

1 Environmental Baseline Monitoring Results

Environmental baseline data carried out by NABL accredited laboratory ATMOS Sustainable Solutions Pvt. Ltd., appointed by Tata Consulting Engineers Limited (TCE).

1.1 Ambient Air Quality

Table 1-1: Ambient Air Quality

Parameters	Units	AAQ1				AAQ2				AAQ3				NAAQS Standards
		Min	Max	98th Percentile	Average	Min	Max	98th Percentile	Average	Min	Max	98th Percentile	Average	
PM10	µg/m ³	36	57	56.5	48.0	40	59	56.7	47.3	37	53	52.1	46.2	100
PM2.5	µg/m ³	16	25	29.0	20.8	13	29	25.5	22.7	15	26	52.1	20.6	60
SO ₂	µg/m ³	5.1	6.9	6.8	5.9	5.3	7.1	7.0	5.9	5.5	7.8	7.8	6.3	80
NO ₂	µg/m ³	8.1	10.4	10.4	9.3	8.6	11.1	11.0	9.6	7.1	10.9	10.9	9.4	80
CO	µg/m ³	0.21	0.38	0.36	0.28	0.20	0.42	0.39	0.31	0.21	0.32	0.31	0.27	35

Parameters	Units	AAQ4				AAQ5				AAQ6				NAAQS Standards
		Min	Max	98th Percentile	Average	Min	Max	98th Percentile	Average	Min	Max	98th Percentile	Average	
PM10	µg/m ³	39	55	54.5	47.1	50	74	73.1	60.2	47	66	66.0	58.5	100
PM2.5	µg/m ³	18	29	29.0	22.8	21	37	35.6	27.2	19	33	32.4	25.4	60
SO ₂	µg/m ³	5.2	6.8	6.8	5.8	6.9	11.3	11.1	8.3	6.4	10.6	10.6	7.8	80
NO ₂	µg/m ³	8.2	11.4	11.3	9.6	11.2	18.3	17.9	13.4	9.2	16.2	15.9	12.6	80
CO	µg/m ³	0.20	0.36	0.36	0.31	0.38	0.59	0.57	0.45	0.31	0.52	0.52	0.38	35

Parameters	Units	AAQ7				AAQ8				NAAQS Standards
		Min	Max	98th Percentile	Average	Min	Max	98th Percentile	Average	
PM10	µg/m ³	48	71	70.1	59.3	41	59	58.8	49.5	100
PM2.5	µg/m ³	22	31	31.0	31.0	17	24	24.0	20.6	60
SO ₂	µg/m ³	5.9	9.4	9.4	7.6	6.2	8.4	8.3	7.1	80
NO ₂	µg/m ³	11.2	14.7	14.4	12.7	7.7	11.7	11.6	10.1	80
CO	µg/m ³	0.28	0.42	0.41	0.34	0.21	0.38	0.37	0.27	35

Note: AAQ1- Gamhariya Village, AAQ2- Murhi Village, AAQ3- Latkuta Village, AAQ4- Paily Village, AAQ5- Amarut Village, AAQ6- Kusmaha Village, AAQ7- Pandri Kalan Village, AAQ8- Garwaiya Village

1.2 Ambient Noise Quality

Table 1-2: Results of Ambient Noise

S. No	Location	Day Equivalent (Ld)	CPCB Noise Standard for Day Equivalent (Ld)	Night Equivalent (Ln)	CPCB Noise Standard for Night Equivalent (Ln)
1	N1	47.6	75	39.8	70
2	N2	49.3	75	40.8	70
3	N3	50.6	55	42.1	45
4	N4	48.1	55	38.6	45
5	N5	51.9	75	41.3	70
6	N6	47.1	75	37.6	70
7	N7	51.7	65	42.6	55
8	N8	50.8	65	40.6	55

Note: N1- Gamhariya Village, N2- Mahugain Village, N3- Jinguru Village, N4- Paily Village, N5- Amarut Village, N6- Kusmasa Village Govt. school, N7- Pandri Kalan Village, N8- Goshian Pesra Village

1.3 Soil Quality

Table 1-3: Soil Quality Results

Parameters	Units	S-1	S-2	S-3	S-4	S-5
pH	-	8.16	7.67	7.74	8.24	7.83
Electrical Conductivity	µmho/cm	426	339	474	368	412
Bulk Density	g/cc	1.45	1.52	1.51	1.43	1.56
Cation exchange capacity	meq/100 gm	19.8	13.5	21.6	14.3	19.1
Nitrates as N	kg/ha	194	156	226	168	208
Phosphorous as P	kg/ha	14.9	16.3	14.4	12.7	18.1
Potassium as K	kg/ha	218	142	166	242	196
Sodium as Na	mg/kg	1.42	1.18	1.61	1.34	1.29
Calcium as Ca	mg/kg	1.42	1.18	1.61	1.34	1.29
Magnesium as Mg	mg/kg	312	296	412	306	426
Total Organic Carbon	%	0.63	0.51	0.59	0.49	0.82
Copper as Cu	mg/kg	2.3	3.2	1.9	2.3	3.5
Sodium Absorption Ratio	mg/kg	1.42	1.18	1.61	1.34	1.29
Available Boron	mg/kg	0.56	0.39	0.62	0.36	0.43
Porosity	%	44.2	41.5	41.9	45.0	40.0
Type of soil		clay loam	sandy clay loam	sandy clay loam	clay loam	sandy loam
a) Sand	%	44.3	46.3	49.6	42.6	68.3
b) Silt	%	26.9	25.9	24.2	27.2	12.1
c) Clay	%	28.8	27.8	26.2	30.2	19.6

Note: S1-Gamhariya Village, S2-Hardwan Village, S3-Gointha Mittha Village, S4-Tetariya village, S5-Kubba Village

1.4 Inland Water Quality

Table 1-4: Analytical Results of Groundwater Quality

S. No	Parameters	Unit	Max Requirement as per		Gamhari ya Village (GW-1) Handpump	Jhajh Village(GW-2) Handpump	Patluka Village(GW-3) Handpump	Pachamba Village (GW-4) Handpump	Uraili Village (GW-5) Handpump	Dharampur Village(GW-6) Handpump	Dhobi Village (GW-7) Handpump	Rani chak Village (GW-8) Handpump
			(IS-10500-2012), Limit									
			Desirable	Permissible								
Physical Parameters												
1	pH value	-	6.5-8.5	No Relaxation	7.34	7.41	6.89	7.56	6.97	7.48	7.27	7.69
2	Color	Hazen	5	15	<5	<5	<5	<5	<5	<5	<5	<5
3	Turbidity	NTU	1	5	<1	2	2	<1	<1	<1	<1	<1
4	Total Dissolved Solids	mg/l	500	2000	509	433	472	568	644	510	574	411
5	Total Alkalinity as CaCO ₃	mg/l	200	600	218	178	196	228	283	242	264	169
6	Total Hardness (as CaCO ₃)	mg/l	200	600	252	214	232	246	310	268	292	194
7	Calcium (as Ca)	mg/l	75	200	66	56	58	64	74	68	71	53
8	Magnesium (as Mg ²⁺)	mg/l	30	100	20.9	17.8	20.9	20.6	30.0	23.5	27.5	14.76
9	Chlorides (as Cl)	mg/l	250	1000	106	98	104	122	136	97	114	89
10	Fluoride (as F)	mg/l	1	1.5	0.6	0.4	0.5	0.4	0.5	0.3	0.4	0.5
11	Sulphate (as SO ₄)	mg/l	200	400	42	32	37	53	46	36	41	35
12	Iron (as Fe)	mg/l	1	No Relaxation	0.18	0.29	0.21	0.15	0.19	0.12	0.15	0.11
13	Nitrate(as NO ₃)	mg/l	45	No Relaxation	9.6	12.2	10.3	8.4	10.4	8.8	13.6	11.3
14	Copper (as Cu)	mg/l	0.05	1.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
15	Boron (as B)	mg/l	0.5	2.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
16	Manganese(as Mn)	mg/l	0.1	0.3	0.04	0.05	0.04	0.03	0.04	0.04	0.03	<0.05
17	Phenolic Compounds (as C ₆ H ₅ OH)	mg/l	0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
18	Sulphide (as H ₂ S)	mg/l	0.05	No Relaxation	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
19	Zinc (as Zn)	mg/l	5	15	0.16	0.27	0.21	0.18	0.26	0.22	0.17	0.15

