	C
Grasses				
1.	<i>Andropogon intermedius</i>	Ghonsi	-	G
2.	<i>Andropogon pumilus</i>	Dewartari	-	G
3.	<i>Arthraxon quartinianus</i>	Basin	-	G
4.	<i>Apluda mutica</i>	Phuli	-	G
5.	<i>Bombusa arundinaceae</i>	Kantabans	-	G
6.	<i>Chionachne koenigii</i>	Kurpi	-	G
7.	<i>Chrysopogon montanus</i>	Chikula	-	G
8.	<i>Coix lacrumajobi</i>	Garu	-	G
9.	<i>Cymbopogon martini</i>	Rusa	-	G
10.	<i>Cynodon dactylon</i>	Doob	-	G
11.	<i>Dendrocalamus strictus</i>	Bans	-	G
12.	<i>Eragrostis tenella</i>	Bhurbhusi	-	G
13.	<i>Dichanthium annulatum</i>	Marwel	-	G
14.	<i>Eulali trispicata</i>	Chunai	-	G
15.	<i>Eulaliopsis binata</i>	Sabai	-	G
16.	<i>Heteropogon contortus</i>	Sukla	-	G
17.	<i>Imperata cylidrica</i>	Chhir	-	G
18.	<i>Iseilema prostratum</i>	Ukri	-	G
19.	<i>Sehima sulcatum</i>	Paonia	-	G
20.	<i>Sorghum halepense</i>	Barru	-	G
21.	<i>Themeda caudata</i>	Gunhar	-	G
22.	<i>Thysanolaena maxima</i>	Phulbahari	-	G
23.	<i>Saccharum munja</i>	Munj0	-	G
24.	<i>Sehima nervosum</i>	Shedo	-	G

(b) List of existing floristic composition within Buffer zone

S. No.	Scientific name	Local Name	Family	Habit
1.	<i>Acacia catechu</i>	Khair	Mimosaceae	T
2.	<i>Acacia arabica</i>	Babul	Laguminosae	T
3.	<i>Acacia leucophloea</i>	Reunja	Mimosaceae	T
4.	<i>Adinacordifolia</i>	Haldu	Rubiaceae	T
5.	<i>Boswellia serrata</i>	Salayi	Burseraceae	T
6.	<i>Bridelea retusa</i>	Kasai	Euphorbiaceae	T
7.	<i>Buchnanian lanzan</i>	Achar	Anacardiaceae	T
8.	<i>Butea Monosperma</i>	Palash	Leguminosae	T
9.	<i>Aegle marmelos</i>	Bel	Rutaceae	T
10.	<i>Ailanthus excelsa</i>	Mahaneem	Simaroubaceae	T
11.	<i>Careya arborea</i>	Wild Guava/ kumbhi	Palmae	S
12.	<i>Anogeissus latifolia</i>	Dhaura	Combretaceae	T
13.	<i>Casearia graveolens</i>	Gilehi	Samydaceae	T
14.	<i>Eriolaena hookeriana</i>	Bothi	Sterculiaceae	T
15.	<i>Erythrina suberosa</i>	Panjra	Leguminosae	T
16.	<i>Elaeodendron glaucum</i>	Jamrasi	Celastraceae	T
17.	<i>Dillenia aurea</i>	Karmata	Dilleniaceae	T
18.	<i>Delonix regia</i>	Cambhar	Laguminosae	T
19.	<i>Dillenia pentagyna</i>	Kalia	Dilleniaceae	T
20.	<i>Ehretia laevis</i>	Datranga	Burseraceae	T
21.	<i>Cordia latifolia</i>	Bara lasora	Baraginaceae	T
22.	<i>Cordian macleodli</i>	Silwat	Baraginaceae	T
23.	<i>Dalbergia latifolia</i>	Shisham	Leguminosae	T
24.	<i>Dalbergia sissoo</i>	Sissoo	Leguminosae	T
25.	<i>Euphorbia nivulia, Ham</i>	Thuar	Euphorbiaceae	T
26.	<i>Ficus hispida</i>	Kutumar	Moraceae	T
27.	<i>Chloroxylon swietenia</i>	Bhirra	Caesalpiniaceae	T
28.	<i>Cleistanthus collinus</i>	Garari	Meliacea	T
29.	<i>Cochlospermum religiosum</i>	Galgal	Euphorbiaceae	T
30.	<i>Eucalyptus spp.</i>	Nilgiri	Myrtaceae	T

S. No.	Scientific name	Local Name	Family	Habit
31.	<i>Ficus lacor</i>	Pakar	Moraceae	T
32.	<i>Bauhinia malabarica</i>	Amta	Leguminaceae	T
33.	<i>Casearia elliptica</i>	Tondri	Samydaceae	T
34.	<i>Cordia dichotoma</i>	Lisoda/Gunda	Rubiaceae	T
35.	<i>Litsea sebifera</i>	Maida lakri	Lauraceae	T
36.	<i>Mitragyna parvifolia</i>	Mundi	Rubiaceae	T
37.	<i>Pterocarpus marsupium</i>	Bija	Leguminosae	T
38.	<i>Randia Dumetorum</i>	Mainphal	Rubiaceae	T
39.	<i>Schleichera oleosa</i>	Kusum	Sapindaceae	T
40.	<i>Santalum album</i>	Chandan	Santalaceae	T
41.	<i>Spondias pinnata</i>	Amra	Anacardiaceae	T
42.	<i>Sterculia villosa</i>	Udal	Anacardiaceae	T
43.	<i>Stereospermum suaveolens</i>	Padar	Bignoniaceae	T
44.	<i>Terminalia belerica</i>	Bahera	Combretaceae	T
45.	<i>Psidium guava</i>	Amrud	Myrtaceae	T
46.	<i>Dalbergia paniculata</i>	Dhobin	Fabaceae	T
47.	<i>Diospyros melanoxylon</i>	Tendu	Lythraceae	T
48.	<i>Diospyros monatana</i>	Bistendu	Lythraceae	T
49.	<i>Ficus benghalensis</i>	Bad	Moraceae	T
50.	<i>Emblica officinalis</i>	Amla	Euphorbiaceae	T
51.	<i>Ficus glomerata</i>	Gular	Moraceae	T
52.	<i>Ficus hispida</i>	Hairy fig	Moraceae	T
53.	<i>Ficus religiosa</i>	Pipal	Moraceae	T
54.	<i>Strychnos potatorum</i>	Nirmali	Laguminosae	T
55.	<i>Grewia disperma</i>	Chaturli	Tiliaceae	T
56.	<i>Grewia tiliaefolia</i>	Dhaman	Tiliaceae	T
57.	<i>Holoptelea integrifolia</i>	Papri/Churel	Asclepiadaceae	T
58.	<i>Gardenia latifolia</i>	Papra	Rubiaceae	T
59.	<i>Gardenia turgida</i>	Phetra	Rubiaceae	T
60.	<i>Garuga pennata</i>	Kekad	Burseraceae	T

S. No.	Scientific name	Local Name	Family	Habit
61.	<i>Gmelina arborea</i>	Gamari	Verbenaceae	T
62.	<i>Hymenodictyon excelsum</i>	Bhonrsal	Rubiaceae	T
63.	<i>Ixota arborea</i>	Lokhandi	Rubiaceae	T
64.	<i>Kydia calycina</i>	Pula	Malvaceae	T
65.	<i>Langerstroemia parviflora</i>	Lendia	Lythraceae	T
66.	<i>Schrebera switenioides</i>	Mokha	Oleaceae	T
67.	<i>Semecarpus anacardium</i>	Bhilwa	Anacardiaceae	T
68.	<i>Xylia xylocarpa</i>	Suria	Mimisaceae	T
69.	<i>Lannea coramandelica</i>	Mohin/ Ash tree	Anacardiaceae	T
70.	<i>Pterocarpus marsupium</i>	Bija	Leguminoceae	T
71.	<i>Pongamia pinnata</i>	Karanj	Fabaceae	T
72.	<i>Schleichera oleosa</i>	Kusum	Sapindaceae	T
73.	<i>Spondias pinnata</i>	Amra	Leguminaceae	T
74.	<i>Sterculia urens</i>	Kullu	Euphorbiaceae	T
75.	<i>Stereospermum suaveolens</i>	Paddar	Bignoniaceae	T
76.	<i>Syzygium cumini</i>	Jamun	Myrtaceae	T
77.	<i>Tamarindus indica</i>	Imli	Caesalpinaceae	T
78.	<i>Hardwickia binata</i>	Anjan	Leguminoceae	T
79.	<i>Terminalia tomentosa</i>	Saja	Combretaceae	T
80.	<i>Zizyphus mauritiana</i>	Bar	Rhamnaceae	T
81.	<i>Tectona grandis</i>	Teak	Verbinaceae	T
82.	<i>Terminalia arjuna</i>	Arjun	Combretaceae	T
Shrubs				
1.	<i>Arbus precatotrius</i>	Gunj	Papilionaceae	S
2.	<i>Achyranthes aspera</i>	Chirchira	Amarantaceae	S
3.	<i>Adhatoda vasica</i>	Adusa	Acanthaceae	S
4.	<i>Ageratum conyzoids</i>	-	Compositae	S
5.	<i>Andrographis paniculata</i>	Chirchira	Acanthaceae	S
6.	<i>Antidesma ghaesebilla</i>	Jondhri	Euphorbiaceae	S
7.	<i>Azanza lampus</i>	Banakpas	Malvaceae	S

S. No.	Scientific name	Local Name	Family	Habit
8.	<i>Barleria cristata</i>	Koranta	Acanthaceae	S
9.	<i>Barleria mantana</i>	Korat	Verbenaceae	S
10.	<i>Carissa opaca</i>	Karonda	Apocynaceae	S
11.	<i>Calotropis procera</i>	Aak	Asclepiadiaceae	S
12.	<i>Cassia Tora</i>	Tarwar	Laguminosae	S
13.	<i>Clerodendron serratum</i>	Barangi	Verbenaceae	S
14.	<i>Colebrookia oppositifolia</i>	Bhandar	Labiatae	S
15.	<i>Crotalaria juncea</i>	Son	Laguminosae	S
16.	<i>Dalbergia voluvis</i>	Birach	Laguminosae	S
17.	<i>Desmodium pulchellum</i>	Chikati	Laguminosae	S
18.	<i>Desmodium velutinum</i>	Chikati	Laguminosae	S
19.	<i>Dioscorea anguina</i>	Bansora	Dioscoreaceae	S
20.	<i>Dondonoea visocosa</i>	Jangli Mehandi	Sapindaceae	S
21.	<i>Embelia robusta</i>	Baibirang	Myrsiaceae	S
22.	<i>Eranthemum purpureseens</i>	Bantulsi	Acanthaceae	S
23.	<i>Gardnia lucida</i>	Dikamali	Rukbiaceae	S
24.	<i>Grewia hirsuta</i>	Gudsaki	Tiliaceae	S
25.	<i>Grewia sapida</i>	Phalsa	Tiliaceae	S
26.	<i>Helicteres isora</i>	Marorphali	Sterculiaceae	S
27.	<i>Indigophera pulchella</i>	Neel	Papilionaceae	S
28.	<i>Ipomea spp.</i>	Besharm	Convolvulaceae	S
29.	<i>Jasminum multiflorum</i>	Kunda	Oleaceae	S
30.	<i>Justieia betonica</i>	Kokander	Acanthaceae	S
31.	<i>Jatropha curcas</i>	Rattanjot	Euphorbiaceae	S
32.	<i>Lantana camara</i>	Raimunia	Verbenaceae	S
33.	<i>Maytenus emarginata</i>	Bahrti	Celastraceae	S
34.	<i>Malastoma malababathricum</i>	Palor	Malastomaceae	S
35.	<i>Maghanian nana</i>	Chepati	Papilionaceae	S
36.	<i>Moghania semilata</i>	Banrahar	Papilionaceae	S
37.	<i>Nyctanthes arbortristis</i>	Harsingar	Oleaceae	S

S. No.	Scientific name	Local Name	Family	Habit
38.	<i>Olax scandens</i>	Harduli	Oleaceae	S
39.	<i>Petalidium barlerioides</i>	Inderjata	Acanthaceae	S
40.	<i>Phoenix acaulis</i>	Chhind	Palmeae	S
41.	<i>Sida acuta</i>	Kareta	Mavaceae	S
42.	<i>Sida cardifolia</i>	Mamas	Mavaceae	S
43.	<i>Strobilanthes auricalatus</i>	Muruadona	Acanthaceae	S
44.	<i>Tephrosia candida</i>	Unhali	Leguminoceae	S
45.	<i>Trema politoria</i>	Jilmila	Ulmaceae	S
46.	<i>Tribulus terrestris</i>	Gokhru	Zygophyllaceae	S
47.	<i>Triumfetta bartramia</i>	Chirpat	Tiliaceae	S
48.	<i>Triumfetta pilosa</i>	Chikati	Tiliaceae	S
49.	<i>Uraria labata</i>	-	Malvaceae	S
50.	<i>Urena siuta</i>	-	Malvaceae	S
51.	<i>Vitex negundo</i>	Nirgudi	Verbenaceae	S
52.	<i>Waltheria indica</i>	Haduli	Sterculiaceae	S
53.	<i>Zizyphus rotundifolia</i>	Jharberi	Rhamnaceae	S
Herbs				
1.	<i>Asparagus racemosum</i>	Sataori	Liliaceae	H
2.	<i>Careya herabacea</i>	Chhiti Kumbhi	Myrtaceae	H
3.	<i>Chlorophyllum tuberosum</i>	Safed Musali	Liliaceae	H
4.	<i>Curculigo orachiolides</i>	Kali musli	Amaryullidaceae	H
5.	<i>Hemidesmum indicus</i>	Sarsaparilla	Asclepidaceae	H
6.	<i>Hibiscus cancellatus</i>	Ambari	Malovaceae	H
7.	<i>Lanandula burmanni</i>	-	Labistea	H
8.	<i>Leea rotusta</i>	Korum	Ampelidaceae	H
9.	<i>Micromeria capitellata</i>	-	Labiataeae	H
10.	<i>Napeta ruderalis</i>	-	Labiataeae	H
11.	<i>Polygala chinesis</i>	Bijnori	Pigalaceae	H
12.	<i>Rubia cordifolis</i>	Manjeti	Rubiaceae	H
13.	<i>Tamarix ericoides</i>	Jhau	Tamaricaceae	H

S. No.	Scientific name	Local Name	Family	Habit
14.	<i>Zingibar capitatum</i>	Randa	Zingiberaceae	H
15.	<i>Ocimum sactum</i>	Tulsi	Labiatae	H
Epiphytes & Parasites				
1.	<i>Cuscuta reflexa</i>	Amarbel	Canvolvulaceae	-
2.	<i>Laranthus logiflorus</i>	Bandha	Laranthaceae	-
3.	<i>Visum nepalene</i>	Bandha	Loranthaceae	-
4.	<i>Orodanche oegyptica</i>	Bandha	Prkobancheaceae	-
Climbers				
1.	<i>Acacia caesia</i>	Gurar	Leguminosae	C
2.	<i>Acacia pennata</i>	Raoni	Mimoseae	C
3.	<i>Bauhinia vahlli</i>	Mahul	Leguminosae	C
4.	<i>Butea superba</i>	Palasbel	Leguminosae	C
5.	<i>Butea parvifolia</i>	Palasbel	Leguminosae	C
6.	<i>Celastrus paniculata</i>	Malkangini	Celastraceae	C
7.	<i>Combretum decandrum</i>	Piwarbel	Combretaceae	C
8.	<i>Dioscorea belophylla</i>	Musalkand	Dioscoreaceae	C
9.	<i>Dioscorea bulbifera</i>	Gothalu	Dioscoreaceae	C
10.	<i>Ichnocarpus frutescens</i>	Dhimarbel	Apocynaceae	C
11.	<i>Marsdenia hamiltonia</i>	Dudhibel	Asclepiadaceae	C
12.	<i>Millettea auriculate</i>	Gauj	Leguminosae	C
13.	<i>Millettea recemosa</i>	Junjinar	Leguminosae	C
14.	<i>Mucuna pruriens</i>	Kewanch	Leguminosae	C
15.	<i>Pueraria tuberosa</i>	Ghorbel	Leguminosae	C
16.	<i>Vitis linnei</i>	Jangli angur	Ampelideae	C
17.	<i>Vitis fomentosa</i>	Purbel	Ampelideae	C
18.	<i>Zyzyphus rugosa</i>	Churna	Rhamnaceae	C
Grasses				
1.	<i>Andropogon intermedius</i>	Ghonsi	-	G
2.	<i>Andopogon pumilus</i>	Dewartari	-	G
3.	<i>Arthraxon quartinianus</i>	Basin	-	G

S. No.	Scientific name	Local Name	Family	Habit
4.	<i>Apluda mutica</i>	Phuli	-	G
5.	<i>Bombusa arundinaceae</i>	Kantabans	-	G
6.	<i>Chionachne koenigii</i>	Kurpi	-	G
7.	<i>Chrysopogon montanus</i>	Chikula	-	G
8.	<i>Coix lacrumajobi</i>	Garu	-	G
9.	<i>Cymbopogon martini</i>	Rusa	-	G
10.	<i>Cynodon dactylon</i>	Doob	-	G
11.	<i>Dendrocalamus strictus</i>	Bans	-	G
12.	<i>Eragrostis tenella</i>	Bhurbhusi	-	G
13.	<i>Dichanthium annulatum</i>	Marwel	-	G
14.	<i>Eulali trispicata</i>	Chunai	-	G
15.	<i>Eulaliopsis binata</i>	Sabai	-	G
16.	<i>Heteropogon contortus</i>	Sukla	-	G
17.	<i>Imperata cylidrica</i>	Chhir	-	G
18.	<i>Iseilema prostratum</i>	Ukri	-	G
19.	<i>Sehima sulcatum</i>	Paonia	-	G
20.	<i>Sorghum halepense</i>	Barru	-	G
21.	<i>Themeda caudata</i>	Gunhar	-	G
22.	<i>Thysanolaena maxima</i>	Phulbahari	-	G
23.	<i>Saccharum munja</i>	Munj	-	G
24.	<i>Imperata Cylidrica</i>	Chhir	-	G
25.	<i>Sehima nervosum</i>	Shedo	-	G

Status of RET Species

During Field Survey, rare, endangered and threatened species of flora recorded under threatened status in the study area are as follows:

1. Endemic- *Hardwickia binnata*, *Mucuna prurita*

2. Locally Endangered Species

A. *Butea monosperma* B. *Clerodendron serratum* C. *Curculigo orchioides* D. *Curcuma augustifolia*
E. *Pterocarpus marsupium*.

3. According to Madhya Pradesh State Medicinal Plant Board endangered species are:

A. *Diospyros peniculato* B. *Pterocarpus marsupium* C. *Terminalia arjuna* D. *Grewia rothi*
E. *Vitex trifolia*-Critically endangered.

ANNEXURE - III

INVENTORY OF FAUNAL DIVERSITY IN THE CORE & BUFFER ZONE OF PROPOSED MINE SITE Based on Actual Sighting, based on inputs from locals and Perused from Secondary Data

a) Core Zone

S. No.	Scientific name	Common name	Status according to IWPA, 1972
Mammalian			
1.	<i>Vulpes bengalensis</i>	Common fox	Sch. II
2.	<i>Rattus rattus</i>	Black rat	Sch. V
3.	<i>Tatera indica</i>	Indian Gerbil	Sch. V
4.	<i>Funambulus palmarum</i>	Indian palm Squirrel	Sch. IV
5.	<i>Canis aureus</i>	Jackal	Sch. III
6.	<i>Boselaphus tragocamelus</i>	Nilgai	Sch. III
7.	<i>Axis axis</i>	Chital	Sch. III
8.	<i>Sus scrofa</i>	Wild boar	Sch. III
9.	<i>Felis chaus</i>	Jungle cat	Sch. II
10.	<i>Herpestes edwardsii</i>	Common Mongoose	Sch. II
11.	<i>Lepus nigricollis</i>	Indian hare	Sch. IV
12.	<i>Hystrix indica</i>	Porcupine	Sch. IV
Reptilian			
1.	<i>Ptyas mucosa</i>	Indian Rat snake	Sch. II
2.	<i>Hemidactylus flaviviridis</i>	House Gecko/Chhipkali	Sch. V
3.	<i>Calotes versicolor</i>	Common Garden Lizard/ Girgit	Sch. IV
4.	<i>Bungarus candidus</i>	Common krait	Sch. IV
5.	<i>Naja naja</i>	Naag/Kobra	Sch. II
6.	<i>Chamaeleo zeylanicus</i>	Indian Chameleon	Sch. IV
7.	<i>Vipera russelli</i>	Russell's viper	Sch. II
8.	<i>Mabuya carinata</i>	Brahminy Skink	Sch. IV
Amphibian			
1.	<i>Rana tigrina</i>	Common Frog	Sch. IV
2.	<i>Bufo melanostictus</i>	Common Indian toad	Sch. IV
3.	<i>Euphlyctis hexadactylus</i>	Rana hexadactyla	Sch. IV

S. No.	Scientific name	Common name	Status according to IWPA, 1972
Butterflies			
1.	<i>Danaus chrysippus</i>	Plain tiger	Sch. IV
2.	<i>Pachliopta hector</i>	Crimson rose	Sch. IV
3.	<i>Hypolimnas bolina</i>	Great eggfly	Sch. IV
4.	<i>Euploea core</i>	Common crow	Sch. IV
6.	<i>Papilio demoleus</i>	Lime butterfly	Sch. IV
7.	<i>Eurema hecabe</i>	Common grass yellow	Sch. IV
8.	<i>Junonia almana</i>	Peacock pansy	Sch. IV
9.	<i>Catopsilia pomona</i>	Common emigrant	Sch. IV
10.	<i>Leptosia nina</i>	Psyche	Sch. IV
Arthropods and Mollusca			
1.	<i>Apis indica</i>	Choti Madhumakkhi	-
2.	<i>Periplaneta americana</i>	Cockroach	-
3.	<i>Sympetrum fonscolombii</i>	Red veined darter dragonfly	-
4.	<i>Diplacodes trivialis</i>	Ground skimmer dragonfly	-
5.	<i>Stegodyphus sp.</i>	Social Spider	-
Avifaunal (Birds)			
1.	<i>Bubulcus ibis</i>	Cattle egret	Sch. IV
2.	<i>Columba livia</i>	Blue rock pigeon	Sch. IV
3.	<i>Egretta garzetta</i>	Little egret	Sch. IV
4.	<i>Alcedo atthis</i>	Common kingfisher	Sch. IV
5.	<i>Caprimulgus asiaticus</i>	Nightjar	Sch. IV
6.	<i>Coracias benghalensis</i>	Indian roller	Sch. IV
7.	<i>Copsychus saularis</i>	Oriental magpie robin	Sch. IV
8.	<i>Saxicoloides fulicata</i>	Indian robin	Sch. IV
9.	<i>Acridotheres tristis</i>	Common myna	Sch. IV
10.	<i>Spilopelia senegalensis</i>	Laughing dove	Sch. IV
11.	<i>Ardeola grayii</i>	Pond heron	Sch. IV
12.	<i>Aegithina tiphia</i>	Common iora	Sch. IV
13.	<i>Anas crecca</i>	Common teal	Sch. IV
14.	<i>Passer domesticus</i>	House sparrow	Sch. IV

Birds

S. No.	Scientific name	Common name	Status according to IWPA, 1972
15.	<i>Corvus macrorhynchos</i>	Jungle crow	Sch. V
16.	<i>Corvus splendens</i>	House crow	Sch. V
17.	<i>Merops orientalis</i>	Small bee- eater	Sch. IV
18.	<i>Streptopelia decaocto</i>	Eurasian collared dove	Sch. IV
19.	<i>Milvus migrans</i>	Black kite	Sch. IV
20.	<i>Pycnonotus cafer</i>	Red vented bulbul	Sch. IV
21.	<i>Psittacula krameri</i>	Rose ringed parakeet	Sch. IV
22.	<i>Ploceus philippinus</i>	Baya- weaver bird	Sch. IV
23.	<i>Sturnus pagodarum</i>	Brahminy starling	Sch. IV
24.	<i>Eudynamys scolopaceus</i>	Asian koel	Sch. IV
25.	<i>Oriolus oriolus</i>	Golden Oriole	Sch. IV
26.	<i>Cuculus micropterus</i>	Indian Cuckoo	Sch. IV
27.	<i>Apus affinis</i>	House swift	Sch. IV
28.	<i>Gallus gallus</i>	Jungle fowl	Sch. IV
29.	<i>Milvus migrans</i>	Black kite	Sch. IV
30.	<i>Haliastur indus</i>	Brahminy kite	Sch. IV
31.	<i>Tyto alba</i>	Barn owl	Sch. IV

B. Faunal Diversity in Buffer Zone

S. No.	Scientific name	Common name	Status according to IWPA, 1972
Mammalian			
1.	<i>Canis aureus</i>	Jackal	Sch. II
2.	<i>Hyaena hyaena</i>	Hyena	Sch. III
3.	<i>Melursus ursinus</i>	Sloth bear	Sch. I
4.	<i>Vulpes bengalensis</i>	Common fox	Sch. II
5.	<i>Rattus rattus</i>	Black rat	Sch. V
6.	<i>Panthera tigris tigris</i>	Bengal tiger	Sch. I
7.	<i>Rattus norvegicus</i>	Field mouse	Sch. V
8.	<i>Bandicota indica</i>	Bandicoot	Sch. V
9.	<i>Tatera indica</i>	Indian Gerbil	Sch. V
10.	<i>Funambulus palmarumi</i>	Indian Palm Squirrel	Sch. IV
11	<i>Tetracerus quadricornis</i>	Chousingha	Sch. I
12.	<i>Boselaphus tragocamelus</i>	Nilgai	Sch. III
13.	<i>Elephas maximus</i>	Elephant	Sch. I
14.	<i>Rhinolophus spp.</i>	Horseshoe Bat	Sch. V
15.	<i>Bos gaurus</i>	Bison	Sch. I
16.	<i>Pteropus giganteus</i>	Indian flying fox	Sch. V
17.	<i>Cervus unicolor</i>	Sambar	Sch. III
18.	<i>Axis axis</i>	Chital	Sch. III
19.	<i>Hystrix indica</i>	Porcupine	Sch. II
20.	<i>Panthera Pardus</i>	Common leopard	Sch. I
21.	<i>Herpestes edwardsii</i>	Common Mongoose	Sch. II
22.	<i>Presbytis entellus</i>	Common langur	Sch. II
23.	<i>Macaca mulatta</i>	Rhesus macaque	Sch. II
24.	<i>Lepus nigricollis</i>	Indian hare	Sch. IV
25.	<i>Sus scrofa</i>	Wild boar	Sch. III
26.	<i>Cuon alpinus</i>	Wild dog	Sch. II
Reptilian			
1.	<i>Vipera russelli</i>	Russell's viper	Sch. II
2.	<i>Varanus bengalensis</i>	Monitor lizard	Sch. I
3.	<i>Ptyas mucosa</i>	Indian Rat snake	Sch. II

Faunal Diversity in Buffer Zone

S. No.	Scientific name	Common name	Status according to IWPA, 1972
4.	<i>Lycodon aulicus</i>	Common wolf snake	Sch. IV
5.	<i>Bungarus candidus</i>	Common krait	Sch. IV
6.	<i>Boiga trigonata</i>	Cat snake	Sch. IV
7.	<i>Eryx johnii</i>	Red sand Boa	Sch. IV
8.	<i>Naja naja</i>	Naag/Kobra	Sch. II
9.	<i>Hemidactylus flaviviridis</i>	House Gecko/Chhipkali	Sch. V
10.	<i>Melanochelys trijuga</i>	Indian pond turtle	Sch. IV
11.	<i>Calotes versicolor</i>	Common Garden Lizard/ Girgit	Sch. IV
12.	<i>Chamaeleo zeylanicus</i>	Indian Chameleon	Sch. IV
13.	<i>Mabuya carinata</i>	Brahminy Skink	Sch. IV
14.	<i>Pythan molurns</i>	Pythan	Sch.I
Amphibian			
1.	<i>Rana limnocharis</i>	Indian cricket Frog	Sch. IV
2.	<i>Hoplobatrachus tigerinus</i>	Indian bull frog	Sch. IV
3.	<i>Rana tigrina</i>	Common Frog	Sch. IV
4.	<i>Bufo melanostictus</i>	Common Indian toad	Sch. IV
5.	<i>Euphlyctis hexadactylus</i>	Rana hexadactyla	Sch. IV
6.	<i>Hyla goeldii</i>	Tree frog	Sch. IV
Butterflies			
1.	<i>Danaus chrysippus</i>	Plain tiger	Sch. IV
2.	<i>Pachliopta hector</i>	Crimson rose	Sch. IV
3.	<i>Hypolimnas bolina</i>	Great eggfly	Sch. IV
4.	<i>Papilio polymnestor</i>	Blue mormon	
5.	<i>Euploea core</i>	Common crow	Sch. IV
6.	<i>Neptis hylas</i>	Common sailer	Sch. IV
7.	<i>Papilio demoleus</i>	Lime butterfly	Sch. IV
8.	<i>Parantica aglea</i>	Glassy tiger	Sch. IV
9.	<i>Eurema hecabe</i>	Common grass yellow	Sch. IV
10.	<i>Junonia almana</i>	Peacock pansy	Sch. IV
11.	<i>Junonia orythia</i>	Blue pansy	Sch. IV
12.	<i>Junonia atlites</i>	Grey pansy	Sch. IV

S. No.	Scientific name	Common name	Status according to IWPA, 1972
13.	<i>Catopsilia pomona</i>	Common emigrant	Sch. IV
14.	<i>Leptosia nina</i>	Psyche	Sch. IV
15.	<i>Chilades parrhassius</i>	Small cupid	Sch. IV
16.	<i>Musca domestica</i>	Housfly	Sch. IV
17.	<i>Aedes aegypti</i>	Dengue mosquito	Sch. IV
18.	<i>Pieris napi</i>	Green- veined white butterfly	Sch. IV
19.	<i>Eurema brigitta</i>	Small grass yellow	Sch. IV
20.	<i>Parantica aglea</i>	Glassy tiger	Sch. IV
Arthropods and Mollusca			
1.	<i>Apis indica</i>	Choti Madhumakkhi	-
2.	<i>Apis dorsata</i>	Badi Madhumakkhi	-
3.	<i>Periplaneta americana</i>	Cockroach	-
4.	<i>Buthus sp.</i>	Scorpion	-
5.	<i>Sympetrum fonscolombii</i>	Red veined darter dragonfly	-
6.	<i>Diplacodes trivialis</i>	Ground skimmer dragonfly	-
7.	<i>Stegodyphus sp.</i>	Social Spider	-
Avifaunal (Birds)			
1.	<i>Ardeola grayii</i>	Pond heron	Sch. IV
2.	<i>Acridotheres tristis</i>	Common myna	Sch. IV
3.	<i>Eudynamys scolopaceus</i>	Asian koel	Sch. IV
4.	<i>Alcedo atthis</i>	Common kingfisher	Sch. IV
5.	<i>Egretta garzetta</i>	Little egret	Sch. IV
6.	<i>Oriolus oriolus</i>	Golden Oriole	Sch. IV
7.	<i>Bubulcus ibis</i>	Cattle egret	Sch. IV
8.	<i>Caprimulgus asiaticus</i>	Nightjar	Sch. IV
9.	<i>Streptopelia decaocto</i>	Eurasian collared dove	Sch. IV
10.	<i>Milvus migrans</i>	Black kite	Sch. IV
11.	<i>Haliastur indus</i>	Brahminy kite	Sch. IV
12.	<i>Tockus birostris</i>	Indian Grey Hornbill	Sch. IV
13.	<i>Tyto alba</i>	Barn owl	Sch. IV
14.	<i>Accipiter badius</i>	Shikra	Sch. IV
15.	<i>Bubo bubo</i>	Eurasian Eagle Owl	Sch. IV

S. No.	Scientific name	Common name	Family
16.	<i>Merops orientalis</i>	Small bee- eater	Sch. IV
17.	<i>Corvus macrorhynchos</i>	Jungle crow	Sch. V
18.	<i>Corvus splendens</i>	Common crow	Sch. V
19.	<i>Passer domesticus</i>	House sparrow	Sch. IV
20.	<i>Nectarinia asiatica</i>	Purple sunbird	Sch. IV
21.	<i>Sturnus pagodarum</i>	Brahminy starling	Sch. IV
22.	<i>Pavo cristatus</i>	Peafowl	Sch. I
23.	<i>Psittacula krameri</i>	Rose ringed parakeet	Sch. IV
24.	<i>Turdoides striatus</i>	Jungle babbler	Sch. IV
25.	<i>Coracias benghalensis</i>	Indian roller	Sch. IV
26.	<i>Copsychus saularis</i>	Oriental magpie robin	Sch. IV
27.	<i>Saxicoloides fulicata</i>	Indian robin	Sch. IV
28.	<i>Vanellus indicus</i>	Red-wattled lapwing	Sch. IV
29.	<i>Ploceus philippinus</i>	Baya- weaver bird	Sch. IV
30.	<i>Gallus gallus</i>	Jungle fowl	Sch. IV
31.	<i>Apus affinis</i>	House swift	Sch. IV
32.	<i>Halcyon smyrnensis</i>	White throated kingfisher	Sch. IV
33.	<i>Francolinus pondicerianus</i>	Grey francolin	Sch. IV
34.	<i>Columba livia</i>	Blue rock pigeon	Sch. IV
35.	<i>Centropus sinensis</i>	Greater coucal	Sch. IV
36.	<i>Amaurornis phoenicurus</i>	White breasted water hen	Sch. IV
37.	<i>Pycnonotus cafer</i>	Red vented bulbul	Sch. IV

Analysis of Fauna

Schedule-I fauna was recorded in the study area during field survey as per (IWPA) Indian Wildlife Protection Act, 1972.