20	Cadmium (as Cd)	mg/l	0.003	No Relaxation	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
21	Cyanide (as CN)	mg/l	0.05	No Relaxation	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
22	Lead (as Pb)	mg/l	0.01	No Relaxation	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
23	Mercury (as Hg)	mg/l	0.001	No Relaxation	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
24	Total Arsenic (as As)	mg/l	0.01	0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
25	Total Chromium (as Cr)	mg/l	0.05	No Relaxation	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
26	Total Coliform	per 100ml	Shall not be detectable		Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
27	<i>E.Coli</i>	<i>E.coli</i> /100 ml	Shall not be detectable		Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent

Table 1-5: Analytical results of Surface Water

Parameter	Units	Water Quality Standards (As per IS:2296)	Results				
			SW-1	SW-2	SW-3	SW-4	SW-5
Colour	Hazen	300	<5.0	<5.0	<5.0	<5.0	<5.0
Odour	—		Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Ph	—	6.5-8.5	7.46	7.53	7.62	7.51	7.46
Electrical Conductivity	mmhos/cm		315.23	482.68	595.41	342.86	488.46
Total Dissolved Solids	mg/l	1500	195.44	299.264	369.152	212.576	302.848
Total Alkalinity as CaCO ₃	mg/l	600	96	138	172	102	144
Total Hardness as CaCO ₃	mg/l	NS	124	158	204	132	172
Calcium	mg/l	NS	28	38	48	32	41
Magnesium	mg/l	NS	13	15.1	20.2	12.5	16
Chemical Oxygen Demand	mg/l	5000	8	20	26	10	18
Biological Oxygen Demand(3 days at 27°C)	mg/l	NS	1.8	3.8	4.8	1.9	3.2
Dissolved Oxygen	mg/l	3	7.3	6.5	6	7.2	6.2
Oil & Grease	mg/l	NS	<2	<2	<2	<2	<2
Nitrate Nitrogen as NO ₃	mg/l	1.5	4.6	8.4	9.4	5.1	0.2

Parameter	Units	Water Quality Standards (As per IS:2296)	Results				
			SW-1	SW-2	SW-3	SW-4	SW-5
Chlorides a Cl-	mg/l	50	35	47	61	38	49
Fluorides as F-	mg/l	NS	0.3	0.5	0.6	0.3	0.5
Sulphates as SO ₄ ²⁻	mg/l	NS	15	36	40	18	32
Cyanide as CN-	mg/l	0.2	<0.05	<0.05	<0.05	<0.05	<0.05
Phenolic Compound as (C ₆ H ₅ OH)	mg/l	NS	<0.001	<0.001	<0.001	<0.001	<0.001
Hexavalent Chromium as Cr+6	mg/l	50	<0.05	<0.05	<0.05	<0.05	<0.05
Iron as Fe	mg/l	NS	0.13	0.17	0.26	0.12	0.19
Cadmium as Cd	mg/l	1.5	<0.01	<0.01	<0.01	<0.01	<0.01
Manganese as Mn	mg/l	NS	<0.01	<0.01	<0.01	<0.01	<0.01
Lead as Pb	mg/l	NS	<0.01	<0.01	<0.01	<0.01	<0.01
Copper as Cu	mg/l	0.1	<0.05	<0.05	<0.05	<0.05	<0.05
Total Arsenic as As	mg/l	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zinc as Zn	mg/l	NS	0.12	0.18	0.24	0.11	0.14
Aluminum as Al	mg/l	NS	<0.03	<0.03	<0.03	<0.03	<0.03
Sodium as Na	mg/l	NS	16	38	41	19	32
Potassium as K	mg/l	NS	2	3	4	2	3
Total Coliforms	MPN/100	300	280	9.0 x 10 ²	1.1 x 10 ³	350	6.3 x 10 ²

Note: SW1-Near Ghora Ghat, SW2-Pond Near Bunda Bigha, SW3-Pond Near Patak Bigha, SW4- River Upstream Near Ghir Sindi Kurdh

SW5- Pond Near Ghuji.

1.5 Flora and Fauna Checklist

Table 1-6: Flora Checklist

Sl. No.	Botanical Name	Local Name	Family	Local Status	IUCN Status	Core	Buffer
Trees							
1	<i>Acacia auriculiformis</i> Benth.	Bengali babul	Leguminosae	C	LC		*
2	<i>Senegalia catechu</i> (L. f.) P.J.H. Hurter & Mabb.	Khair	Leguminosae	C	LC	*	*
3	<i>Aegle marmelos</i> (L.) Corrêa	Belpathar	Rutaceae	C	LC	*	*
4	<i>Alangium chinense</i> (Lour.) Harms		Cornaceae	C	LC	*	*

Sl. No.	Botanical Name	Local Name	Family	Local Status	IUCN Status	Core	Buffer
5	<i>Albizia lebbbeck</i> (L.) Benth.	Sirish	Leguminosae	C	LC	*	*
6	<i>Anogeissus latifolia</i> (Roxb. ex DC.) Wall. ex Bedd.	Dhaora	Combretaceae	C	LC		*
7	<i>Acacia leucophloea</i> (Roxb.) Willd.	Nimabar Safed Babul Safed Kikka	Leguminosae	C	LC	*	*
8	<i>Vachellia nilotica</i> (L.) P.J.H.Hurter & Mabb.	Babul	Leguminosae	C	LC	*	*
9	<i>Alangium salviifolium</i> (L.f.) Wangerin.	Akola	Cornaceae	C	LC	*	*
10	<i>Albizia amara</i> (Roxb.) B.Boivin.	Krishna siris	Leguminosae	C	LC		*
11	<i>Alstonia scholaris</i> (L.) R. Br.	Chhativan, Satawana	Apocynaceae	C	LC		*
12	<i>Ailanthus excelsa</i> Roxb.	Maharuk, Ghomeem	Simaroubaceae	C	LC	*	*
13	<i>Annona squamosa</i> L.	Sharifa, Sitaphal	Annonaceae	C	LC	*	*
14	<i>Azadirachta indica</i> A.Juss.	Neem	Meliaceae	C	LC	*	*
15	<i>Bauhinia racemosa</i> Lam.	Katmauli	Leguminosae	C	LC		*
16	<i>Bauhinia purpurea</i> L.	Kaniar	Leguminosae	C	LC		*
17	<i>Borassus flabellifer</i> L.		Arecaceae	C	LC	*	*
18	<i>Butea monosperma</i> (Lam.) Taub.	Palash	Leguminosae	C	LC	*	*
19	<i>Buchanania cochinchinensis</i> (Lour.) M.R.Almeida	Char, Charoli	Anacardiaceae	C	LC		*
20	<i>Bombax ceiba</i> L.	Shimal Simal	Malvaceae	C	LC	*	*
21	<i>Boswellia serrata</i> Roxb.	salaki	Burseraceae	C	LC		*
22	<i>Casearia tomentosa</i> Roxb.		Salicaceae	C	LC		*
23	<i>Cassia fistula</i> L.	Amaltas	Leguminosae	C	LC	*	*
24	<i>Cassia siamea</i> Lam.	Kassod	Leguminosae	C	LC		*
25	<i>Ceiba pentandra</i> (L.) Gaertn	Safed Simal	Malvaceae	C	LC		*
26	<i>Citrus sinensis</i> (L.) Osbeck	santra	Rutaceae	C	LC		*
27	<i>Cochlospermum religiosum</i> (L.) Alston	Galgol	Bixaceae				*
28	<i>Cordia dichotoma</i> G.Forst.	Lasora, Bada Goonda	Boraginaceae	C	LC		*
29	<i>Dalbergia sissoo</i> DC.	Shisham	Leguminosae	C	LC	*	*
30	<i>Delonix regia</i> (Hook.) Raf.	Gulmohar or Gul Mohr	Leguminosae	C	LC	*	*
31	<i>Dichrostachys cinerea</i> (L.) Wight & Arn.	kheri	Mimosaceae	C	LC	*	*

Sl. No.	Botanical Name	Local Name	Family	Local Status	IUCN Status	Core	Buffer
32	<i>Diospyros chloroxylon</i> Roxb.	Kala tendu Kinnu	Ebenaceae	C	LC		*
33	<i>Diospyros melanoxylon</i> Roxb.	Tendu	Ebenaceae				*
34	<i>Diospyros montana</i> Roxb.	Bistendu, Kala dhao, Kendu	Ebenaceae				*
35	<i>Eucalyptus globulus</i> Labill.	Eucalyptus	Myrtaceae	C	LC	*	*
36	<i>Ficus benghalensis</i> L.	Bargad	Moraceae	C	LC	*	*
37	<i>Ficus hispida</i> L.f.	Gobla/Kagsha/Kala Umbar	Moraceae	C	LC		*
38	<i>Ficus mollis</i> Vahl	Kamarup	Moraceae	C	LC	*	*
39	<i>Ficus religiosa</i> L.	Pippal	Moraceae	C	LC	*	*
40	<i>Flacourtia indica</i> (Burm.f.) Merr.	Bilangada	Salicaceae	C	LC		*
41	<i>Givotia moluccana</i> (L.) Sreem.		Euphorbiaceae	C	LC		*
42	<i>Gardenia latifolia</i> Aiton	Gandhraj	Rubiaceae	C	LC		*
43	<i>Grewia tiliifolia</i> Vahl.	Dhamin, Dhamni	Malvaceae	C	LC		*
44	<i>Gymnosporia emarginata</i> (Willd.) Thwaites	Vingar, Baikal, Kingani	Celastraceae	C	LC		*
45	<i>Gyrocarpus americanus</i> Jacq.	Zaitun	Hernandiaceae	C	LC		*
46	<i>Gmelina arborea</i> Roxb.	Gumbar, Gamhar	Lamiaceae	C	LC	*	*
47	<i>Grewia asiatica</i> L.	Phalsa	Malvaceae	C	LC		*
48	<i>Holoptelea integrifolia</i> Planch.	Chilbil, Kaanjhu	Ulmaceae	C	LC	*	*
49	<i>Helicteres isora</i> L.	Marorphal	Malvaceae	C	LC		*
50	<i>Hymenodictyon orixense</i> (Roxb.) Mabb.	Kala Bachnag, Bhurkur	Rubiaceae	C	LC		*
51	<i>Ixora pavetta</i> Andrews	Rugmini	Rubiaceae	C	LC	*	*
52	<i>Lannea coromandelica</i> (Houtt.) Merr.	Mohin tree	Anacardiaceae	C	LC	*	*
53	<i>Leucaena leucocephala</i> (Lam.) de Wit	Safed Babool	Leguminosae	C	LC	*	*
54	<i>Mangifera indica</i> L.	Aam	Anacardiaceae	C	LC	*	*
55	<i>Maytenus emarginata</i> (Ruiz & Pav.) Loes.	Vingar, Baikal, Kingani	Celastraceae	C	LC		*
56	<i>Millingtonia hortensis</i> L.f.	Neem Chameli	Bignoniaceae	C	LC		*
57	<i>Morinda pubescens</i>	Auch	Rubiaceae	C		*	
58	<i>Moringa oleifera</i> Lam.	munga, saijna, shajna	Moringaceae	C	LC	*	*
59	<i>Madhuca longifolia</i> (Koenig) <i>Macbr. var. latifolia</i>	Mahuwa	Sapotaceae	C	LC	*	*
60	<i>Mitragyna parvifolia</i> (Roxb.) Korth.	Kadamb, Karam, Kaim,	Rubiaceae	C	LC	*	*

Sl. No.	Botanical Name	Local Name	Family	Local Status	IUCN Status	Core	Buffer
61	<i>Nyctanthes arbor-tristis</i> L.	Paarijat, Shefali, Har Singar	Oleaceae	C	LC	*	*
62	<i>Peltophorum pterocarpum</i> (DC.) K. Heyne	Peela gulmohar	Leguminosae	C	LC		*
63	<i>Phoenix sylvestris</i> (L.) Roxb.	Khajur, Sendhi	Arecaceae	C	LC	*	*
64	<i>Phyllanthus emblica</i> L.	Amla	Phyllanthaceae	C	LC	*	*
65	<i>Pithecellobium dulce</i> (Roxb.) Benth.	Jangal Jalebi	Leguminosae	C	LC	*	*
66	<i>Plumeria rubra</i> L.	Golachin, Golenchi, Champa	Apocynaceae	C	LC		*
67	<i>Pongamia pinnata</i> (L.) Pierre	Karanj	Leguminosae	C	LC	*	*
68	<i>Prosopis chilensis</i> (Molina) Stuntz		Leguminosae	C	LC	*	*
69	<i>Psidium guajava</i> L.	Amrud	Myrtaceae	C	LC	*	*
70	<i>Pterospermum xylocarpum</i> (Gaertn.) Oken		Malvaceae	C	LC		*
71	<i>Premna mollissima</i> Roth		Lamiaceae				*
72	<i>Samanea saman</i>	Vilaiti Siris	Mimosaceae	C	LC	*	*
73	<i>Sapindus emarginatus</i> Vahl	Ritha	Sapindaceae	C	LC		*
74	<i>Shorea robusta</i> C.F. Gaertn.	Sakher Sakhu Salwa, Sal	Dipterocarpaceae	C	LC		*
75	<i>Sterculia urens</i> Roxb.	Katira, Karaya	Malvaceae	C	LC		*
76	<i>Semecarpus anacardium</i> L.f.	Bilwa	Anacardiaceae	C	LC		*
77	<i>Senna siamea</i> (Lam.) H.S. Irwin & Barneby	Kassod	Leguminosae	C	LC		*
78	<i>Syzygium cumini</i> (L.) Skeels	Jamun	Myrtaceae	C	LC	*	*
79	<i>Tamarindus indica</i> L.	Imli, Titar	Leguminosae	C	LC	*	*
80	<i>Tectona grandis</i> L.f.	Sagvaan	Lamiaceae	C	LC	*	*
81	<i>Terminalia arjuna</i> (Roxb. ex DC.) Wight & Arn.	Arjun, Kahu	Combretaceae	C	LC	*	*
82	<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Baheda, Bhaira	Combretaceae	C	LC	*	*
83	<i>Wrightia tinctoria</i> R.Br.	Mitaindrajou, Dodhi, Indrajau	Apocynaceae	C	LC		*
84	<i>Xylia xylocarpa</i> (Roxb.) Taub.	Suria, Jambu, Tangan	Leguminosae	C	LC		*
85	<i>Ziziphus jujuba</i> Mill.	Beri	Rhamnaceae	C	LC	*	*
Shrubs							
86	<i>Abutilon indicum</i> (L.) Sweet	Kanghi	Malvaceae	C	LC	*	*