1.	Indian monitor lizard	<i>Varanus benglensis</i>	Sch. I
2.	Indian peafowl	<i>Pavo cristatus</i>	Sch. I
3.	Sloth bear	<i>Melursus ursinus</i>	Sch. I
4.	Elephant	<i>Elephas maximus</i>	Sch. I
5.	Indian rock python	<i>Python molurus</i>	Sch. I
6.	Bengal tiger	<i>Panthera tigris tigris</i>	Sch. I
7.	Chousingha	<i>Tetracerus quadricornis</i>	Sch. I
8.	Bison	<i>Bos qaurus</i>	Sch. I
9.	Common leopard	<i>Panthera Pardus</i>	Sch. I

INVENTORY OF AQUATIC FLORA IN THE CORE & BUFFER ZONE OF PROPOSED MINE SITE

Based on Actual Sighting, based on inputs from locals and Perused from Secondary Data

S. No.	Scientific name	Common name	Family
Aquatic diversity of buffer zone			
1.	<i>Harpadon nehereus</i>	Bombil	-
2.	<i>Sperata seenghala</i>	Singara	-
3.	<i>Penaeus monodon</i>	Prawn	-
4.	<i>Labeo rohita</i>	Rohu	-
5.	<i>Oreochromis niloticus</i>	Tilapia	-
6.	<i>Lamellidens corrianus</i>	Shells	-
7.	<i>Rita rita</i>	Rita	-
8.	<i>Mastacembelus armatus</i>	Bam	-
9.	<i>Alysfus tengara</i>	Tengara	-
10.	<i>Cirrhinas mrigala</i>	Mrigal	-
11.	<i>Boleophthalmus spp.</i>	Mudskippers	-
12.	<i>Catla catla</i>	Catla	-
13.	<i>Mugil cephalus</i>	Mullet	-


 वनमण्डलाधिकारी
 पूर्व सामान्य वन मण्डल, मण्डला


 क्षेत्र संचालक,
 कान्हा टायगर रिजर्व,
 मण्डला


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 I.F.S.
 Principal Chief Conservator of Forest
 (Wildlife) & Chief Wildlife Warden, M.P.

**AUTHENTICATED LIST OF
FLORA & FAUNA OF
MUKAM BAUXIT MINES
10 KM RADIOUS AREA FALLEN IN
CHHATTISGARH**

ANNEXURE - II

INVENTORY OF FLORAL DIVERSITY IN THE CORE & BUFFER ZONE OF MINE SITE

Based on Actual Sighting, based on inputs from locals and Perused from Secondary Data

Habit: Tree (T), Shrub (S), Herb (H), Grass (G), and Climber (C)

(a) Floral Diversity within Core Zone - Trees

S. No.	Scientific name	Local name	Family	Habit
1.	<i>Ficus religiosa</i>	Pipal	Moraceae	T
2.	<i>Azadiracta indica</i>	Neem	Maliaceae	T
3.	<i>Mangifera indica</i>	Mango	Anacardiaceae	T
4.	<i>Cassia fistula</i>	Amaltas	Laguminosae	T
5.	<i>Albizzia lebeck</i>	Kala Siris	Fabaceae	T
6.	<i>Albizzia chinensis</i>	Kiragi	Laguminosae	T
7.	<i>Albizzia odoratissima</i>	Chichwa	Laguminosae	T
8.	<i>Anona squamosa</i>	Sitafal	Anonaceae	T
9.	<i>Albizzia procera</i>	Safed Siris	Laguminosae	T
10.	<i>Bauhinia variegata</i>	Kachnar	Laguminosae	T
11.	<i>Bauhinia racemosa</i>	Asta	Laguminosae	T
12.	<i>Pongamia Pinnata</i>	Karanj	Laguminosae	T
13.	<i>Madhuca indica</i>	Mahua	Sapotaceae	T
14.	<i>Diospyros monatana</i>	Bistendu	Ebenaceae	T
15.	<i>Eriolaena hookeriana</i>	Bothi	Sterculiaceae	T
16.	<i>Erythrina suberosa</i>	Panjra	Leguminosae	T
17.	<i>Euphorbia nivulia</i>	Thuar	Euphorbiaceae	T
18.	<i>Ficus hispida</i>	Kutummar	Moraceae	T
19.	<i>Ficus lacor</i>	Pakar	Moraceae	T
20.	<i>Flacourtia Indica</i>	Kakai	Bixaceae	T
21.	<i>Randia dumetorum</i>	Mainphal	Rubiaceae	T
22.	<i>Schleichera oleosa</i>	Kusum	Sapindaceae	T
23.	<i>Spondias pinnata</i>	Amra	Anacardiacea	T
24.	<i>Tamarindus indica</i>	Imli	Caesalpinaceae	T
25.	<i>Tectona grandis</i>	Teak	Verbinaceae	T
26.	<i>Syzygium cumini</i>	Jamun	Myrtaceae	T
Shrubs				
1.	<i>Arbus precatotrius</i>	Gunj	Papilionaceae	S
2.	<i>Achyranthes aspera</i>	Chirchira	Amarantaceae	S

(a) Floral Diversity within Core Zone

S. No.	Scientific name	Local Name	Family	Habit
3.	<i>Adhatoda vasica</i>	Adusa	Acanthaceae	S
4.	<i>Andrographis paniculata</i>	Chirchira	Acanthaceae	S
5.	<i>Antidesma ghaesebilla</i>	Jondhri	Euphorbiaceae	S
6.	<i>Azanza lampus</i>	Banakpas	Malvaceae	S
8.	<i>Carissa opaca</i>	Karonda	Apocynaceae	S
9.	<i>Calotropis procera</i>	Aak	Asclepiadaceae	S
10.	<i>Cassia Tora</i>	Tarwar	Laguminosae	S
11.	<i>Clerodendron serratum</i>	Barangi	Verbenaceae	S
12.	<i>Colebrookia oppositifolia</i>	Bhandar	Labiatae	S
13.	<i>Crotalaria juncea</i>	Son	Laguminosae	S
14.	<i>Dalbergia voluvisis</i>	Birach	Laguminosae	S
15.	<i>Desmodium pulchellum</i>	Chikati	Laguminosae	S
16.	<i>Dondonoea viscosa</i>	Jangli Mehandi	Sapindaceae	S
17.	<i>Embelia robusta</i>	Baibirang	Myrsiaceae	S
18.	<i>Eranthemum purpureseens</i>	Bantulsi	Acanthaceae	S
19.	<i>Gardnia lucida</i>	Dikamali	Rukbiaceae	S
20.	<i>Grewia hirsuta</i>	Gudsaki	Tiliaceae	S
21.	<i>Indigophera pulchella</i>	Neel	Papilionaceae	S
22.	<i>Ipomea spp.</i>	Besharm	Convolvulaceae	S
23.	<i>Jasminum multiflorum</i>	Kunda	Oleaceae	S
24.	<i>Jatropha curcas</i>	Rattan jot	Euphorbiaceae	S
25.	<i>Lantana camara</i>	Raimunia	Verbenaceae	S
26.	<i>Moghania semilata</i>	Banrahar	Papilionaceae	S
27.	<i>Nyctanthes arbortristis</i>	Harsingar	Oleaceae	S
28.	<i>Olex scandens</i>	Harduli	Oleaceae	S
29.	<i>Petalidium barlerioides</i>	Inderjata	Acanthaceae	S
30.	<i>Phoenix acaulis</i>	Chhind	Palmeae	S
31.	<i>Strobilanthes auricalatus</i>	Muruadona	Acanthaceae	S
32.	<i>Tephrosia candida</i>	Unhali	Leguminosae	S
33.	<i>Trema politoria</i>	Jilmila	Ulmaceae	S
34.	<i>Tribulus terrestris</i>	Gokhru	Zygophyllaceae	S
35.	<i>Uraria labata</i>	-	Malvaceae	S

Floral Diversity within Core Zone

S. No.	Scientific name	Local Name	Family	Habit
36.	<i>Urena siuta</i>	-	Malvaceae	S
37.	<i>Zizyphus rotundifolia</i>	Jharberi	Rhamnaceae	S
Herbs				
1.	<i>Asparagus racemosum</i>	Sataori	Liliaceae	H
2.	<i>Careya herabacea</i>	Chhiti Kumbhi	Myrtaceae	H
3.	<i>Hemidesmum indicus</i>	Sarsaparilla	Asclepidaceae	H
4.	<i>Hibiscus cancellatus</i>	Ambari	Malovaceae	H
5.	<i>Lanandula burmanni</i>	-	Labiateae	H
6.	<i>Leea rotusta</i>	Korum	Ampelidaceae	H
7.	<i>Micromeria capitellata</i>	-	Labiateae	H
8.	<i>Napeta ruderalis</i>	-	Labiateae	H
9.	<i>Rubia cordifolis</i>	Manjeti	Rubiaceae	H
10.	<i>Tamarix ericoides</i>	Jhau	Tamaricaceae	H
11.	<i>Zingibar capitatum</i>	Randa	Zingiberaceae	H
12.	<i>Ocimum sactum</i>	Tulsi	Labiateae	H
Epiphytes & Parasites				
1.	<i>Cuscuta reflexa</i>	Amarbel	Canvolvulaceae	-
2.	<i>Laranthus logiflorus</i>	Bandha	Laranthaceae	-
Climbers				
1.	<i>Acacia caesia</i>	Gurar	Leguminosae	C
2.	<i>Acacia pennata</i>	Raoni	Mimoseae	C
3.	<i>Bauhinia vahlli</i>	Mahul	Leguminosae	C
4.	<i>Butea superba</i>	Palasbel	Leguminosae	C
5.	<i>Butea parvifolia</i>	Palasbel	Leguminosae	C
6.	<i>Dioscorea belophylla</i>	Musalkand	Dioscoreaceae	C
7.	<i>Dioscorea bulbifera</i>	Gothalu	Dioscoreaceae	C
8.	<i>Millettea auriculate</i>	Gauj	Leguminosae	C
9.	<i>Millettea recemosa</i>	Junjinar	Leguminosae	C
10.	<i>Pueraria tuberosa</i>	Ghorbel	Leguminosae	C
11.	<i>Vitis linnei</i>	Jangli angur	Ampelideae	C

Floral Diversity within Core Zone

S. No.	Scientific name	Local Name	Family	Habit
12.	<i>Vitis tomentosa</i>	Purbel	Ampelideae	C
13.	<i>Zyzyphus rugosa</i>	Churna	Rhamnaceae	C
Grasses				
1.	<i>Andropogon intermedius</i>	Ghonsi	-	G
2.	<i>Andropogon pumilus</i>	Dewartari	-	G
3.	<i>Arthraxon quartianus</i>	Basin	-	G
4.	<i>Apluda mutica</i>	Phuli	-	G
5.	<i>Bombusa arundinaceae</i>	Kantabans	-	G
6.	<i>Chionachne koenigii</i>	Kurpi	-	G
7.	<i>Chrysopogon montanus</i>	Chikula	-	G
8.	<i>Coix lacrumajobi</i>	Garu	-	G
9.	<i>Cymbopogon martini</i>	Rusa	-	G
10.	<i>Cynodon dactylon</i>	Doob	-	G
11.	<i>Dendrocalamus strictus</i>	Bans	-	G
12.	<i>Eragrostis tenella</i>	Bhurbhusi	-	G
13.	<i>Dichanthium annulatum</i>	Marwel	-	G
14.	<i>Eulali trispicata</i>	Chunai	-	G
15.	<i>Eulaliopsis binata</i>	Sabai	-	G
16.	<i>Heteropogon contortus</i>	Sukla	-	G
17.	<i>Imperata cylidrica</i>	Chhir	-	G
18.	<i>Iseilema prostratum</i>	Ukri	-	G
19.	<i>Sehima sulcatum</i>	Paonia	-	G
20.	<i>Sorghum halepense</i>	Barru	-	G
21.	<i>Themeda caudata</i>	Gunhar	-	G
22.	<i>Thysanolaena maxima</i>	Phulbahari.	-	G
23.	<i>Saccharum munja</i>	Munj0	-	G
24.	<i>Sehima nervosum</i>	Shedo	-	G

(b) List of existing floristic composition within Buffer zone

S. No.	Scientific name	Local Name	Family	Habit
1.	<i>Acacia catechu</i>	Khair	Mimosaceae	T
2.	<i>Acacia arabica</i>	Babul	Laguminosae	T
3.	<i>Acacia leucophloea</i>	Reunja	Mimosaceae	T
4.	<i>Adinacordifolia</i>	Haldu	Rubiaceae	T
5.	<i>Boswellia serrata</i>	Salayi	Burseraceae	T
6.	<i>Bridelea retusa</i>	Kasai	Euphorbiaceae	T
7.	<i>Buchnanian lanzan</i>	Achar	Anacardiaceae	T
8.	<i>Butea Monosperma</i>	Palash	Leguminaceae	T
9.	<i>Aegle marmelos</i>	Bel	Rutaceae	T
10.	<i>Ailanthus excelsa</i>	Mahaneem	Simaroubaceae	T
11.	<i>Careya arborea</i>	Wild Guava/ kumbhi	Palmae	S
12.	<i>Anogeissus latifolia</i>	Dhaura	Combretaceae	T
13.	<i>Casearia graveolens</i>	Gilehi	Samydaceae	T
14.	<i>Eriolaena hookeriana</i>	Bothi	Sterculiaceae	T
15.	<i>Erythrina suberosa</i>	Panjra	Leguminosae	T
16.	<i>Elaeodendron glaucum</i>	Jamrasi	Celastraceae	T
17.	<i>Dillenia aurea</i>	Karmata	Dilleniaceae	T
18.	<i>Delonix regia</i>	Gulmohar	Laguminosae	T
19.	<i>Dillenia pentagyna</i>	Kalla	Dilleniaceae	T
20.	<i>Ehretia laevis</i>	Datranga	Burseraceae	T
21.	<i>Cordia latifolia</i>	Bara lasora	Baraginaceae	T
22.	<i>Cordia macleodii</i>	Silwat	Baraginaceae	T
23.	<i>Dalbergia latifolia</i>	Shisham	Leguminosae	T
24.	<i>Dalbergia sissoo</i>	Sissoo	Leguminosae	T
25.	<i>Euphorbia nivulia, Ham</i>	Thuar	Euphorbiaceae	T
26.	<i>Ficus hispida</i>	Kutummar	Moraceae	T
27.	<i>Chloroxylon swietenia</i>	Bhirra	Caesalpiniaceae	T
28.	<i>Cleistanthus collinus</i>	Garari	Meliaceae	T
29.	<i>Cochlospermum religiosum</i>	Galgal	Euphorbiaceae	T
30.	<i>Eucalyptus spp.</i>	Nilgiri	Myrtaceae	T

S. No.	Scientific name	Local Name	Family	Habit
31.	<i>Ficus lacor</i>	Pakar	Moraceae	T
32.	<i>Bauhinia malabarica</i>	Amta	Leguminaceae	T
33.	<i>Casearia elliptica</i>	Tondri	Samydaceae	T
34.	<i>Cordia dichotoma</i>	Lisoda/Gunda	Rubiaceae	T
35.	<i>Litsea sebifera</i>	Maida lakri	Lauraceae	T
36.	<i>Mitragyna parvifolia</i>	Mundi	Rubiaceae	T
37.	<i>Pterocarpus marsupium</i>	Bija	Leguminosae	T
38.	<i>Randia Dumetorum</i>	Mainphal	Rubiaceae	T
39.	<i>Schleichera oleosa</i>	Kusum	Sapindaceae	T
40.	<i>Santalum album</i>	Chandan	Santalaceae	T
41.	<i>Spondias pinnata</i>	Amra	Anacardiaceae	T
42.	<i>Sterculia villosa</i>	Udal	Anacardiaceae	T
43.	<i>Stereospermum suaveolens</i>	Padar	Bignoniaceae	T
44.	<i>Terminalia belerica</i>	Bahera	Combretaceae	T
45.	<i>Psidium guava</i>	Amrud	Myrtaceae	T
46.	<i>Dalbergia paniculata</i>	Dhobin	Fabaceae	T
47.	<i>Diospyros melanoxylon</i>	Tendu	Lythraceae	T
48.	<i>Diospyros monatana</i>	Bistendu	Lythraceae	T
49.	<i>Ficus benghalensis</i>	Bad	Moraceae	T
50.	<i>Emblica officinalis</i>	Amla	Euphorbiaceae	T
51.	<i>Ficus glomerata</i>	Gular	Moraceae	T
52.	<i>Ficus hispida</i>	Hairy fig	Moraceae	T
53.	<i>Ficus religiosa</i>	Pipal	Moraceae	T
54.	<i>Strychnos potatorum</i>	Nirmali	Laguminosae	T
55.	<i>Grewia disperma</i>	Chaturli	Tiliaceae	T
56.	<i>Grewia tiliaefolia</i>	Dhaman	Tiliaceae	T
57.	<i>Holoptelea integrifolia</i>	Papri/Churel	Asclepiadaceae	T
58.	<i>Gardenia latifolia</i>	Papra	Rubiaceae	T
59.	<i>Gardenia turgida</i>	Phetra	Rubiaceae	T
60.	<i>Garuga pennata</i>	Kekad	Burseraceae	T