Sl. No.	Botanical Name	Local Name	Family	Local Status	IUCN Status	Core	Buffer
87	<i>Agave americana</i> L.	Raam Kanta, Banskeora, Barakanvar, Kantala	Asparagaceae	C	LC	*	*
88	<i>Azima tetracantha</i> Lam.	Kanta gur kamai	Salvadoraceae	C	LC		*
89	<i>Getonia floribunda</i> Roxb	Kokorahj	Combretaceae				
90	<i>Caesalpinia bonduc</i> (L.) Roxb.	Gataran, Karanju	Leguminosae	C	LC	*	*
91	<i>Caesalpinia pulcherrima</i> (L.) Sw.	Krishna-charan	Leguminosae	C	LC		*
92	<i>Calotropis gigantea</i> (L.) Dryand.	Akoa, Akond, Akona	Apocynaceae	C	LC	*	*
93	<i>Calotropis procera</i> (Aiton) Dryand.	Akada, Madar	Apocynaceae	C	LC		*
94	<i>Canna indica</i> L.	Sabbajaya, Sarvajaya	Cannaceae	C	LC		*
95	<i>Carissa carandas</i> L.	Karando, Karaunda	Apocynaceae	C	LC		*
96	<i>Catunaregam spinosa</i> (Thunb.) Tirveng.	Mainphal	Rubiaceae	C	LC	*	*
97	<i>Canthium coromandelicum</i> (Burm.f.) Alston.	Kirma, Kadbar	Rubiaceae	C	LC	*	*
98	<i>Dodonaea viscosa</i> Jacq.	Sinatha, Aliaar	Sapindaceae	C	LC	*	*
99	<i>Euphorbia caducifolia</i> Haines		Euphorbiaceae	C	LC		*
100	<i>Euphorbia tirucalli</i> L.	Sehud, Konpal sehud	Euphorbiaceae	C	LC		*
101	<i>Gardenia gummiifera</i> L.f.	Dikamali	Rubiaceae				
102	<i>Grewia flavescens</i> Juss.	Chapra	Malvaceae	C	LC	*	*
103	<i>Grewia tenax</i> (Forssk.) Fiori	Gondn	Malvaceae	C	LC		*
104	<i>Helicteres isora</i> L.	Marodphali, Aita	Malvaceae	C	LC		*
105	<i>Hibiscus rosa-sinensis</i> L.	Jasat, Jasum, Mandar	Malvaceae	C	LC		*
106	<i>Hyptis suaveolens</i> (L.) Poit.	Vilaiti Tulsi	Lamiaceae	C	LC		*
107	<i>Ixora coccinea</i> L.	Rangan, Rugmini	Rubiaceae	C	LC		*
108	<i>Jasminum roxburghianum</i> Wall. ex C.B.Clarke		Oleaceae	C	LC		*
109	<i>Jatropha curcas</i> L.	Jamal ghoti, Jungli erand	Euphorbiaceae	C	LC		*
110	<i>Jatropha glandulifera</i> Roxb.	Laal Bagharend, Jangali erandi	Euphorbiaceae	C	LC	*	*
111	<i>Lantana camara</i> L.		Verbenaceae	C	LC	*	*
112	<i>Leonotis nepetifolia</i> (L.) R.Br.	Bara Guma	Lamiaceae	C	LC		*
113	<i>Opuntia dillenii</i> (Ker Gawl.) Haw.	Nagphana	Cactaceae	C	LC	*	*

Sl. No.	Botanical Name	Local Name	Family	Local Status	IUCN Status	Core	Buffer
114	<i>Plumbago zeylanica</i> L.	Chitrak	Plumbaginaceae	C	LC	*	*
115	<i>Sarcostemma acidum</i> (Roxb.) Voigt	Somalatha	Apocynaceae	C	LC		*
116	<i>Senna auriculata</i> (L.) Roxb.	Tarwar	Leguminosae	C	LC	*	*
117	<i>Senna occidentalis</i> (L.) Link	Kasondi, Kasandi	Leguminosae	C	LC	*	*
118	<i>Vitex negundo</i> L.	Samhalu, Nirgandhi	Lamiaceae			*	
119	<i>Solanum pubescens</i> Willd.		Solanaceae	C	LC		*
120	<i>Ziziphus oenoplia</i> (L.) Mill.	Makkaya, Makai, Makoh	Rhamnaceae	C	LC	*	*
121	<i>Dichrostachys cinerea</i> (L.) Wight & Arn.	Vurtuli, Kheri	Leguminosae			*	*
Herbs							
122	<i>Acalypha alnifolia</i> Poir.		Euphorbiaceae	C	LC		*
123	<i>Acalypha indica</i> L.	Kuppi, kuppikhokhali	Euphorbiaceae	C	LC	*	*
124	<i>Achyranthes aspera</i> L.	Circita, Latgira, Chichira, Addhajhare	Amaranthaceae	C	LC		*
125	<i>Aerva lanata</i> (L.) Juss.	Gorakhganja, Chaya	Amaranthaceae	C	LC	*	*
126	<i>Aeschynomene aspera</i> L.	Sola	Leguminosae	C	LC	*	*
127	<i>Ageratum conyzoides</i> (L.) L.	Jangli pudina, Visadodi	Compositae	C	LC		*
128	<i>Aloe vera</i> (L.) Burm.f.	Gheekumari	Asparagaceae	C	LC		*
129	<i>Alternanthera sessilis</i> (L.) R.Br. ex DC.	Gudrisag	Amaranthaceae	C	LC		*
130	<i>Amaranthus viridis</i> L.	ungli chaulayi	Amaranthaceae	C	LC	*	*
131	<i>Andrographis paniculata</i> (Burm.f.) Nees	Kalpanath, Kiriya, Chrarayata	Acanthaceae	C	LC		*
132	<i>Andropogon pumilus</i> Roxb.		Poaceae	C	LC		*
133	<i>Apluda mutica</i> L.f.	Tachula, Tachhila	Poaceae	C	LC	*	*
134	<i>Argemone mexicana</i> L.	Satyanasini	Papaveraceae	C	LC		*
135	<i>Aristida fasciculata</i> Torr.		Poaceae	C	LC	*	*
136	<i>Aristida hystrix</i> L.f.		Poaceae	C	LC	*	*
137	<i>Bacopa monnieri</i> (L.) Wettst.	Brahmi	Plantaginaceae	C	LC		*
138	<i>Barleria longifolia</i> L.		Acanthaceae	C	LC	*	*
139	<i>Barleria prionitis</i> L.	Jinti Katsareya	Acanthaceae	C	LC	*	*
140	<i>Blepharis maderaspatensis</i> (L.) B. Heyne ex Roth	Uttagana, Dudhiya Choti	Acanthaceae	C	LC		*

Sl. No.	Botanical Name	Local Name	Family	Local Status	IUCN Status	Core	Buffer
141	<i>Boerhavia diffusa</i> L.	Beshakapore, Gadhaparna	Nyctaginaceae	C	LC	*	*
142	<i>Brachiaria ramosa</i> (L.) Stapf	Makra, Murat	Poaceae	C	LC		*
143	<i>Caralluma adscendens</i>		Apocynaceae	C	LC	*	*
144	<i>Cassia obtusa</i> Clos		Leguminosae	C	LC		*
145	<i>Catharanthus pusillus</i> (Murray) G.Don	Sukbanda	Apocynaceae	C	LC		*
146	<i>Catharanthus roseus</i> (L.) G.Don	Sadabaha	Apocynaceae	C	LC	*	*
147	<i>Celosia argentea</i> L.	Safed Murgha, Sarwari	Amaranthaceae	C	LC		*
148	<i>Chloris barbata</i> Sw.		Poaceae	C	LC	*	*
149	<i>Cleome gynandra</i> L.	Aajgandha, Jakhiya	Cleomaceae	C	LC		*
150	<i>Cleome viscosa</i> L.	Hurhur, Ujla Hulhul	Cleomaceae	C	LC	*	*
151	<i>Commelina benghalensis</i> L.	Kana, Kankawa	Commelinaceae	C	LC	*	*
152	<i>Corchorus aestuans</i> L.	Chonch	Malvaceae	C	LC		*
153	<i>Crotalaria juncea</i> L.		Leguminosae	C	LC		*
154	<i>Croton bonplandianus</i> Baill.	Kala Bhangra	Euphorbiaceae	C	LC	*	*
155	<i>Cyanotis axillaris</i> (L.) D.Don ex Sweet	Kana	Commelinaceae	C	LC		*
156	<i>Cyanotis tuberosa</i> (Roxb.) Schult. & Schult.f.		Commelinaceae	C	LC	*	*
157	<i>Cymbopogon citratus</i> (DC.) Stapf	Gandhatrin	Poaceae	C	LC		*
158	<i>Cyperus rotundus</i> L.	Nagarmotha, Motha	Cyperaceae	C	LC	*	*
159	<i>Dactyloctenium aegyptium</i> (L.) Beauv.	Makra	Poaceae	C	LC		*
160	<i>Datura stramonium</i> L.		Solanaceae	C	LC		*
161	<i>Desmodium triflorum</i> (L.) DC.	Kudaliya Motha	Leguminosae	C	LC	*	*
162	<i>Dipteracanthus prostratus</i> (Poir.) Nees		Acanthaceae	C	LC		*
163	<i>Ecobolium viride</i> (Forssk.) Alston		Acanthaceae	C	LC		*
164	<i>Eclipta prostrata</i> (L.) L.	Bhringraj, Bhangra	Compositae	C	LC		*
165	<i>Eragrostis tenella</i> (L.) Beauv. & Schult.		Poaceae	C	LC	*	*
166	<i>Eupatorium odoratum</i> L.	Tivra gandha, Bagh dhoka	Compositae	C	LC		*
167	<i>Euphorbia hirta</i> L.	Dudhi, Duddhi	Euphorbiaceae	C	LC		*
168	<i>Evolvulus alsinoides</i> (L.) L	Vishnu Krantha	Convolvulaceae	C	LC		*
169	<i>Fimbristylis cymosa</i> R.Br.		Cyperaceae	C	LC		*
170	<i>Glinus oppositifolius</i> (L.) DC.	Jima	Molluginaceae	C	LC		*

Sl. No.	Botanical Name	Local Name	Family	Local Status	IUCN Status	Core	Buffer
171	<i>Gomphrena serrata</i> L.		Amaranthaceae	C	LC	*	*
172	<i>Heteropogon contortus</i> (L.) P.Beauv. ex Roem. & Schult.		Poaceae	C	LC	*	*
173	<i>Hibiscus lobatus</i> (Murray) Kuntze		Malvaceae	C	LC		*
174	<i>Hybanthus enneaspermus</i> (L.) F.Muell.	Ratanpurus	Violaceae	C	LC	*	*
175	<i>Hygrophila auriculata</i> (Schumach.) Heine	Talimkhana, Kokilaksha	Acanthaceae	C	LC		*
176	<i>Indigofera linnaei</i> Ali	Bekario Latahai	Leguminosae	C	LC	*	*
177	<i>Justicia procumbens</i> L.		Acanthaceae	C	LC	*	*
178	<i>Lagascea mollis</i> Cav.		Compositae	C	LC		*
179	<i>Leucas aspera</i> (Willd.) Link		Lamiaceae	C	LC	*	*
180	<i>Ludwigia perennis</i> L.	Chota Halkusa, Gopha	Onagraceae	C	LC		*
181	<i>Melhanian incana</i> B.Heyne		Sterculiaceae	C	LC		*
182	<i>Mimosa pudica</i> L.		Leguminosae	C	LC	*	*
183	<i>Mollugo nudicaulis</i> Lam.	Chui Mui, Lajvanti	Molluginaceae	C	LC	*	*
184	<i>Ocimum tenuifolium</i> L.	Tulsi	Lamiaceae	C	LC		*
185	<i>Oldenlandia umbellata</i> L.	Chirval	Rubiaceae	C	LC		*
186	<i>Oxalis corniculata</i> L.	Amrul	Oxalidaceae	C	LC		*
187	<i>Parthenium hysterophorus</i> L.		Compositae	C	LC	*	*
188	<i>Pavonia zeylanica</i> Cav.		Malvaceae	C	LC		*
189	<i>Phyllanthus amarus</i> Schumach. & Thonn.	Jar Amla	Phyllanthaceae	C	LC		*
190	<i>Portulaca oleracea</i> L.	Badi-noni, Khursa	Portulacaceae	C	LC		*
191	<i>Rhynchosia capitata</i> (Roth) DC.		Leguminosae	C	LC		*
192	<i>Saccharum spontaneum</i> L.	Kaans	Poaceae	C	LC	*	*
193	<i>Setaria pumila</i> (Poir.) Roem. & Schult		Poaceae	C	LC		*
194	<i>Sida acuta</i> Burm.f.	Bariyara, Kureta, Kareta, Karenta	Malvaceae	C	LC	*	*
195	<i>Sida cordifolia</i> L.		Malvaceae	C	LC		*
196	<i>Tephrosia purpurea</i> (L.) Pers.	Balu, Barial	Leguminosae	C	LC	*	*
197	<i>Tribulus terrestris</i> L.	Gokharu	Zygophyllaceae	C	LC	*	*
198	<i>Tridax procumbens</i> (L.) L.	Ghamra	Compositae	C	LC	*	*
199	<i>Typha angustata</i> Bory & Chaub	Pathera, Pater	Typhaceae	C	LC		*