S. No.	Scientific name	Local Name	Family	Habit
61.	<i>Gmelina arborea</i>	Gamari	Verbenaceae	T
62.	<i>Hymenodictyon excelsum</i>	Bhonrsal	Rubiaceae	T
63.	<i>Ixota arborea</i>	Lokhandi	Rubiaceae	T
64.	<i>Kydia calycina</i>	Pula	Malvaceae	T
65.	<i>Langerstroemia parviflora</i>	Lendia	Lythraceae	T
66.	<i>Schrebera switenioides</i>	Mokha	Oleaceae	T
67.	<i>Semecarpus anacardium</i>	Bhilwa	Anacardiaceae	T
68.	<i>Xylia xylocarpa</i>	Suria	Mimisaceae	T
69.	<i>Lannea coramandelica</i>	Mohin/ Ash tree	Anacardiaceae	T
70.	<i>Pterocarpus marsupium</i>	Bija	Leguminosae	T
71.	<i>Pongamia pinnata</i>	Karanj	Fabaceae	T
72.	<i>Schleichera oleosa</i>	Kusum	Sapindaceae	T
73.	<i>Spondias pinnata</i>	Amra	Leguminosae	T
74.	<i>Sterculia urens</i>	Kullu	Euphorbiaceae	T
75.	<i>Stereospermum suaveolens</i>	Paddar	Bignoniaceae	T
76.	<i>Syzygium cumini</i>	Jamun	Myrtaceae	T
77.	<i>Tamarindus indica</i>	Imli	Caesalpinaceae	T
78.	<i>Hardwickia binata</i>	Anjan	Leguminosae	T
79.	<i>Terminalia tomentosa</i>	Saja	Combretaceae	T
80.	<i>Zizyphus maurandia</i>	Bar	Rhamnaceae	T
81.	<i>Tectona grandis</i>	Teak	Verbinaceae	T
82.	<i>Terminalia arjuna</i>	Arjun	Combretaceae	T
Shrubs				
1.	<i>Arbus precatotrius</i>	Gunj	Papilionaceae	S
2.	<i>Achyranthes aspera</i>	Chirchira	Amarantaceae	S
3.	<i>Adhatoda vasica</i>	Adusa	Acanthaceae	S
4.	<i>Ageratum conyzoids</i>	-	Compositae	S
5.	<i>Andrographis paniculata</i>	Chirchira	Acanthaceae	S
6.	<i>Antidesma ghaesensbilla</i>	Jondhri	Euphorbiaceae	S
7.	<i>Azanza lampus</i>	Banakpas	Malvaceae	S

S. No.	Scientific name	Local Name	Family	Habit
8.	<i>Barleria cristata</i>	Koranta	Acanthaceae	S
9.	<i>Barleria mantana</i>	Korat	Verbenaceae	S
10.	<i>Carissa opaca</i>	Karonda	Apocynaceae	S
11.	<i>Calotropis procera</i>	Aak	Asclepiadiaceae	S
12.	<i>Cassia Tora</i>	Tarwar	Laguminosae	S
13.	<i>Clerodendron serratum</i>	Barangi	Verbenaceae	S
14.	<i>Colebrookia oppositifolia</i>	Bhandar	Labiatae	S
15.	<i>Crotalaria juncea</i>	Son	Laguminosae	S
16.	<i>Dalbergia voluvilis</i>	Birach	Laguminosae	S
17.	<i>Desmodium pulchellum</i>	Chikati	Laguminosae	S
18.	<i>Desmodium velutinum</i>	Chikati	Laguminosae	S
19.	<i>Dioscorea anguina</i>	Bansora	Dioscoreaceae	S
20.	<i>Dondonoea visocosa</i>	Jangli Mehandi	Sapindaceae	S
21.	<i>Embelia robusta</i>	Baibirang	Myrsiaceae	S
22.	<i>Eranthemum purpureseens</i>	Bantulsi	Acanthaceae	S
23.	<i>Gardnia lucida</i>	Dikamali	Rukbiaceae	S
24.	<i>Grewia hirsuta</i>	Gudsaki	Tiliaceae	S
25.	<i>Grewia sapida</i>	Phalsa	Tiliaceae	S
26.	<i>Helicteres isora</i>	Marorphali	Sterculiaceae	S
27.	<i>Indigophera pulchella</i>	Neel	Papilionaceae	S
28.	<i>Ipomea spp.</i>	Besharm	Convolvulaceae	S
29.	<i>Jasminum multiflorum</i>	Kunda	Oleaceae	S
30.	<i>Justieia betonica</i>	Kokander	Acanthaceae	S
31.	<i>Jatropha curcas</i>	Rattan jot	Euphorbiaceae	S
32.	<i>Lantana camara</i>	Raimunia	Verbenaceae	S
33.	<i>Maytenus emarginata</i>	Bahrti	Celastraceae	S
34.	<i>Malastoma malababathricum</i>	Palor	Malastomaceae	S
35.	<i>Maghanian nana</i>	Chepati	Papilionaceae	S
36.	<i>Moghania semilata</i>	Banrahar	Papilionaceae	S
37.	<i>Nyctanthes arbortristis</i>	Harsingar	Oleaceae	S

S. No.	Scientific name	Local Name	Family	Habit
38.	<i>Olax scandens</i>	Harduli	Oleaceae	S
39.	<i>Petalidium barberioides</i>	Inderjata	Acanthaceae	S
40.	<i>Phoenix acaulis</i>	Chhind	Palmeae	S
41.	<i>Sida acuta</i>	Kareta	Mavaceae	S
42.	<i>Sida cardifolia</i>	Mamas	Mavaceae	S
43.	<i>Strobilanthes auricalatus</i>	Muruadona	Acanthaceae	S
44.	<i>Tephrosia candida</i>	Unhali	Leguminoceae	S
45.	<i>Trema politoria</i>	Jilmila	Ulmaceae	S
46.	<i>Tribulus terrestris</i>	Gokhru	Zygophyllaceae	S
47.	<i>Triumfetta bartramia</i>	Chirpat	Tiliaceae	S
48.	<i>Triumfetta pilosa</i>	Chikati	Tiliaceae	S
49.	<i>Uraria labata</i>	-	Malvaceae	S
50.	<i>Urena siuta</i>	-	Malvaceae	S
51.	<i>Vitex negundo</i>	Nirgudi	Verbenaceae	S
52.	<i>Waltheria indica</i>	Haduli	Sterculiaceae	S
53.	<i>Zizyphus rotundifolia</i>	Jharberi	Rhamnaceae	S
Herbs				
1.	<i>Asparagus racemosum</i>	Sataori	Liliaceae	H
2.	<i>Careya herabacea</i>	Chhiti Kumbhi	Myrtaceae	H
3.	<i>Chlorophyllum tuberosum</i>	Safed Musali	Liliaceae	H
4.	<i>Curculigo orachiolides</i>	Kali musli	Amaryullidaceae	H
5.	<i>Hemidesmum indicus</i>	Sarsaparilla	Asclepidiaceae	H
6.	<i>Hibiscus cancellatus</i>	Ambari	Malovaceae	H
7.	<i>Lanandula burmanni</i>	-	Labistea	H
8.	<i>Leea rotusta</i>	Korum	Ampelidaceae	H
9.	<i>Micromeria capitellata</i>	-	Labiataeae	H
10.	<i>Napeta ruderalis</i>	-	Labiataeae	H
11.	<i>Polygala chinesis</i>	Bijnori	Pigalaceae	H
12.	<i>Rubia cordifolis</i>	Manjeti	Rubiaceae	H
13.	<i>Tamarix ericoides</i>	Jhau	Tamaricaceae	H

S. No.	Scientific name	Local Name	Family	Habit
14.	<i>Zingibar capitatum</i>	Randa	Zingiberaceae	H
15.	<i>Ocimum sactum</i>	Tulsi	Labiatae	H
Epiphytes & Parasites				
1.	<i>Cuscuta reflexa</i>	Amarbel	Canvolvulaceae	-
2.	<i>Laranthus logiflorus</i>	Bandha	Laranthaceae	-
3.	<i>Visum nepalene</i>	Bandha	Loranthaceae	-
4.	<i>Orodanche oegyptica</i>	Bandha	Prkobancheaceae	-
Climbers				
1.	<i>Acacia caesia</i>	Gurar	Leguminosae	C
2.	<i>Acacia pennata</i>	Raoni	Mimoseae	C
3.	<i>Bauhinia vahlli</i>	Mahul	Leguminosae	C
4.	<i>Butea superba</i>	Palasbel	Leguminosae	C
5.	<i>Butea parvifolia</i>	Palasbel	Leguminosae	C
6.	<i>Celastrus paniculata</i>	Malkangini	Celastraceae	C
7.	<i>Combretum decandrum</i>	Piwarbel	Combretaceae	C
8.	<i>Dioscorea belophylla</i>	Musalkand	Dioscoreaceae	C
9.	<i>Dioscorea bulbifera</i>	Gothalu	Dioscoreaceae	C
10.	<i>Ichnocarpus frutescens</i>	Dhimarbel	Apocynaceae	C
11.	<i>Marsdenia hamiltonia</i>	Dudhibel	Asclepiadaceae	C
12.	<i>Millettea auriculate</i>	Gauj	Leguminosae	C
13.	<i>Millettea recemosa</i>	Junjinar	Leguminosae	C
14.	<i>Mucuna pruriens</i>	Kewanch	Leguminosae	C
15.	<i>Pueraria tuberosa</i>	Ghorbel	Leguminosae	C
16.	<i>Vitis linnei</i>	Jangli angur	Ampelideae	C
17.	<i>Vitis fomentosa</i>	Purbel	Ampelideae	C
18.	<i>Zyzyphus rugosa</i>	Churna	Rhamnaceae	C
Grasses				
1.	<i>Andropogon intermedius</i>	Ghonsi	-	G
2.	<i>Andopogon pumilus</i>	Dewartari	-	G
3.	<i>Arthraxon quartinianus</i>	Basin	-	G

S. No.	Scientific name	Local Name	Family	Habit
4.	<i>Apluda mutica</i>	Phuli	-	G
5.	<i>Bombusa arundinaceae</i>	Kantabans	-	G
6.	<i>Chionachne koenigii</i>	Kurpi	-	G
7.	<i>Chrysopogon montanus</i>	Chikula	-	G
8.	<i>Coix lacrumajobi</i>	Garu	-	G
9.	<i>Cymbopogon martini</i>	Rusa	-	G
10.	<i>Cynodon dactylon</i>	Doob	-	G
11.	<i>Dendrocalamus strictus</i>	Bans	-	G
12.	<i>Eragrostis tenella</i>	Bhurbhusi	-	G
13.	<i>Dichanthium annulatum</i>	Marwel	-	G
14.	<i>Eulali trispicata</i>	Chunai	-	G
15.	<i>Eulaliopsis binata</i>	Sabai	-	G
16.	<i>Heteropogon contortus</i>	Sukla	-	G
17.	<i>Imperata cylidrica</i>	Chhir	-	G
18.	<i>Iseilema prostratum</i>	Ukri	-	G
19.	<i>Sehima sulcatum</i>	Paonia	-	G
20.	<i>Sorghum halepense</i>	Barru	-	G
21.	<i>Themeda caudata</i>	Gunhar	-	G
22.	<i>Thysanolaena maxima</i>	Phulbahari	-	G
23.	<i>Saccharum munja</i>	Munj	-	G
24.	<i>Imperata Cylidrica</i>	Chhir	-	G
25.	<i>Sehima nervosum</i>	Shedo	-	G

Status of RET Species

During Field Survey, rare, endangered and threatened species of flora recorded under threatened status in the study area are as follows:

1. Endemic- *Hardwickia binnata*, *Mucuna prurita*
2. Locally Endangered Species
 - A. *Butea monosperma*
 - B. *Clerodendron serratum*
 - C. *Curculigo orchioides*
 - D. *Curcuma augustifolia*
 - E. *Pterocarpus marsupium*.
3. According to Chhattisgarh State Medicinal Plant Board endangered species are:
 - A. *Diospyros peniculato*
 - B. *Pterocarpus marsupium*
 - C. *Terminalia arjuna*
 - D. *Grewia rothi*
 - E. *Vitex trifolia*-Critically endangered.

ANNEXURE - III

INVENTORY OF FAUNAL DIVERSITY IN THE CORE & BUFFER ZONE OF PROPOSED MINE SITE

Based on Actual Sighting, based on inputs from locals and Perused from Secondary Data

a) Core Zone

S. No.	Scientific name	Common name	Status according to IWPA, 1972
Mammalian			
1.	<i>Vulpes bengalensis</i>	Common fox	Sch. II
2.	<i>Rattus rattus</i>	Black rat	Sch. V
3.	<i>Tatera indica</i>	Indian Gerbil	Sch. V
4.	<i>Funambulus palmarum</i>	Indian palm Squirrel	Sch. IV
5.	<i>Canis aureus</i>	Jackal	Sch. III
6.	<i>Boselaphus tragocamelus</i>	Nilgai	Sch. III
7.	<i>Axis axis</i>	Chital	Sch. III
8.	<i>Sus scrofa</i>	Wild boar	Sch. III
9.	<i>Felis chaus</i>	Jungle cat	Sch. II
10.	<i>Herpestes edwardsii</i>	Common Mongoose	Sch. II
11.	<i>Lepus nigricollis</i>	Indian hare	Sch. IV
12.	<i>Hystrix indica</i>	Porcupine	Sch. IV
Reptilian			
1.	<i>Ptyas mucosa</i>	Indian Rat snake	Sch. II
2.	<i>Hemidactylus flaviviridis</i>	House Gecko/Chhipkali	Sch. V
3.	<i>Calotes versicolor</i>	Common Garden Lizard/ Girgit	Sch. IV
4.	<i>Bungarus candidus</i>	Common krait	Sch. IV
5.	<i>Naja naja</i>	Naag/Kobra	Sch. II
6.	<i>Chamaeleo zeylanicus</i>	Indian Chameleon	Sch. IV
7.	<i>Vipera russelli</i>	Russell's viper	Sch. II
8.	<i>Mabuya carinata</i>	Brahminy Skink	Sch. IV
Amphibian			
1.	<i>Rana tigrina</i>	Common Frog	Sch. IV
2.	<i>Bufo melanostictus</i>	Common Indian toad	Sch. IV
3.	<i>Euphyctis hexadactylus</i>	Rana hexadactyla	Sch. IV

S. No.	Scientific name	Common name	Status according to IWPA, 1972
Butterflies			
1.	<i>Danaus chrysippus</i>	Plain tiger	Sch. IV
2.	<i>Pachliopta hector</i>	Crimson rose	Sch. IV
3.	<i>Hypolimnas bolina</i>	Great eggfly	Sch. IV
4.	<i>Euploea core</i>	Common crow	Sch. IV
6.	<i>Papilio demoleus</i>	Lime butterfly	Sch. IV
7.	<i>Eurema hecabe</i>	Common grass yellow	Sch. IV
8.	<i>Junonia almana</i>	Peacock pansy	Sch. IV
9.	<i>Catopsilia pomona</i>	Common emigrant	Sch. IV
10.	<i>Leptosia nina</i>	Psyche	Sch. IV
Arthropods and Mollusca			
1.	<i>Apis indica</i>	Choti Madhumakkhi	-
2.	<i>Periplaneta americana</i>	Cockroach	-
3.	<i>Sympetrum fonscolombii</i>	Red veined darter dragonfly	-
4.	<i>Diplacodes trivialis</i>	Ground skimmer dragonfly	-
5.	<i>Stegodyphus sp.</i>	Social Spider	-
Avifaunal (Birds)			
1.	<i>Bubulcus ibis</i>	Cattle egret	Sch. IV
2.	<i>Columba livia</i>	Blue rock pigeon	Sch. IV
3.	<i>Egretta garzetta</i>	Little egret	Sch. IV
4.	<i>Alcedo atthis</i>	Common kingfisher	Sch. IV
5.	<i>Caprimulgus asiaticus</i>	Nightjar	Sch. IV
6.	<i>Coracias benghalensis</i>	Indian roller	Sch. IV
7.	<i>Copsychus saularis</i>	Oriental magpie robin	Sch. IV
8.	<i>Saxicoloides fulicata</i>	Indian robin	Sch. IV
9.	<i>Acridotheres tristis</i>	Common myna	Sch. IV
10.	<i>Spilopelia senegalensis</i>	Laughing dove	Sch. IV
11.	<i>Ardeola grayii</i>	Pond heron	Sch. IV
12.	<i>Aegithina tiphia</i>	Common iora	Sch. IV
13.	<i>Anas crecca</i>	Common teal	Sch. IV
14.	<i>Passer domesticus</i>	House sparrow	Sch. IV