Sl. No.	Botanical Name	Local Name	Family	Local Status	IUCN Status	Core	Buffer
200	<i>Urena lobata</i> L.	Bachita	Malvaceae	C	LC		*
201	<i>Vernonia cinerea</i> (L.) Less.	Sahadevi, Sadodi, Daudotpala	Compositae	C	LC	*	*
202	<i>Ruellia tuberosa</i> L.		Acanthaceae	C	LC	*	*
Climbers							
203	<i>Abrus precatorius</i> L.	Gunci, Rati, Rakti	Leguminosae	C	LC	*	*
204	<i>Aristolochia indica</i> L.	Isharmu, vishapaha	Aristolochiaceae	C	LC	*	*
205	<i>Asparagus racemosus</i> Willd.	Satawar, Sada-bori, Shakakul	Asparagaceae	C	LC		*
206	<i>Caesalpinia bonduc</i> (L.) Roxb.	Katkaranj, Gataran, Karanju, Katkaliji	Leguminosae	C	LC		*
207	<i>Capparis zeylanica</i> L.	Ardanda, Govindphal	Oleaceae	C	LC	*	*
208	<i>Cissus quadrangularis</i> L.	Harjora, Harsenkari	Vitaceae	C	LC	*	*
209	<i>Cuscuta reflexa</i> Roxb.	Akasha Bela, Amarbe	Convolvulaceae	C	LC		*
210	<i>Hemidesmus indicus</i> (L.) R. Br. ex Schult	Anantamul, Dudhli	Apocynaceae	C	LC	*	*
211	<i>Ichnocarpus frutescens</i> (L.) W.T. Aiton	Kaalidhudi, Dudhi, Dudilata	Apocynaceae	C	LC		*
212	<i>Jasminum angustifolium</i> (L.) Willd.	Banmallika	Cleaceae	C	LC		*
213	<i>Mimosa rubicaulis</i> Lam.	Katrar	Leguminosae	C	LC		*
214	<i>Mucuna pruriens</i> (L.) DC.	Kinvach, Kaunch	Leguminosae	C	LC	*	*
215	<i>Tinospora cordifolia</i> (Willd.) Miers.	Gulache, Gulbel	Menispermaceae	C	LC		*
216	<i>Passiflora foetida</i> L.	Jhumka Lata	Passifloraceae	C	LC	*	*
217	<i>Pergularia daemia</i> (Forssk.) Chiov.	Utarani, Utranajutuka	Apocynaceae	C	LC	*	*
218	<i>Cardiospermum halicacabum</i> L.	Kanphata, Kanphuti	Sapindaceae	C	LC	*	*
Hydrophytes							
219	<i>Aponogeton natans</i> (L.) Engl. & K. Krause			C	LC	--	*
220	<i>Lemna minor</i> Hegelm.			C	LC	*	*
221	<i>Hydrilla</i> Rich.			C	LC	--	*
222	<i>Marsilea quadrifolia</i> L.			C	LC	*	*
223	<i>Nymphaea hydrophylla</i> (Lour.) Kuntze	Kumudini, Tagarmul		C	LC	--	*
224	<i>Nymphaea nouchali</i> Burm. f.	Neel padma, Neel kamal		C	LC	*	*
225	<i>Eichornia crassipes</i> Solms			C	LC	--	*

Table 1-7: Fauna Checklist

Check list of Mammals recorded in the Study area (Core and Buffer area)						
S.No.	Family/Scientific Name	Common Name	IUCN	IWPA Schedule	Core	Buffer
	Canidae					
1	Indian fox	<i>Loomdi</i>	LC	I	--	+
	Herpestidae					
2	Common Indian Mongoose	<i>NevaLaa</i>	LC	III	+	+
	Leporidae					
3	Black-naped Hare	<i>Khargosh</i>	LC	IV	+	+
	Muridae					
4	Indian mole rat	<i>Cuhaa</i>	LC	V	+	+
5	Little Indian Field mouse		LC	V	+	+
6	House rat		LC	V	+	+
	Sciuridae					
7	Three striped palm squirrel		LC	V	+	+
	Pteropodidae					
8	Indian fruit bat	<i>Gadal</i>	LC	IV	--	+
	Suidae					
9	Indian Wild Boar	<i>Jungle suar</i>	LC	III	+	+
	Hystriidae					
10	Indian crested porcupine	<i>Sahi Siyal</i>	LC	IV	--	+
Check list of Birds recorded in the Study area (Core and Buffer area)						
SI No	Order/Family/Common name	Species name	IUCN	IWPA Schedule	Core	Buffer
	Ardeidae					
1	Cattle Egret	<i>Bubulcus ibis</i>	Lc	IV	+	+
2	Grey Heron	<i>Ardea cinerea</i>	LC	IV	--	+
3	Indian Pond Heron	<i>Ardeola greyii</i>	LC	IV	+	+

Check list of Mammals recorded in the Study area (Core and Buffer area)						
S.No.	Family/Scientific Name	Common Name	IUCN	IWPA Schedule	Core	Buffer
4	Yellow Bittern	<i>Ixobrychus sinensis</i>	LC	IV	--	+
	Anseriformes:Anatidae					
5	Common Teal	<i>Anas crecca</i>	LC	IV	--	+
	Falconiformes:Accipitridae					
6	Black Kite	<i>Milvus migrans</i>	LC	IV	+	+
	Corvidae					
7	Shikra	<i>Accipiter badius</i>	LC	IV	--	+
	Galliformes:Phasianidae					
9	Grey Francolin	<i>Francolinus pondicerianus</i>	LC	IV	+	+
	Rallidae					
10	Common coot	<i>Pulica atra</i>	LC	IV	--	+
11	Common Moorhen	<i>Gallinula chloropus</i>	LC	IV	--	+
	Columbiformes:Columbidae					
12	Rock pigeon	<i>Columba livia</i>	LC	IV	+	+
13	Spotted Dove	<i>Streptopelia chinensis</i>	LC	IV	+	+
	Psittaciformes:Psittacidae					
14	Rose ringed Parakeet	<i>Psittacula krameri</i>	LC	IV	+	+
15	Alexandrine Parakeet	<i>Psittacula eupatria</i>	NT	IV	--	+
	Cuculiformes:Cuculidae					
16	Asian Koel	<i>Eudynamys scolopacea</i>	LC	IV	+	+
	Strigiformes:Strigidae					
17	Spotted Owlet	<i>Athene brama</i>	LC	IV	--	+
	Upupiformes:Upupidae					
18	Common hoopoe	<i>Upupa epops</i>	LC	IV	--	+
	Apodiformes:Apodidae					
19	Asian Palm Swift	<i>Cypsiurus unicolor</i>	LC	IV	+	+
20	House Swift	<i>Apus affinis</i>	LC	IV	--	+
	Coraciformes:Meropidae					
21	Small Green Bee-eater	<i>Merops orientalis</i>	LC	IV	+	+

Check list of Mammals recorded in the Study area (Core and Buffer area)						
S.No.	Family/Scientific Name	Common Name	IUCN	IWPA Schedule	Core	Buffer
	Coraciidae					
22	Indian Roller	<i>Coracias benghalensis</i>	LC	IV	+	+
	Passeriformes:Alaudidae					
23	Ashy crowned Sparrow Lark	<i>Eremopterix grisea</i>	LC	IV	--	+
	Dicruridae					
24	Black Drongo	<i>Dicrurus macrocercus</i>	LC	IV	+	+
	Cisticolidae					
25	Ashy prinia	<i>Prinia socialis</i>	LC	IV	+	+
	Sturnidae					
26	Common Myna	<i>Acridotheres tristis</i>	LC	IV	+	+
27	Asian pied starling	<i>Gracupica contra</i>	LC	IV	+	+
	Timaliidae					
28	Common Babbler	<i>Turdoides caudatus</i>	LC	IV	+	+
	Aegithinidae					
29	Common lora	<i>Aegithina tiphia</i>	LC	IV	--	+
	Cisticolidae					
30	Plain prinia	<i>Prinia inornata</i>	LC	IV	+	+
	Oriolidae					
31	Eurasian Golden Oriole	<i>Oriolus oriolus</i>	LC	IV	+	+
	Corvidae					
32	House crow	<i>Corvus splendens</i>	LC	IV	+	+
33	Rufous Treepie	<i>Dendrocitta vagabunda</i>	LC	IV	--	+
	Passeridae					
34	House Sparrow	<i>Passer domesticus</i>	LC	IV	+	+
	Estrildidae					
35	Scaly-breasted Munia	<i>Lonchura punctulata</i>	LC	IV	--	+
36	Indian Silverbill	<i>Lonchura malabarica</i>	LC	IV	--	+
	Nectariniidae					
37	Purple rumped Sun bird	<i>Nectarinia zeylonica</i>	LC	IV	+	+

Check list of Mammals recorded in the Study area (Core and Buffer area)						
S.No.	Family/Scientific Name	Common Name	IUCN	IWPA Schedule	Core	Buffer
	Motacillidae					
38	Paddy field Pipit	<i>Anthus rufulus</i>	LC	IV	--	+
39	Pied wagtail	<i>Motacilla madarasapatanensis</i>	LC	IV	--	+
	Pycnonotidae					
40	Red vented bulbul	<i>Pycnonotus cafer</i>	LC	IV	+	+
	Campephagidae					
41	Small Minivet	<i>Pericrocotus cinnamomeus</i>	LC	IV	--	+
	Phalacrocoracidae					
42	Little cormorant	<i>Microcarbo niger</i>	LC	IV	--	+
	Megalaimidae					
43	Coppersmith Barbet	<i>Megalaima haemacephala</i>	LC	IV	--	+
	Phasianidae					
44	Indian peafowl	<i>Pavo cristatus</i>	LC	I	+	+
	Jacanidae					
45	Pheasant-tailed jacana	<i>Hydrophasianus chirurgus</i>	LC	IV	--	+
46	Bronze winged Jacana	<i>Metopidius indicus</i>	LC	IV	--	+
	Accipitridae					
47	Brahminy Kite	<i>Haliastur indus</i>	LC	IV	--	+
	Ploceidae					
48	Baya Weaver	<i>Ploceus philippinus</i>	LC	IV	+	+
	Podicipedidae					
49	Little Grebe	<i>Tachybaptus ruficollis</i>	LC	IV	--	+
	Rallidae					
50	White Breasted Water Hen	<i>Amaurornis phoenicurus</i>	LC	IV	--	+
	Ciconiidae					
51	Asian openbill	<i>Anastomus oscitans</i>	LC	IV	+	+
Check list of Herpeto fauna recorded in the Study Area (Core and Buffer area)						

Check list of Mammals recorded in the Study area (Core and Buffer area)						
S.No.	Family/Scientific Name	Common Name	IUCN	IWPA Schedule	Core	Buffer
Sl No	Order/Family/Common name	Species name	IUCN	IWPA Schedule	Core	Buffer
	Squamata:Agamidae					
1	Common garden lizard	<i>Calotes versicolor</i>	LC	NL	--	+
2	Fan throated lizard	<i>Citana ponticeriana</i>	LC	NL	+	+
3	Common Indian cobra	<i>Naja naja</i>	LC	I	--	+
	Anura:Ranidae					
4	Paddy Field Frog	<i>Fejervarya limnocharis</i>	LC	IV	--	+
5	Common tree frog	<i>Polypedates maculatus</i>	LC	NL	--	+
6	Common Indian Toad	<i>Bufo melanostictus</i>	LC	NL	--	+
	Squamata: Viperidae					
7	Russell's Viper	<i>Daboia russelii</i>	LC	I	--	+
	Squamata: Elapidae					
8	Common Indian Krait	<i>Bungarus caeruleus</i>	LC	NL	--	+
	Squamata;Varanidae					
9	Indian Monitor Lizard	<i>Varanus bengalensis</i>	LC	I	--	+
	Squamata;Chamaeleonidae					
10	Indian Chameleon	<i>Chamaeleo zeylanicus</i>	LC	II	--	+
	Colubridae					
11	Indian rat snake	<i>Ptyas mucosa</i>	LC	II	+	+
	Scincidae					
12	Common skink	<i>Mabuya carinata</i>	LC	NL	+	+
Check list of Invertebrates recorded in the Study Area (Core and Buffer area)						
Sl No	Order/Family/ Common name	Species name	IUCN	IWPA Schedule	Core	Buffer
	Araneae:Lycosidae					
1	Common Funnel Web Spider	<i>Hippasa agelenoides</i>	NA	NL	+	+
	Vespidae					

Check list of Mammals recorded in the Study area (Core and Buffer area)						
S.No.	Family/Scientific Name	Common Name	IUCN	IWPA Schedule	Core	Buffer
2	Paper wasp	<i>Ropalidia marginata</i>	NA	NL	+	+
	Apidae					
3	Carpenter bee		NA	NL	+	+
4	Honey Bee	<i>Apis mellifera</i>	NA	NL	+	+
5	Honey Bee	<i>Apis indica</i>	NA	NL	--	+
	Lepidoptera:Lycaenidae					
6	Grass Jewel	<i>Freyeria trochylus</i>	NA	NL	--	+
7	Tiny grass blue	<i>Zizula hylax</i>	NA	NL	--	+
	Nymphalidae					
8	Blue Pancy	<i>Junonia orithya</i>	NA	NL	--	+
9	Blue tiger	<i>Tirumala hamata</i>	NA	NL	+	+
10	Common castor	<i>Ariadne merione</i>	NA	NL	--	+
11	Danaid egg fly	<i>Hypolimnas misippus</i>	NA	NL	+	+
12	Lemon Pansy	<i>Junonia lemonias</i>	NA	NL	--	+
13	Peacock Pansy	<i>Precis almana almanac</i>	NA	NL	--	+
14	Plain Tiger	<i>Danaus chrysippus</i>	NA	NL	--	+
15	Tawny Coster	<i>Acraea violae</i>	NA	NL	+	+
	Pieridae					
16	Plain Orange Tip	<i>Colotis eucharis</i>	NA	NL	--	+
17	Mottled emigrant	<i>Catopsilia pyranthe</i>	NA	NL	--	+
	Papilionidae					
18	Common Mormon	<i>Papilio polytes</i>	NA	NL	+	+
	Hesperiidae					
19	Indian skipper	<i>Pelopidas sp</i>	NA	NL	--	+
	Odonata:Libellulidae					
20	Blue Marsh Hawk	<i>Orthetrum glaucaum</i>	NA	NL	--	+
	Aeshnidae					
21	Blue-tailed Green Darner	<i>Anax guttatus</i>	LC	NL	--	+