Birds

S. No.	Scientific name	Common name	Status according to IWPA, 1972
15.	<i>Corvus macrorhynchos</i>	Jungle crow	Sch. V
16.	<i>Corvus splendens</i>	House crow	Sch. V
17.	<i>Merops orientalis</i>	Small bee-eater	Sch. IV
18.	<i>Streptopelia decaocto</i>	Eurasian collared dove	Sch. IV
19.	<i>Milvus migrans</i>	Black kite	Sch. IV
20.	<i>Pycnonotus cafer</i>	Red vented bulbul	Sch. IV
21.	<i>Psittacula krameri</i>	Rose ringed parakeet	Sch. IV
22.	<i>Ploceus philippinus</i>	Baya-weaver bird	Sch. IV
23.	<i>Sturnus pagodarum</i>	Brahminy starling	Sch. IV
24.	<i>Eudynamis scolopaceus</i>	Asian koel	Sch. IV
25.	<i>Oriolus oriolus</i>	Golden Oriole	Sch. IV
26.	<i>Cuculus micropterus</i>	Indian Cuckoo	Sch. IV
27.	<i>Apus affinis</i>	House swift	Sch. IV
28.	<i>Gallus gallus</i>	Jungle fowl	Sch. IV
29.	<i>Milvus migrans</i>	Black kite	Sch. IV
30.	<i>Haliastur indus</i>	Brahminy kite	Sch. IV
31.	<i>Tyto alba</i>	Barn owl	Sch. IV

B. Faunal Diversity in Buffer Zone

S. No.	Scientific name	Common name	Status according to IWPA, 1972
Mammalian			
1.	<i>Canis aureus</i>	Jackal	Sch. II
2.	<i>Hyaena hyaena</i>	Hyena	Sch. III
3.	<i>Melursus ursinus</i>	Sloth bear	Sch. I
4.	<i>Vulpes bengalensis</i>	Common fox	Sch. II
5.	<i>Rattus rattus</i>	Black rat	Sch. V
6.	<i>Rattus norvegicus</i>	Field mouse	Sch. V
7.	<i>Bandicota indica</i>	Bandicoot	Sch. V
8.	<i>Tatera indica</i>	Indian Gerbil	Sch. V
9.	<i>Funambulus palmarumi</i>	Indian Palm Squirrel	Sch. IV
10.	<i>Boselaphus tragocamelus</i>	Nilgai	Sch. III
11.	<i>Elephas maximus</i>	Elephant	Sch. I
11.	<i>Rhinolophus spp.</i>	Horseshoe Bat	Sch. V
12.	<i>Pteropus giganteus</i>	Indian flying fox	Sch. V
13.	<i>Cervus unicolor</i>	Sambar	Sch. III
14.	<i>Axis axis</i>	Chital	Sch. III
15.	<i>Hystrix indica</i>	Porcupine	Sch. II
16.	<i>Herpestes edwardsii</i>	Common Mongoose	Sch. II
17.	<i>Presbytis entellus</i>	Common langur	Sch. II
18.	<i>Macaca mulatta</i>	Rhesus macaque	Sch. II
19.	<i>Lepus nigricollis</i>	Indian hare	Sch. IV
20.	<i>Sus scrofa</i>	Wild boar	Sch. III
21.	<i>Cuon alpinus</i>	Wild dog	Sch. II
21.	<i>Panthera pardus</i>	Common leopard	Sch. I
Reptilian			
1.	<i>Vipera russelli</i>	Russell's viper	Sch. II
2.	<i>Varanus bengalensis</i>	Monitor lizard	Sch. I
3.	<i>Ptyas mucosa</i>	Indian Rat snake	Sch. II
4.	<i>Lycodon aulicus</i>	Common wolf snake	Sch. IV
5.	<i>Bungarus candidus</i>	Common krait	Sch. IV
6.	<i>Boiga trigonata</i>	Cat snake	Sch. IV

Faunal Diversity in Buffer Zone

S. No.	Scientific name	Common name	Status according to IWPA, 1972
7.	<i>Eryx johnii</i>	Red sand Boa	Sch. IV
8.	<i>Naja naja</i>	Naag/Kobra	Sch. II
9.	<i>Hemidactylus flaviviridis</i>	House Gecko/Chhipkali	Sch. V
10.	<i>Melanochelys trijuga</i>	Indian pond turtle	Sch. IV
11.	<i>Calotes versicolor</i>	Common Garden Lizard/ Girgit	Sch. IV
12.	<i>Chamaeleo zeylanicus</i>	Indian Chameleon	Sch. IV
13.	<i>Mabuya carinata</i>	Brahminy Skink	Sch. IV
14.	<i>Pythan molurns</i>	Pythan	Sch. I
Amphibian			
1.	<i>Rana limnocharis</i>	Indian cricket Frog	Sch. IV
2.	<i>Hoplobatrachus tigerinus</i>	Indian bull frog	Sch. IV
3.	<i>Rana tigrina</i>	Common Frog	Sch. IV
4.	<i>Bufo melanostictus</i>	Common Indian toad	Sch. IV
5.	<i>Euphlyctis hexadactylus</i>	Rana hexadactyla	Sch. IV
6.	<i>Hyla goeldii</i>	Tree frog	Sch. IV
Butterflies			
1.	<i>Danaus chrysippus</i>	Plain tiger	Sch. IV
2.	<i>Pachliopta hector</i>	Crimson rose	Sch. IV
3.	<i>Hypolimnas bolina</i>	Great eggfly	Sch. IV
4.	<i>Papilio polymnestor</i>	Blue mormon	
5.	<i>Euploea core</i>	Common crow	Sch. IV
6.	<i>Neptis hylas</i>	Common sailer	Sch. IV
7.	<i>Papilio demoleus</i>	Lime butterfly	Sch. IV
8.	<i>Parantica aglea</i>	Glassy tiger	Sch. IV
9.	<i>Eurema hecabe</i>	Common grass yellow	Sch. IV
10.	<i>Junonia almana</i>	Peacock pansy	Sch. IV
11.	<i>Junonia orythia</i>	Blue pansy	Sch. IV
12.	<i>Junonia atlites</i>	Grey pansy	Sch. IV
13.	<i>Catopsilia pomona</i>	Common emigrant	Sch. IV
14.	<i>Leptosia nina</i>	Psyche	Sch. IV
15.	<i>Chilades parrhassius</i>	Small cupid	Sch. IV

S. No.	Scientific name	Common name	Status according to IWPA, 1972
16.	<i>Musca domestica</i>	Housfly	Sch. IV
17.	<i>Aedes aegypti</i>	Dengue mosquito	Sch. IV
18.	<i>Pieris napi</i>	Green- veined white butterfly	Sch. IV
19.	<i>Eurema brigitta</i>	Small grass yellow	Sch. IV
20.	<i>Parantica aglea</i>	Glassy tiger	Sch. IV
Arthropods and Mollusca			
1.	<i>Apis indica</i>	Choti Madhumakkhi	-
2.	<i>Apis dorsata</i>	Badi Madhumakkhi	-
3.	<i>Periplaneta americana</i>	Cockroach	-
4.	<i>Buthus sp.</i>	Scorpion	-
5.	<i>Sympetrum fonscolombii</i>	Red veined darter dragonfly	-
6.	<i>Diplacodes trivialis</i>	Ground skimmer dragonfly	-
7.	<i>Stegodyphus sp.</i>	Social Spider	-
Avifaunal (Birds)			
1.	<i>Ardeola grayii</i>	Pond heron	Sch. IV
2.	<i>Acridotheres tristis</i>	Common myna	Sch. IV
3.	<i>Eudynamys scolopaceus</i>	Asian koel	Sch. IV
4.	<i>Alcedo atthis</i>	Common kingfisher	Sch. IV
5.	<i>Egretta garzetta</i>	Little egret	Sch. IV
6.	<i>Oriolus oriolus</i>	Golden Oriole	Sch. IV
7.	<i>Bubulcus ibis</i>	Cattle egret	Sch. IV
8.	<i>Caprimulgus asiaticus</i>	Nightjar	Sch. IV
9.	<i>Streptopelia decaocto</i>	Eurasian collared dove	Sch. IV
10.	<i>Milvus migrans</i>	Black kite	Sch. IV
11.	<i>Haliastur indus</i>	Brahminy kite	Sch. IV
12.	<i>Tockus birostris</i>	Indian Grey Hornbill	Sch. IV
13.	<i>Tyto alba</i>	Barn owl	Sch. IV
14.	<i>Accipiter badius</i>	Shikra	Sch. IV
15.	<i>Bubo bubo</i>	Eurasian Eagle Owl	Sch. IV
16.	<i>Merops orientalis</i>	Small bee- eater	Sch. IV
17.	<i>Corvus macrorhynchos</i>	Jungle crow	Sch. V
18.	<i>Corvus splendens</i>	Common crow	Sch. V

S. No.	Scientific name	Common name	Family
19.	<i>Passer domesticus</i>	House sparrow	Sch. IV
20.	<i>Nectarinia asiatica</i>	Purple sunbird	Sch. IV
21.	<i>Sturnus pagodarum</i>	Brahminy starling	Sch. IV
22.	<i>Pavo cristatus</i>	Peafowl	Sch. I
23.	<i>Psittacula krameri</i>	Rose ringed parakeet	Sch. IV
24.	<i>Turdoides striatus</i>	Jungle babbler	Sch. IV
25.	<i>Coracias benghalensis</i>	Indian roller	Sch. IV
26.	<i>Copsychus saularis</i>	Oriental magpie robin	Sch. IV
27.	<i>Saxicoloides fulicata</i>	Indian robin	Sch. IV
28.	<i>Vanellus indicus</i>	Red-wattled lapwing	Sch. IV
29.	<i>Ploceus philippinus</i>	Baya- weaver bird	Sch. IV
30.	<i>Gallus gallus</i>	Jungle fowl	Sch. IV
31.	<i>Apus affinis</i>	House swift	Sch. IV
32.	<i>Halcyon smyrnensis</i>	White throated kingfisher	Sch. IV
33.	<i>Francolinus pondicerianus</i>	Grey francolin	Sch. IV
34.	<i>Columba livia</i>	Blue rock pigeon	Sch. IV
35.	<i>Centropus sinensis</i>	Greater coucal	Sch. IV
36.	<i>Amaurornis phoenicurus</i>	White breasted water hen	Sch. IV
37.	<i>Pycnonotus cafer</i>	Red vented bulbul	Sch. IV

Analysis of Fauna

Two Schedule- I fauna was recorded in the study area during field survey as per (IWPA) Indian Wildlife Protection Act, 1972.

1.	Indian monitor lizard	<i>Varanus benglensis</i>	Sch. I
2.	Indian peafowl	<i>Pavo cristatus</i>	Sch. I
3.	Sloth bear	<i>Melursus ursinus</i>	Sch. I
4.	Elephant	<i>Elephas maximus</i>	Sch. I
5.	Indian Rock Python	<i>Python molurus</i>	Sch. I
6.	Common leopard	<i>Panthera pardus</i>	Sch. I

INVENTORY OF AQUATIC FLORA IN THE CORE & BUFFER ZONE OF PROPOSED MINE SITE

Based on Actual Sighting, based on inputs from locals and Perused from Secondary Data

S. No.	Scientific name	Common name	Family
Aquatic diversity of buffer zone			
1.	<i>Harpadon nehereus</i>	Bombil	-
2.	<i>Sperata seenghala</i>	Singara	-
3.	<i>Penaeus monodon</i>	Prawn	-
4.	<i>Labeo rohita</i>	Rohu	-
5.	<i>Oreochromis niloticus</i>	Tilapia	-
6.	<i>Lamellidens corrianus</i>	Shells	-
7.	<i>Rita rita</i>	Rita	-
8.	<i>Mastacembelus armatus</i>	Bam	-
9.	<i>Alysius tengara</i>	Tengara	-
10.	<i>Cirrhinas mrigala</i>	Mrigal	-
11.	<i>Boleophthalmus spp.</i>	Mudskippers	-
12.	<i>Catla catla</i>	Catla	-
13.	<i>Mugil cephalus</i>	Mullet	-

del
Sub Divisional Officer
Kawardha

[Signature]
Divisional Forest Officer
Kawardha Division

[Signature]
Chief Conservator of Forests
Durg Circle, Durg (C.G.)

परिशिष्ट-03

संचालनालय भौमिकी तथा खनिकर्म, छत्तीसगढ़

इन्द्रावती भवन, ब्लॉक 4, द्वितीय तल, अटल नगर जिला रायपुर, छत्तीसगढ़ - 492002

फोन 0771 - 2412840, 44. PBX No. 2412843 45 फैक्स : 0771 - 2412841 Email : dgm.cg@nic.in

क्रमांक 8752 / खनि 02 / बाक्स/नं.क. 09 / 2023

नवा रायपुर अटल नगर, दिनांक

प्रति,

1 DEC 2023

प्रबंध संचालक,

छत्तीसगढ़ मिनरल डेव्हलपमेंट कार्पोरेशन,

सेक्टर 24, ब्लॉक 7 ए, तृतीय तल,

नवा रायपुर अटल नगर (छ.ग.)

विषय:-

जिला कबीरधाम तहसील बोड़ला के ग्राम मुकाम रकबा 110.563 हे० क्षेत्र के पर्यावरण स्वीकृति हेतु EAC की 20वीं बैठक के माध्यम से चाही गई वांछित जानकारी उपलब्ध कराने बाबत ।

संदर्भ:-

आपका पत्र क्रमांक 950 / बाक्स/आईट / 2023 दिनांक 10.10.2023

-00-

विषयांतर्गत भारत सरकार, पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय द्वारा जारी कार्यवाही विवरण दिनांक 29.09.2023 के क्रम में आपके द्वारा जिला कबीरधाम तहसील बोड़ला स्थित मुकाम बाक्स/आईट खदान रकबा 110.563 हे० क्षेत्र पर सी०एम०डी०सी० द्वारा अवैध उत्खनन नहीं किए जाने के संबंध में प्रमाण पत्र उपलब्ध कराने हेतु निवेदन किया गया है ।

उपरोक्तानुसार कार्यालय कलेक्टर जिला कबीरधाम (छ०ग०) के पत्र पृ०क० 8689 / स्टेनो / अपर कले, 2023 दिनांक 10.10.2023 को प्राप्त पत्र की प्रति आपकी ओर आवश्यक कार्यवाही हेतु संलग्न कर प्रेषित है ।

संलग्न: उपरोक्तानुसार

DGM
संचालक 01/12/23
भौमिकी तथा खनिकर्म
छत्तीसगढ़

DGM
DGM(M)

01/12/23
Dehaudha
06/12/2023

Chhattisgarh Mineral Development
Corporation Limited
06 DEC 2023
Receipt No. 1951

dr

कार्यालय कलेक्टर जिला कबीरघाम (छ.ग.)

कवर्धा, दिनांक 10/10/2023

पृ.क्रमांक / 8689 / स्टेनो / अपर कले. / 2023

—: प्रमाण पत्र :-

मेसर्स छत्तीसगढ़ मिनरल डेव्हलपमेंट कार्पोरेशन लिमिटेड (मुकाम बाक्सार्ट खदान) ग्राम-मुकाम, तहसील-बोड़ला, जिला कबीरघाम (छ.ग.) स्थित बाक्सार्ट (मुख्य खनिज) खदान उत्खनन क्षमता-8,02,977.5 टन प्रतिवर्ष (3,84,615.4 टन प्रतिवर्ष (ROM) एंड OB 4,18,362.10 टन प्रतिवर्ष) व क्षेत्रफल-110.563 हेक्टेयर (निजी भूमि-17.401 हेक्टेयर एवं शासकीय भूमि-43.162 हेक्टेयर) के पर्यावरणीय स्वीकृति हेतु भारत सरकार पर्यावरण वन एवं जलवायु परिवर्तन मंत्रालय, नई दिल्ली की 20वीं बैठक दिनांक 21-22 सितम्बर 2023 के सरल क्रमांक 5 के बिंदु क्रमांक 8 " The project proponent needs to seek comments from the State EMG, if any illegal mining done by Project Proponent or not " के संबंध में प्रमाणित किया जाता है कि, मेसर्स छत्तीसगढ़ मिनरल डेव्हलपमेंट कार्पोरेशन लिमिटेड द्वारा किसी भी प्रकार का उक्त क्षेत्र में अवैध उत्खनन नहीं किया गया है। क्योंकि जिला प्रशासन द्वारा आज दिनांक 10.10.2023 की स्थिति में किसी भी प्रकार का भू-प्रवेश की अनुमति अथवा उक्त क्षेत्र में कार्य करने का कोई भी अधिकार मेसर्स छत्तीसगढ़ मिनरल डेव्हलपमेंट कार्पोरेशन लिमिटेड को प्रदाय नहीं किया गया है। अतः पुनः स्पष्ट किया जा रहा है कि, मेसर्स छत्तीसगढ़ मिनरल डेव्हलपमेंट कार्पोरेशन लिमिटेड द्वारा उक्त क्षेत्र में अवैध उत्खनन नहीं किया गया है।

पे/स्वा/न
1.12.23



अपर कलेक्टर
जिला कबीरघाम

पृ.क्रमांक / 8689 / स्टेनो / अपर कले, 2023

कवर्धा, दिनांक 10/10/2023

प्रतिलिपि :-

1. संचालक, संचालनालय भौमिकी तथा खनिकर्म, इन्द्रावती भवन, अटल नगर नवा रायपुर की ओर आवश्यक कार्यवाही हेतु अग्रेषित।
2. कलेक्टर (खनिज शाखा), जिला-कबीरघाम (छ.ग.) की ओर सूचनार्थ अग्रेषित।
3. प्रबंध संचालक, छत्तीसगढ़ मिनरल डेव्हलपमेंट कार्पोरेशन लिमिटेड नवा रायपुर की ओर सूचनार्थ अग्रेषित।

अपर कलेक्टर
जिला कबीरघाम

Ruler

Line Path Polygon Crde 3D path 3D polygon

Measure the distance between two points on the ground

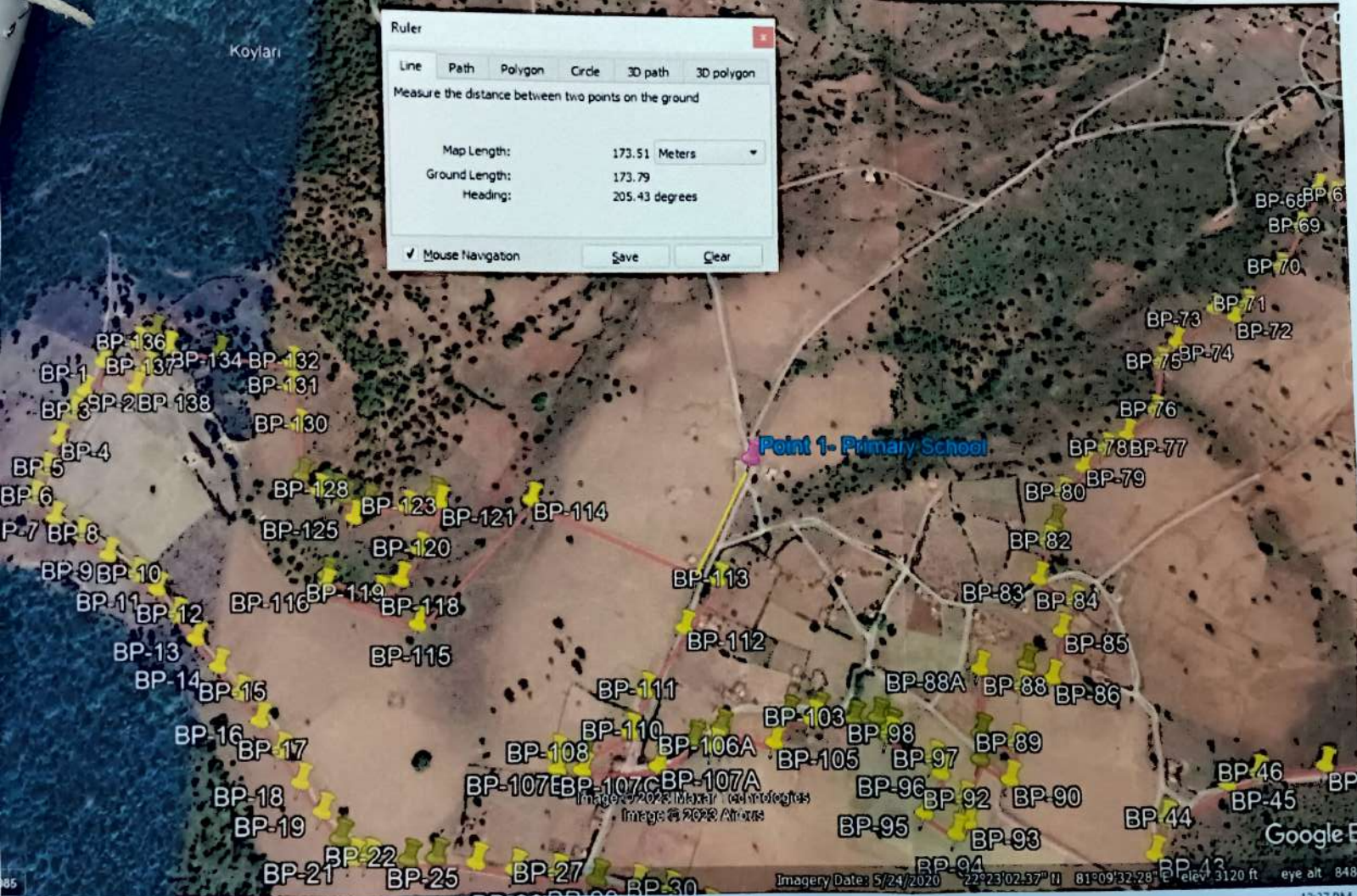
Map Length: 173.51 Meters

Ground Length: 173.79

Heading: 205.43 degrees

Mouse Navigation

Save Clear



MUKAM VILLAGE

Point 1- Primary School

Ruler

Line Path Polygon Circle 3D path 3D polygon

Measure the distance between two points on the ground

Map Length: 547.74 Meters

Ground Length: 548.88

Heading: 210.30 degrees

Mouse Navigation



Google Earth

Imagery Date: 5/24/2020 22°23'27.34" N 81°10'16.89" E elev. 2892 ft eye alt. 11246 ft

**AUTHENTICATED LIST OF
FLORA & FAUNA OF
MUKAM BAUXIT MINES
10 KM RADIOUS AREA FALLEN IN
CHHATTISGARH**

ANNEXURE - II

INVENTORY OF FLORAL DIVERSITY IN THE CORE & BUFFER ZONE OF MINE SITE

Based on Actual Sighting, based on inputs from locals and Perused from Secondary Data

Habit: Tree (T), Shrub (S), Herb (H), Grass (G), and Climber (C)

(a) Floral Diversity within Core Zone - Trees

S. No.	Scientific name	Local name	Family	Habit
1.	<i>Ficus religiosa</i>	Pipal	Moraceae	T
2.	<i>Azadiracta indica</i>	Neem	Maliaceae	T
3.	<i>Mangifera indica</i>	Mango	Anacardiaceae	T
4.	<i>Cassia fistula</i>	Amaltas	Laguminosae	T
5.	<i>Albizzia lebeck</i>	Kala Siris	Fabaceae	T
6.	<i>Albizzia chinensis</i>	Kiragi	Laguminosae	T
7.	<i>Albizzia odoratissima</i>	Chichwa	Laguminosae	T
8.	<i>Anona squamosa</i>	Sitafal	Anonaceae	T
9.	<i>Albizzia procera</i>	Safed Siris	Laguminosae	T
10.	<i>Bauhinia variegata</i>	Kachnar	Laguminosae	T
11.	<i>Bauhinia racemosa</i>	Asta	Laguminosae	T
12.	<i>Pongamia Pinnata</i>	Karanj	Laguminosae	T
13.	<i>Madhuca indica</i>	Mahua	Sapotaceae	T
14.	<i>Diospyros monatana</i>	Bistendu	Ebenaceae	T
15.	<i>Eriolaena hookeriana</i>	Bothi	Sterculiaceae	T
16.	<i>Erythrina suberosa</i>	Panjra	Leguminosae	T
17.	<i>Euphorbia nivulia</i>	Thuar	Euphorbiaceae	T
18.	<i>Ficus hispida</i>	Kutumar	Moraceae	T
19.	<i>Ficus lacor</i>	Pakar	Moraceae	T
20.	<i>Flacourtia Indica</i>	Kakai	Bixaceae	T
21.	<i>Randia dumetorum</i>	Mainphat	Rubiaceae	T
22.	<i>Schleichera oleosa</i>	Kusum	Sapindaceae	T
23.	<i>Spondias pinnata</i>	Amra	Anacardiaceae	T
24.	<i>Tamarindus indica</i>	Imli	Caesalpinaceae	T
25.	<i>Tectona grandis</i>	Teak	Verbinaceae	T
26.	<i>Syzygium cumini</i>	Jamun	Myrtaceae	T
Shrubs				
1.	<i>Arbus precatotrius</i>	Gunj	Papilionaceae	S
2.	<i>Achyranthes aspera</i>	Chirchira	Amarantaceae	S

(a) Floral Diversity within Core Zone

S. No.	Scientific name	Local Name	Family	Habit
3.	<i>Adhatoda vasica</i>	Adusa	Acanthaceae	S
4.	<i>Andrographis paniculata</i>	Chirchira	Acanthaceae	S
5.	<i>Antidesma ghaesensbilla</i>	Jondhri	Euphorbiaceae	S
6.	<i>Azanza lampus</i>	Banakpas	Malvaceae	S
8.	<i>Carissa opaca</i>	Karonda	Apocynaceae	S
9.	<i>Calotropis procera</i>	Aak	Asclepediaceae	S
10.	<i>Cassia Tora</i>	Tarwar	Laguminosae	S
11.	<i>Clerodendronserratum</i>	Barangi	Verbenaceae	S
12.	<i>Colebrookia oppositifolia</i>	Bhandar	Labiatae	S
13.	<i>Crotalaria juncea</i>	Son	Laguminosae	S
14.	<i>Dalbergia voluvilis</i>	Birach	Laguminosae	S
15.	<i>Desmodium pulchellum</i>	Chikati	Laguminosae	S
16.	<i>Dondonoea viscosa</i>	Jangli Mehandi	Sapindaceae	S
17.	<i>Embelia robusta</i>	Baibirang	Myrsiaceae	S
18.	<i>Eranthemum purpureseens</i>	Bantulsi	Acanthaceae	S
19.	<i>Gardnia lucida</i>	Dikamali	Rukbiaceae	S
20.	<i>Grewia hirsuta</i>	Gudsaki	Tiliaceae	S
21.	<i>Indigophera pulchella</i>	Neel	Papilionaceae	S
22.	<i>Ipomea spp.</i>	Besharm	Convolvulaceae	S
23.	<i>Jasminum multiflorum</i>	Kunda	Oleaceae	S
24.	<i>Jatropha curcas</i>	Rattanjot	Euphorbiaceae	S
25.	<i>Lantana camara</i>	Raimunia	Verbenaceae	S
26.	<i>Moghania semilata</i>	Banrahar	Papilionaceae	S
27.	<i>Nyctanthes arbortristis</i>	Harsingar	Oleaceae	S
28.	<i>Olax scandens</i>	Harduli	Oleaceae	S
29.	<i>Petalidiun barberioides</i>	Inderjata	Acanthaceae	S
30.	<i>Phoenix acaulis</i>	Chhind	Palmeae	S
31.	<i>Strobilanthes auricalatus</i>	Muruadona	Acanthaceae	S
32.	<i>Tephrosia candida</i>	Unhali	Leguminoceae	S
33.	<i>Trema politoria</i>	Jilmila	Ulmaceae	S
34.	<i>Tribulus terrestris</i>	Gokhru	Zygophyllaceae	S
35.	<i>Uraria labata</i>	-	Malvaceae	S

Floral Diversity within Core Zone

S. No.	Scientific name	Local Name	Family	Habit
36.	<i>Urena siuta</i>	-	Malvaceae	S
37.	<i>Zizyphus rotundifolia</i>	Jharberi	Rhamnaceae	S
Herbs				
1.	<i>Asparagus racemosum</i>	Sataori	Liliaceae	H
2.	<i>Careya herabacea</i>	Chhiti Kumbhi	Myrtaceae	H
3.	<i>Hemidesmum indicus</i>	Sarsaparilla	Asclepidaceae	H
4.	<i>Hibiscus cancellatus</i>	Ambari	Malvaceae	H
5.	<i>Lanandula burmanni</i>	-	Labiateae	H
6.	<i>Leea rotusta</i>	Korum	Ampelidaceae	H
7.	<i>Micromeria capitellata</i>	-	Labiataeae	H
8.	<i>Napeta ruderalis</i>	-	Labiataeae	H
9.	<i>Rubia cordifolis</i>	Manjeti	Rubiaceae	H
10.	<i>Tamarix ericoides</i>	Jhau	Tamaricaceae	H
11.	<i>Zingibar capitatum</i>	Randa	Zingiberaceae	H
12.	<i>Ocimum sactum</i>	Tulsi	Labiatae	H
Epiphytes & Parasites				
1.	<i>Cuscuta reflexa</i>	Amarbel	Canvolvulaceae	-
2.	<i>Laranthus logiflorus</i>	Bandha	Laranthaceae	-
Climbers				
1.	<i>Acacia caesia</i>	Gurar	Leguminosae	C
2.	<i>Acacia pennata</i>	Raoni	Mimoseae	C
3.	<i>Bauhinia vahlli</i>	Mahul	Leguminosae	C
4.	<i>Butea superba</i>	Palasbel	Leguminosae	C
5.	<i>Butea parvifolia</i>	Palasbel	Leguminosae	C
6.	<i>Dioscorea belophylla</i>	Musalkand	Dioscoreaceae	C
7.	<i>Dioscorea bulbifera</i>	Gothalu	Dioscoreaceae	C
8.	<i>Millettea auriculate</i>	Gauj	Leguminosae	C
9.	<i>Millettea recemosa</i>	Junjinar	Leguminosae	C
10.	<i>Pueraria tuberosa</i>	Ghorbel	Leguminosae	C
11.	<i>Vitis linnei</i>	Jangli angur	Ampelideae	C

Floral Diversity within Core Zone

S. No.	Scientific name	Local Name	Family	Habit
12.	<i>Vitis tomentosa</i>	Purbel	Ampelideae	C
13.	<i>Zyzyphus rugosa</i>	Churna	Rhamnaceae	C
Grasses				
1.	<i>Andropogon intermedius</i>	Ghonsi	-	G
2.	<i>Andropogon pumilus</i>	Dewartari	-	G
3.	<i>Arthraxon quartianus</i>	Basin	-	G
4.	<i>Apluda mutica</i>	Phuli	-	G
5.	<i>Bombusa arundinaceae</i>	Kantabans	-	G
6.	<i>Chionachne koenigii</i>	Kurpi	-	G
7.	<i>Chrysopogon montanus</i>	Chikula	-	G
8.	<i>Coix lacrumajobi</i>	Garu	-	G
9.	<i>Cymbopogon martini</i>	Rusa	-	G
10.	<i>Cynodon dactylon</i>	Doob	-	G
11.	<i>Dendrocalamus strictus</i>	Bans	-	G
12.	<i>Eragrostis tenella</i>	Bhurbhusi	-	G
13.	<i>Dichanthium annulatum</i>	Marwel	-	G
14.	<i>Eulali trispicata</i>	Chunai	-	G
15.	<i>Eulaliopsis binata</i>	Sabai	-	G
16.	<i>Heteropogon contortus</i>	Sukla	-	G
17.	<i>Imperata cylidrica</i>	Chhir	-	G
18.	<i>Iseilema prostratum</i>	Ukri	-	G
19.	<i>Sehima sulcatum</i>	Paonia	-	G
20.	<i>Sorghum halepense</i>	Barru	-	G
21.	<i>Themeda caudata</i>	Gunhar	-	G
22.	<i>Thysanolaena maxima</i>	Phulbahari	-	G
23.	<i>Saccharum munja</i>	Munj0	-	G
24.	<i>Sehima nervosum</i>	Shedo	-	G

(b) List of existing floristic composition within Buffer zone

S. No.	Scientific name	Local Name	Family	Habit
1.	<i>Acacia catechu</i>	Khair	Mimosaceae	T
2.	<i>Acacia arabica</i>	Babul	Laguminosae	T
3.	<i>Acacia leucophloea</i>	Reunja	Mimosaceae	T
4.	<i>Adinacordifolia</i>	Haldu	Rubiaceae	T
5.	<i>Boswellia serrata</i>	Salayi	Burseraceae	T
6.	<i>Bridelea retusa</i>	Kasai	Euphorbiaceae	T
7.	<i>Buchnanian lanzan</i>	Achar	Anacardiaceae	T
8.	<i>Butea Monosperma</i>	Palash	Leguminaceae	T
9.	<i>Aegle marmelos</i>	Bel	Rutaceae	T
10.	<i>Ailanthus excelsa</i>	Mahaneem	Simaroubaceae	T
11.	<i>Careya arborea</i>	Wild Guava/ kumbhi	Palmae	S
12.	<i>Anogeissus latifolia</i>	Dhaura	Combretaceae	T
13.	<i>Casearia graveolens</i>	Gilehi	Samydeaceae	T
14.	<i>Eriolaena hookeriana</i>	Bothi	Sterculiaceae	T
15.	<i>Erythrina suberosa</i>	Panjra	Leguminosae	T
16.	<i>Elaeodendron glaucum</i>	Jamrasi	Celastraceae	T
17.	<i>Dillenia aurea</i>	Karmata	Dilleniaceae	T
18.	<i>Delonix regia</i>	Gulmohar	Laguminosae	T
19.	<i>Dillenia pentagyna</i>	Kalla	Dilleniaceae	T
20.	<i>Ehretia laevis</i>	Datranga	Burseraceae	T
21.	<i>Cordia latifolia</i>	Bara lasora	Baraginaceae	T
22.	<i>Cordian macleodli</i>	Silwat	Baraginaceae	T
23.	<i>Dalbergia latifolia</i>	Shisham	Leguminosae	T
24.	<i>Dalbergia sissoo</i>	Sissoo	Leguminosae	T
25.	<i>Euphorbia nivulia, Ham</i>	Thuar	Euphorbiaceae	T
26.	<i>Ficus hispida</i>	Kutumar	Moraceae	T
27.	<i>Chloroxylon swietenia</i>	Bhirra	Caesalpiniaceae	T
28.	<i>Cleistanthus collinus</i>	Garari	Meliacea	T
29.	<i>Cochlospermum religiosum</i>	Galgal	Euphorbiaceae	T
30.	<i>Eucalyptus spp.</i>	Nilgiri	Myrtaceae	T

S. No.	Scientific name	Local Name	Family	Habit
31.	<i>Ficus lacor</i>	Pakar	Moraceae	T
32.	<i>Bauhinia malabarica</i>	Amta	Leguminaceae	T
33.	<i>Casearia elliptica</i>	Tondri	Samydaceae	T
34.	<i>Cordia dichotoma</i>	Lisoda/Gunda	Rubiaceae	T
35.	<i>Litsea sebifera</i>	Maida lakri	Lauraceae	T
36.	<i>Mitragyna parvifolia</i>	Mundi	Rubiaceae	T
37.	<i>Pterocarpus marsupium</i>	Bija	Leguminosae	T
38.	<i>Randia Dumetorum</i>	Mainphal	Rubiaceae	T
39.	<i>Schleichera oleosa</i>	Kusum	Sapindaceae	T
40.	<i>Santalum album</i>	Chandan	Santalaceae	T
41.	<i>Spondias pinnata</i>	Amra	Anacardiaceae	T
42.	<i>Sterculia villosa</i>	Udal	Anacardiaceae	T
43.	<i>Stereospermum suaveolens</i>	Padar	Bignoniaceae	T
44.	<i>Terminalia belerica</i>	Bahera	Combretaceae	T
45.	<i>Psidium guava</i>	Amrud	Myrtaceae	T
46.	<i>Dalbergia paniculata</i>	Dhobin	Fabaceae	T
47.	<i>Diospyros melanoxylon</i>	Tendu	Lythraceae	T
48.	<i>Diospyros monatanana</i>	Bistendu	Lythraceae	T
49.	<i>Ficus benghalensis</i>	Bad	Moraceae	T
50.	<i>Emblica officinalis</i>	Amla	Euphorbiaceae	T
51.	<i>Ficus glomerata</i>	Gular	Moraceae	T
52.	<i>Ficus hispida</i>	Hairy fig	Moraceae	T
53.	<i>Ficus religiosa</i>	Pipal	Moraceae	T
54.	<i>Strychnos potatorum</i>	Nirmali	Laguminosae	T
55.	<i>Grewia disperma</i>	Chaturli	Tiliaceae	T
56.	<i>Grewia tiliaefolia</i>	Dhaman	Tiliaceae	T
57.	<i>Holoptelea integrifolia</i>	Papri/Churel	Asclepiadaceae	T
58.	<i>Gardenia latifolia</i>	Papra	Rubiaceae	T
59.	<i>Gardenia turgida</i>	Phetra	Rubiaceae	T
60.	<i>Garuga pennata</i>	Kekad	Burseraceae	T

S. No.	Scientific name	Local Name	Family	Habit
61.	<i>Gmelina arborea</i>	Gamari	Verbenaceae	T
62.	<i>Hymenodictyon excelsum</i>	Bhonrsal	Rubiaceae	T
63.	<i>Ixota arborea</i>	Lokhandi	Rubiaceae	T
64.	<i>Kydia calycina</i>	Pula	Malvaceae	T
65.	<i>Langerstroemia parviflora</i>	Lendia	Lythraceae	T
66.	<i>Schrebera switenioides</i>	Mokha	Oleaceae	T
67.	<i>Semecarpus anacardium</i>	Bhilwa	Anacardiaceae	T
68.	<i>Xylocarpus xylocarpa</i>	Suria	Mimicaceae	T
69.	<i>Lannea coramandelica</i>	Mohin/ Ash tree	Anacardiaceae	T
70.	<i>Pterocarpus marsupium</i>	Bija	Leguminosaceae	T
71.	<i>Pongamia pinnata</i>	Karanj	Fabaceae	T
72.	<i>Schleichera oleosa</i>	Kusum	Sapindaceae	T
73.	<i>Spondias pinnata</i>	Amra	Leguminosaceae	T
74.	<i>Sterculia urens</i>	Kullu	Euphorbiaceae	T
75.	<i>Stereospermum suaveolens</i>	Paddar	Bignoniaceae	T
76.	<i>Syzygium cumini</i>	Jamun	Myrtaceae	T
77.	<i>Tamarindus indica</i>	Imli	Caesalpinaceae	T
78.	<i>Hardwickia binata</i>	Anjan	Leguminosaceae	T
79.	<i>Terminalia tomentosa</i>	Saja	Combretaceae	T
80.	<i>Zizyphus maurandia</i>	Bar	Rhamnaceae	T
81.	<i>Tectona grandis</i>	Teak	Verbinaceae	T
82.	<i>Terminalia arjuna</i>	Arjun	Combretaceae	T
<i>shrubs</i>				
1.	<i>Arbus precatotrius</i>	Gunj	Papilionaceae	S
2.	<i>Achyranthes aspera</i>	Chirchira	Amarantaceae	S
3.	<i>Adhatoda vasica</i>	Adusa	Acanthaceae	S
4.	<i>Ageratum conyzoids</i>	-	Compositae	S
5.	<i>Andrographis paniculata</i>	Chirchira	Acanthaceae	S
6.	<i>Antidesma ghaesensbilla</i>	Jondhri	Euphorbiaceae	S
7.	<i>Azanza lampus</i>	Banakpas	Malvaceae	S

S. No.	Scientific name	Local Name	Family	Habit
8.	<i>Barleria cristata</i>	Koranta	Acanthaceae	S
9.	<i>Barleria mantana</i>	Korat	Verbenaceae	S
10.	<i>Carissa opaca</i>	Karonda	Apocynaceae	S
11.	<i>Calotropis procera</i>	Aak	Asclepiaceae	S
12.	<i>Cassia Tora</i>	Tarwar	Laguminosae	S
13.	<i>Clerodendron serratum</i>	Barangi	Verbenaceae	S
14.	<i>Colebrookia oppositifolia</i>	Bhandar	Labiatae	S
15.	<i>Crotalaria juncea</i>	Son	Laguminosae	S
16.	<i>Dalbergia voluvis</i>	Birach	Laguminosae	S
17.	<i>Desmodium pulchellum</i>	Chikati	Laguminosae	S
18.	<i>Desmodium velutinum</i>	Chikati	Laguminosae	S
19.	<i>Dioscorea anguina</i>	Bansora	Dioscoreaceae	S
20.	<i>Dondonoea visocosa</i>	Jangli Mehandi	Sapindaceae	S
21.	<i>Embelia robusta</i>	Baibirang	Myrsiaceae	S
22.	<i>Eranthemum purpureseens</i>	Bantulsi	Acanthaceae	S
23.	<i>Gardnia lucida</i>	Dikamali	Rukbiaceae	S
24.	<i>Grewia hirsuta</i>	Gudsaki	Tiliaceae	S
25.	<i>Grewia sapida</i>	Phalsa	Tiliaceae	S
26.	<i>Helicteres isora</i>	Marorphali	Sterculiaceae	S
27.	<i>Indigophera pulchella</i>	Neel	Papilionaceae	S
28.	<i>Ipomea spp.</i>	Besharm	Convolvulaceae	S
29.	<i>Jasminum multiflorum</i>	Kunda	Oleaceae	S
30.	<i>Justieia betonica</i>	Kokander	Acanthaceae	S
31.	<i>Jatropha curcas</i>	Rattanjo	Euphorbiaceae	S
32.	<i>Lantana camara</i>	Raimunia	Verbenaceae	S
33.	<i>Maytenus emarginata</i>	Bahrta	Celastraceae	S
34.	<i>Malastoma malababathricum</i>	Palor	Malastomaceae	S
35.	<i>Maghania nana</i>	Chepati	Papilionaceae	S
36.	<i>Moghania semilata</i>	Banrahar	Papilionaceae	S
37.	<i>Nyctanthes arbortristis</i>	Harsingar	Oleaceae	S

S. No.	Scientific name	Local Name	Family	Habit
38.	<i>Olax scandens</i>	Harduli	Oleaceae	S
39.	<i>Petalidion barberioides</i>	Inderjata	Acanthaceae	S
40.	<i>Phoenix acaulis</i>	Chhind	Palmeae	S
41.	<i>Sida acuta</i>	Kareta	Mavaceae	S
42.	<i>Sida cardifolia</i>	Mamas	Mavaceae	S
43.	<i>Strobilanthes auricalatus</i>	Muruadona	Acanthaceae	S
44.	<i>Tephrosia candida</i>	Unhali	Leguminoceae	S
45.	<i>Trema politoria</i>	Jilmila	Ulmaceae	S
46.	<i>Tribulus terrestris</i>	Gokhru	Zygophyllaceae	S
47.	<i>Triumfetta bartramia</i>	Chirpat	Tiliaceae	S
48.	<i>Triumfetta pilosa</i>	Chikati	Tiliaceae	S
49.	<i>Uria labata</i>	-	Malvaceae	S
50.	<i>Urena siuta</i>	-	Malvaceae	S
51.	<i>Vitex negundo</i>	Nirgudi	Verbenaceae	S
52.	<i>Waltheria indica</i>	Haduli	Sterculiaceae	S
53.	<i>Zizyphus rotundifolia</i>	Jharberi	Rhamnaceae	S
Herbs				
1.	<i>Asparagus racemosum</i>	Sataori	Liliaceae	H
2.	<i>Careya herabacea</i>	Chhiti Kumbhi	Myrtaceae	H
3.	<i>Chlorophyllum tuberosum</i>	Safed Musali	Liliaceae	H
4.	<i>Curculigo orachiolides</i>	Kali musli	Amaryullidaceae	H
5.	<i>Hemidesmum indicus</i>	Sarsaparilla	Asclepidlaceae	H
6.	<i>Hibiscus cancellatus</i>	Ambari	Malovaceae	H
7.	<i>Lanandula burmanni</i>	-	Labistea	H
8.	<i>Leea rotusta</i>	Korum	Ampelidaceae	H
9.	<i>Micromeria capitellata</i>	-	Labiataeae	H
10.	<i>Napeta ruderalis</i>	-	Labiataeae	H
11.	<i>Polygala chinesis</i>	Bijnori	Pigalaceae	H
12.	<i>Rubia cordifolis</i>	Manjeti	Rubiaceae	H
13.	<i>Tamarix ericoides</i>	Jhau	Tamaricaceae	H

S. No.	Scientific name	Local Name	Family	Habit
			Zingiberaceae	H
14	<i>Zingibar capitatum</i>	Randa	Labiatae	H
15	<i>Ocimum sactum</i>	Tulsi		
Epiphytes & Parasites				
1.	<i>Cuscuta reflexa</i>	Amarbel	Canvolvulaceae	-
2.	<i>Laranthus logiflorus</i>	Bandha	Laranthaceae	-
3.	<i>Visum nepalene</i>	Bandha	Loranthaceae	-
4.	<i>Orodanche oegyptica</i>	Bandha	Prkobancheaceae	-
Climbers				
1.	<i>Acacia caesia</i>	Gurar	Leguminosae	C
2.	<i>Acacia pennata</i>	Raoni	Mimoseae	C
3.	<i>Bauhinia vahlli</i>	Mahul	Leguminosae	C
4.	<i>Butea superba</i>	Palasbel	Leguminosae	C
5.	<i>Butea parvifolia</i>	Palasbel	Leguminosae	C
6.	<i>Celastrus paniculata</i>	Malkangini	Celastraceae	C
7.	<i>Combretum decandrum</i>	Piwarbel	Combretaceae	C
8.	<i>Dioscorea belophylla</i>	Musalkand	Dioscoreaceae	C
9.	<i>Dioscorea bulbifera</i>	Gothalu	Dioscoreaceae	C
10.	<i>Ichnocarpus frutescens</i>	Dhimarbel	Apocynaceae	C
11.	<i>Marsdenia hamiltonia</i>	Dudhibel	Asclepiadaceae	C
12.	<i>Millettea auriculate</i>	Gauj	Leguminosae	C
13.	<i>Millettea recemosa</i>	Junjinar	Leguminosae	C
14.	<i>Mucuna pruriens</i>	Kewanch	Leguminosae	C
15.	<i>Pueraria tuberosa</i>	Ghorbel	Leguminosae	C
16.	<i>Vitis linnei</i>	Jangli angur	Ampelideae	C
17.	<i>Vitis fomentosa</i>	Purbel	Ampelideae	C
18.	<i>Zyzyphus rugosa</i>	Churna	Rhamnaceae	C
Grasses				
1.	<i>Andropogon intermedius</i>	Ghonsi	-	G
2.	<i>Andopogon pumilus</i>	Dewartari	-	G
3.	<i>Arthraxon quartinianus</i>	Basin	-	G

S. No.	Scientific name	Local Name	Family	Habit
4.	<i>Apluda mutica</i>	Phuli	-	G
5.	<i>Bombusa arundinaceae</i>	Kantabans	-	G
6.	<i>Chionachne koenigii</i>	Kurpi	-	G
7.	<i>Chrysopogon montanus</i>	Chikula	-	G
8.	<i>Coix lacrumajobi</i>	Garu	-	G
9.	<i>Cymbopogon martini</i>	Rusa	-	G
10.	<i>Cynodon dactylon</i>	Doob	-	G
11.	<i>Dendrocalamus strictus</i>	Bans	-	G
12.	<i>Eragrostis tenella</i>	Bhurbhusi	-	G
13.	<i>Dichanthium annulatum</i>	Marwel	-	G
14.	<i>Eulali trispicata</i>	Chunai	-	G
15.	<i>Eulaliopsis binata</i>	Sabai	-	G
16.	<i>Heteropogon contortus</i>	Sukla	-	G
17.	<i>Imperata cylidrica</i>	Chhir	-	G
18.	<i>Iseilema prostratum</i>	Ukri	-	G
19.	<i>Sehima sulcatum</i>	Paonia	-	G
20.	<i>Sorghum halepense</i>	Barru	-	G
21.	<i>Themeda caudata</i>	Gunhar	-	G
22.	<i>Thysanolaena maxima</i>	Phulbahari	-	G
23.	<i>Saccharum munja</i>	Munj	-	G
24.	<i>Imperata Cylidrica</i>	Chhir	-	G
25.	<i>Sehima nervosum</i>	Shedo	-	G

Status of RET Species

During Field Survey, rare, endangered and threatened species of flora recorded under threatened status in the study area are as follows:

1. Endemic- *Hardwickia binnata*, *Mucuna prurita*

2. Locally Endangered Species

A. *Butea monosperma* B. *Clerodendron serratum* C. *Curculigo orchioides* D. *Curcuma augustifolia*
E. *Pterocarpus marsupium*.

3. According to Chhattisgarh State Medicinal Plant Board endangered species are:

A. *Diospyros peniculato* B. *Pterocarpus marsupium* C. *Terminalia arjuna* D. *Grewia rothi*
E. *Vitex trifolia*-Critically endangered.

ANNEXURE - III

INVENTORY OF FAUNAL DIVERSITY IN THE CORE & BUFFER ZONE OF PROPOSED MINE SITE

Based on Actual Sighting, based on inputs from locals and Perused from Secondary Data

a) Core Zone

S. No.	Scientific name	Common name	Status according to IWPA, 1972
Mammalian			
1.	<i>Vulpes bengalensis</i>	Common fox	Sch. II
2.	<i>Rattus rattus</i>	Black rat	Sch. V
3.	<i>Tatera indica</i>	Indian Gerbil	Sch. V
4.	<i>Funambulus palmarum</i>	Indian palm Squirrel	Sch. IV
5.	<i>Canis aureus</i>	Jackal	Sch. III
6.	<i>Boselaphus tragocamelus</i>	Nilgai	Sch. III
7.	<i>Axis axis</i>	Chital	Sch. III
8.	<i>Sus scrofa</i>	Wild boar	Sch. III
9.	<i>Felis chaus</i>	Jungle cat	Sch. II
10.	<i>Herpestes edwardsii</i>	Common Mongoose	Sch. II
11.	<i>Lepus nigricollis</i>	Indian hare	Sch. IV
12.	<i>Hystrix indica</i>	Porcupine	Sch. IV
Reptilian			
1.	<i>Ptyas mucosa</i>	Indian Rat snake	Sch. II
2.	<i>Hemidactylus flaviviridis</i>	House Gecko/Chhipkali	Sch. V
3.	<i>Calotes versicolor</i>	Common Garden Lizard/ Girgit	Sch. IV
4.	<i>Bungarus candidus</i>	Common krait	Sch. IV
5.	<i>Naja naja</i>	Naag/Kobra	Sch. II
6.	<i>Chamaeleo zeylanicus</i>	Indian Chameleon	Sch. IV
7.	<i>Vipera russelli</i>	Russell's viper	Sch. II
8.	<i>Mabuya carinata</i>	Brahminy Skink	Sch. IV
Amphibian			
1.	<i>Rana tigrina</i>	Common Frog	Sch. IV
2.	<i>Bufo melanostictus</i>	Common Indian toad	Sch. IV
3.	<i>Euphlyctis hexadactylus</i>	Rana hexadactyla	Sch. IV

S. No.	Scientific name	Common name	Status according to IWPA, 1972
Butterflies			
1.	<i>Danaus chrysippus</i>	Plain tiger	Sch. IV
2.	<i>Pachliopta hector</i>	Crimson rose	Sch. IV
3.	<i>Hypolimnas bolina</i>	Great eggfly	Sch. IV
4.	<i>Euploea core</i>	Common crow	Sch. IV
6.	<i>Papilio demoleus</i>	Lime butterfly	Sch. IV
7.	<i>Eurema hecabe</i>	Common grass yellow	Sch. IV
8.	<i>Junonia almana</i>	Peacock pansy	Sch. IV
9.	<i>Catopsilia pomona</i>	Common emigrant	Sch. IV
10.	<i>Leptosia nina</i>	Psyche	Sch. IV
Arthropods and Mollusca			
1.	<i>Apis indica</i>	Choti Madhumakkhi	-
2.	<i>Periplaneta americana</i>	Cockroach	-
3.	<i>Sympetrum fonscolombii</i>	Red veined darter dragonfly	-
4.	<i>Diplacodes trivialis</i>	Ground skimmer dragonfly	-
5.	<i>Stegodyphus sp.</i>	Social Spider	-
Avifaunal (Birds)			
1.	<i>Bubulcus ibis</i>	Cattle egret	Sch. IV
2.	<i>Columba livia</i>	Blue rock pigeon	Sch. IV
3.	<i>Egretta garzetta</i>	Little egret	Sch. IV
4.	<i>Alcedo atthis</i>	Common kingfisher	Sch. IV
5.	<i>Caprimulgus asiaticus</i>	Nightjar	Sch. IV
6.	<i>Coracias benghalensis</i>	Indian roller	Sch. IV
7.	<i>Copsychus saularis</i>	Oriental magpie robin	Sch. IV
8.	<i>Saxicoloides fulicata</i>	Indian robin	Sch. IV
9.	<i>Acridotheres tristis</i>	Common myna	Sch. IV
10.	<i>Spilopelia senegalensis</i>	Laughing dove	Sch. IV
11.	<i>Ardeola grayii</i>	Pond heron	Sch. IV
12.	<i>Aegithina tiphia</i>	Common iora	Sch. IV
13.	<i>Anas crecca</i>	Common teal	Sch. IV
14.	<i>Passer domesticus</i>	House sparrow	Sch. IV

Birds

S. No.	Scientific name	Common name	Status according to IWPA, 1972
15.	<i>Corvus macrorhynchos</i>	Jungle crow	Sch. V
16.	<i>Corvus splendens</i>	House crow	Sch. V
17.	<i>Merops orientalis</i>	Small bee- eater	Sch. IV
18.	<i>Streptopelia decaocto</i>	Eurasian collared dove	Sch. IV
19.	<i>Milvus migrans</i>	Black kite	Sch. IV
20.	<i>Pycnonotus cafer</i>	Red vented bulbul	Sch. IV
21.	<i>Psittacula krameri</i>	Rose ringed parakeet	Sch. IV
22.	<i>Ploceus philippinus</i>	Baya- weaver bird	Sch. IV
23.	<i>Sturnus pagodarum</i>	Brahminy starling	Sch. IV
24.	<i>Eudynamys scolopaceus</i>	Asian koel	Sch. IV
25.	<i>Oriolus oriolus</i>	Golden Oriole	Sch. IV
26.	<i>Cuculus micropterus</i>	Indian Cuckoo	Sch. IV
27.	<i>Apus affinis</i>	House swift	Sch. IV
28.	<i>Gallus gallus</i>	Jungle fowl	Sch. IV
29.	<i>Milvus migrans</i>	Black kite	Sch. IV
30.	<i>Haliastur indus</i>	Brahminy kite	Sch. IV
31.	<i>Tyto alba</i>	Barn owl	Sch. IV

B. Faunal Diversity in Buffer Zone

S. No.	Scientific name	Common name	Status according to IWPA, 1972
Mammalian			
1.	<i>Canis aureus</i>	Jackal	Sch. II
2.	<i>Hyaena hyaena</i>	Hyena	Sch. III
3.	<i>Melursus ursinus</i>	Sloth bear	Sch. I
4.	<i>Vulpes bengalensis</i>	Common fox	Sch. II
5.	<i>Rattus rattus</i>	Black rat	Sch. V
6.	<i>Rattus norvegicus</i>	Field mouse	Sch. V
7.	<i>Bandicota indica</i>	Bandicoot	Sch. V
8.	<i>Tatera indica</i>	Indian Gerbil	Sch. V
9.	<i>Funambulus palmarumi</i>	Indian Palm Squirrel	Sch. IV
10.	<i>Boselaphus tragocamelus</i>	Nilgai	Sch. III
11.	<i>Elephas maximus</i>	Elephant	Sch. I
11.	<i>Rhinolophus spp.</i>	Horseshoe Bat	Sch. V
12.	<i>Pteropus giganteus</i>	Indian flying fox	Sch. V
13.	<i>Cervus unicolor</i>	Sambar	Sch. III
14.	<i>Axis axis</i>	Chital	Sch. III
15.	<i>Hystrix indica</i>	Porcupine	Sch. II
16.	<i>Herpestes edwardsii</i>	Common Mongoose	Sch. II
17.	<i>Presbytis entellus</i>	Common langur	Sch. II
18.	<i>Macaca mulatta</i>	Rhesus macaque	Sch. II
19.	<i>Lepus nigricollis</i>	Indian hare	Sch. IV
20.	<i>Sus scrofa</i>	Wild boar	Sch. III
21.	<i>Cuon alpinus</i>	Wild dog	Sch. II
21.	<i>Panthera pardus</i>	Common leopard	Sch. I
Reptilian			
1.	<i>Vipera russelli</i>	Russell's viper	Sch. II
2.	<i>Varanus bengalensis</i>	Monitor lizard	Sch. I
3.	<i>Ptyas mucosa</i>	Indian Rat snake	Sch. II
4.	<i>Lycodon aulicus</i>	Common wolf snake	Sch. IV
5.	<i>Bungarus candidus</i>	Common krait	Sch. IV
6.	<i>Boiga trigonata</i>	Cat snake	Sch. IV

Faunal Diversity in Buffer Zone

S. No.	Scientific name	Common name	Status according to IWPA, 1972
7.	<i>Eryx johnii</i>	Red sand Boa	Sch. IV
8.	<i>Naja naja</i>	Naag/Kobra	Sch. II
9.	<i>Hemidactylus flaviviridis</i>	House Gecko/Chhipkali	Sch. V
10.	<i>Melanochelys trijuga</i>	Indian pond turtle	Sch. IV
11.	<i>Calotes versicolor</i>	Common Garden Lizard/ Girgit	Sch. IV
12.	<i>Chamaeleo zeylanicus</i>	Indian Chameleon	Sch. IV
13.	<i>Mabuya carinata</i>	Brahminy Skink	Sch. IV
14.	Pythan molurns	Pythan	Sch. I
Amphibian			
1.	<i>Rana limnocharis</i>	Indian cricket Frog	Sch. IV
2.	<i>Hoplobatrachus tigerinus</i>	Indian bull frog	Sch. IV
3.	<i>Rana tigrina</i>	Common Frog	Sch. IV
4.	<i>Bufo melanostictus</i>	Common Indian toad	Sch. IV
5.	<i>Euphlyctis hexadactylus</i>	Rana hexadactyla	Sch. IV
6.	<i>Hyla goeldii</i>	Tree frog	Sch. IV
Butterflies			
1.	<i>Danaus chrysippus</i>	Plain tiger	Sch. IV
2.	<i>Pachliopta hector</i>	Crimson rose	Sch. IV
3.	<i>Hypolimnas bolina</i>	Great eggfly	Sch. IV
4.	<i>Papilio polymnestor</i>	Blue mormon	
5.	<i>Euploea core</i>	Common crow	Sch. IV
6.	<i>Neptis hylas</i>	Common sailer	Sch. IV
7.	<i>Papilio demoleus</i>	Lime butterfly	Sch. IV
8.	<i>Parantica aglea</i>	Glassy tiger	Sch. IV
9.	<i>Eurema hecabe</i>	Common grass yellow	Sch. IV
10.	<i>Junonia almana</i>	Peacock pansy	Sch. IV
11.	<i>Junonia orythia</i>	Blue pansy	Sch. IV
12.	<i>Junonia atlites</i>	Grey pansy	Sch. IV
13.	<i>Catopsilia pomona</i>	Common emigrant	Sch. IV
14.	<i>Leptosia nina</i>	Psyche	Sch. IV
15.	<i>Chilades parrhassius</i>	Small cupid	Sch. IV

S. No.	Scientific name	Common name	Status according to IWPA, 1972
16.	<i>Musca domestica</i>	Housfly	Sch. IV
17.	<i>Aedes aegypti</i>	Dengue mosquito	Sch. IV
18.	<i>Pieris napi</i>	Green- veined white butterfly	Sch. IV
19.	<i>Eurema brigitta</i>	Small grass yellow	Sch. IV
20.	<i>Parantica aglea</i>	Glassy tiger	Sch. IV
Arthropods and Mollusca			
1.	<i>Apis indica</i>	Choti Madhumakkhi	-
2.	<i>Apis dorsata</i>	Badi Madhumakkhi	-
3.	<i>Periplaneta americana</i>	Cockroach	-
4.	<i>Buthus sp.</i>	Scorpion	-
5.	<i>Sympetrum fonscolombii</i>	Red veined darter dragonfly	-
6.	<i>Diplacodes trivialis</i>	Ground skimmer dragonfly	-
7.	<i>Stegodyphus sp.</i>	Social Spider	-
Avifaunal (Birds)			
1.	<i>Ardeola grayii</i>	Pond heron	Sch. IV
2.	<i>Acridotheres tristis</i>	Common myna	Sch. IV
3.	<i>Eudynamis scolopaceus</i>	Asian koel	Sch. IV
4.	<i>Alcedo atthis</i>	Common kingfisher	Sch. IV
5.	<i>Egretta garzetta</i>	Little egret	Sch. IV
6.	<i>Oriolus oriolus</i>	Golden Oriole	Sch. IV
7.	<i>Bubulcus ibis</i>	Cattle egret	Sch. IV
8.	<i>Caprimulgus asiaticus</i>	Nightjar	Sch. IV
9.	<i>Streptopelia decaocto</i>	Eurasian collared dove	Sch. IV
10.	<i>Milvus migrans</i>	Black kite	Sch. IV
11.	<i>Haliastur indus</i>	Brahminy kite	Sch. IV
12.	<i>Tockus birostris</i>	Indian Grey Hornbill	Sch. IV
13.	<i>Tyto alba</i>	Barn owl	Sch. IV
14.	<i>Accipiter badius</i>	Shikra	Sch. IV
15.	<i>Bubo bubo</i>	Eurasian Eagle Owl	Sch. IV
16.	<i>Merops orientalis</i>	Small bee- eater	Sch. IV
17.	<i>Corvus macrorhynchos</i>	Jungle crow	Sch. V
18.	<i>Corvus splendens</i>	Common crow	Sch. V

S. No.	Scientific name	Common name	Family
19.	<i>Passer domesticus</i>	House sparrow	Sch. IV
20.	<i>Nectarinia asiatica</i>	Purple sunbird	Sch. IV
21.	<i>Sturnus pagodarum</i>	Brahminy starling	Sch. IV
22.	<i>Pavo cristatus</i>	Peafowl	Sch. I
23.	<i>Psittacula krameri</i>	Rose ringed parakeet	Sch. IV
24.	<i>Turdoides striatus</i>	Jungle babbler	Sch. IV
25.	<i>Coracias benghalensis</i>	Indian roller	Sch. IV
26.	<i>Copsychus saularis</i>	Oriental magpie robin	Sch. IV
27.	<i>Saxicoloides fulicata</i>	Indian robin	Sch. IV
28.	<i>Vanellus indicus</i>	Red-wattled lapwing	Sch. IV
29.	<i>Ploceus philippinus</i>	Baya- weaver bird	Sch. IV
30.	<i>Gallus gallus</i>	Jungle fowl	Sch. IV
31.	<i>Apus affinis</i>	House swift	Sch. IV
32.	<i>Halcyon smyrnensis</i>	White throated kingfisher	Sch. IV
33.	<i>Francolinus pondicerianus</i>	Grey francolin	Sch. IV
34.	<i>Columba livia</i>	Blue rock pigeon	Sch. IV
35.	<i>Centropus sinensis</i>	Greater coucal	Sch. IV
36.	<i>Amaurornis phoenicurus</i>	White breasted water hen	Sch. IV
37.	<i>Pycnonotus cafer</i>	Red vented bulbul	Sch. IV

Analysis of Fauna

Two Schedule- I fauna was recorded in the study area during field survey as per (IWPA) Indian Wildlife Protection Act, 1972.

1.	Indian monitor lizard	<i>Varanus benglensis</i>	Sch. I
2.	Indian peafowl	<i>Pavo cristatus</i>	Sch. I
3.	Sloth bear	<i>Melursus ursinus</i>	Sch. I
4.	Elephant	<i>Elephas maximus</i>	Sch. I
5.	Indian Rock Python	<i>Python molurus</i>	Sch. I
6.	Common leopard	<i>Panthera pardus</i>	Sch. I

INVENTORY OF AQUATIC FLORA IN THE CORE & BUFFER ZONE OF PROPOSED MINE SITE

Based on Actual Sighting, based on inputs from locals and Perused from Secondary Data

S. No.	Scientific name	Common name	Family
Aquatic diversity of buffer zone			
1.	<i>Harpadon nehereus</i>	Bombil	-
2.	<i>Sperata seenghala</i>	Singara	-
3.	<i>Penaeus monodon</i>	Prawn	-
4.	<i>Labeo rohita</i>	Rohu	-
5.	<i>Oreochromis niloticus</i>	Tilapia	-
6.	<i>Lamellidens corrianus</i>	Shells	-
7.	<i>Rita rita</i>	Rita	-
8.	<i>Mastacembelus armatus</i>	Bam	-
9.	<i>Alysfus tengara</i>	Tengara	-
10.	<i>Cirrhinas mrigala</i>	Mrigal	-
11.	<i>Boleophthalmus spp.</i>	Mudskippers	-
12.	<i>Catla catla</i>	Catla	-
13.	<i>Mugil cephalus</i>	Mullet	-


Sub Divisional Officer
Kawardha


Divisional Forest Officer
Kawardha Division


Chief Conservator of Forest
Durg Circle, Durg (C.G.)


Principal Chief Conservator of Forest
(Wild Life)
Chhattisgarh, Atal Nagar, Raipur