Check list of Mammals recorded in the Study area (Core and Buffer area)						
S.No.	Family/Scientific Name	Common Name	IUCN	IWPA Schedule	Core	Buffer
	Gomphidae					
22	Common Clubtail	<i>Ictinogomphus rapax</i>	LC	NL	+	+
	Libellulidae					
23	Dragon fly	<i>Urothemis signata signata</i>	NA	NL	--	+
	Nymphalidae					
24	Stripped tiger	<i>Danaus genutia</i>	NA	NL	--	+
	Pieridae					
25	Common gull	<i>Cepora nerissa</i>	NA	NL	--	+
	Nymphalidae					
26	Common Indian Crow	<i>Euploea core</i>	NA	NL	+	+
	Pieridae					
27	Common jezebel	<i>Delias eucharis</i>	NA	NL	--	+
	Libellulidae					
28	Diplacodes trivialis	<i>Dragon fly</i>	NA	NL	--	+
	Aeshnidae					
29	Anax guttatus	<i>Dragon fly</i>	NA	NL	--	+
Checklist of Fishes recorded in the study area (Buffer area)						
S.No.	Vernacular name	Family/Scientific name	IUCN	IWPA Schedule	Core	Buffer
		Channidae				
1	Korrameenu	<i>Channa striata</i>	LC	NL	--	+
2	Matta	<i>Channa punctatus</i>	LC	NL	--	+
		Cyprinidae				
3	Rohu	<i>Labeo rohita</i>	LC	NL	--	+
4	Bocha	<i>Catla catla</i>	LC	NL	--	+
		Bagridae				
5	Jella	<i>Mystus gulio</i>	LC	NL	--	+

Check list of Mammals recorded in the Study area (Core and Buffer area)						
S.No.	Family/Scientific Name	Common Name	IUCN	IWPA Schedule	Core	Buffer
6	Nahara Jella	<i>Mystus cavasius</i>	LC	NL	--	+
		Cyprinidae				
7	Budda pakke	<i>Puntius sophore</i>	LC	NL	--	+
8	Parigi	<i>Pethia ticto</i>	LC	NL	--	+

Check list of Mammals recorded in the Study area (Core and Buffer area)						
S.No.	Family/Scientific Name	Common Name	IUCN	IWPA Schedule	Core	Buffer
	Canidae					
1	Indian fox	<i>Vulpes bengalensis</i>	LC	II	--	+
	Herpestidae					
2	Common Indian Mongoose	<i>Herpestes javanicus</i>	LC	III	+	+
	Leporidae					
3	Black-naped Hare	<i>Lepus nigricollis</i>	LC	IV	+	+
	Muridae					
4	Indian mole rat	<i>Bendicota bengalensis</i>	LC	V	+	+
5	Little Indian Field mouse	<i>Mus booduga</i>	LC	V	+	+
6	House rat	<i>Rattus rattus</i>	LC	V	+	+
	Sciuridae					
7	Three striped palm squirrel	<i>Funambulus palmarum</i>	LC	V	+	+
	Pteropodidae					
8	Indian fruit bat	<i>Pteropus giganteus</i>	LC	IV	--	+
	Suidae					
9	Indian Wild Boar	<i>Sus scrofa cristatus</i>	LC	III	+	+
	Hystriidae					
10	Indian crested porcupine	<i>Hystrix indica</i>	LC	IV	--	+
Check list of Birds recorded in the Study area (Core and Buffer area)						

Check list of Mammals recorded in the Study area (Core and Buffer area)						
S.No.	Family/Scientific Name	Common Name	IUCN	IWPA Schedule	Core	Buffer
SI No	Order/Family/Common name	Species name	IUCN	IWPA Schedule	Core	Buffer
	Ardeidae					
1	Cattle Egret	<i>Bubulcus ibis</i>	Lc	IV	+	+
2	Grey Heron	<i>Ardea cinerea</i>	LC	IV	--	+
3	Indian Pond Heron	<i>Ardeola greyii</i>	LC	IV	+	+
4	Yellow Bittern	<i>Ixobrychus sinensis</i>	LC	IV	--	+
	Anseriformes:Anatidae					
5	Common Teal	<i>Anas crecca</i>	LC	IV	--	+
	Falconiformes:Accipitridae					
6	Black Kite	<i>Milvus migrans</i>	LC	IV	+	+
	Corvidae					
7	Shikra	<i>Accipiter badius</i>	LC	IV	--	+
	Galliformes:Phasianidae					
9	Grey Francolin	<i>Francolinus pondicerianus</i>	LC	IV	+	+
	Rallidae					
10	Common coot	<i>Pulica atra</i>	LC	IV	--	+
11	Common Moorhen	<i>Gallinula chloropus</i>	LC	IV	--	+
	Columbiformes:Columbidae					
12	Rock pigeon	<i>Columba livia</i>	LC	IV	+	+
13	Spotted Dove	<i>Streptopelia chinensis</i>	LC	IV	--	+
	Psittaciformes:Psittacidae					
14	Rose ringed Parakeet	<i>Psittacula krameri</i>	LC	IV	+	+
15	Alexandrine Parakeet	<i>Psittacula eupatria</i>	NT	IV	--	+
	Cuculiformes:Cuculidae					
16	Asian Koel	<i>Eudynamys scolopacea</i>	LC	IV	+	+
	Strigiformes:Strigidae					
17	Spotted Owlet	<i>Athene brama</i>	LC	IV	--	+
	Upupiformes:Upupidae					

Check list of Mammals recorded in the Study area (Core and Buffer area)						
S.No.	Family/Scientific Name	Common Name	IUCN	IWPA Schedule	Core	Buffer
18	Common hoopoe	<i>Upupa epops</i>	LC	IV	--	+
	Apodiformes:Apodidae					
19	Asian Palm Swift	<i>Cypsiurus unicolor</i>	LC	IV	+	+
20	House Swift	<i>Apus affinis</i>	LC	IV	--	+
	Coraciiformes:Meropidae					
21	Small Green Bee-eater	<i>Merops orientalis</i>	LC	IV	+	+
	Coraciidae					
22	Indian Roller	<i>Coracias benghalensis</i>	LC	IV	+	+
	Passeriformes:Alaudidae					
23	Ashy crowned Sparrow Lark	<i>Eremopterix grisea</i>	LC	IV	--	+
	Dicruridae					
24	Black Drongo	<i>Dicrurus macrocercus</i>	LC	IV	--	+
	Cisticolidae					
25	Ashy prinia	<i>Prinia socialis</i>	LC	IV	+	+
	Sturnidae					
26	Common Myna	<i>Acridotheres tristis</i>	LC	IV	+	+
27	Asian pied starling	<i>Gracupica contra</i>	LC	IV	--	+
	Timaliidae					
28	Common Babbler	<i>Turdoides caudatus</i>	LC	IV	+	+
	Aegithinidae					
29	Common lora	<i>Aegithina tiphia</i>	LC	IV	--	+
	Cisticolidae					
30	Plain prinia	<i>Prinia inornata</i>	LC	IV	+	+
	Oriolidae					
31	Eurasian Golden Oriole	<i>Oriolus oriolus</i>	LC	IV	--	+
	Corvidae					
32	House crow	<i>Corvus splendens</i>	LC	IV	+	+
33	Rufous Treepie	<i>Dendrocitta vagabunda</i>	LC	IV	--	+
	Passeridae					

Check list of Mammals recorded in the Study area (Core and Buffer area)						
S.No.	Family/Scientific Name	Common Name	IUCN	IWPA Schedule	Core	Buffer
34	House Sparrow	<i>Passer domesticus</i>	LC	IV	+	+
	Estrildidae					
35	Scaly-breasted Munia	<i>Lonchura punctulata</i>	LC	IV	--	+
36	Indian Silverbill	<i>Lonchura malabarica</i>	LC	IV	--	+
	Nectariniidae					
37	Purple rumped Sun bird	<i>Nectarinia zeylonica</i>	LC	IV	+	+
	Motacillidae					
38	Paddy field Pipit	<i>Anthus rufulus</i>	LC	IV	--	+
39	Pied wagtail	<i>Motacilla madarasapatanensis</i>	LC	IV	--	+
	Pycnonotidae					
40	Red vented bulbul	<i>Pycnonotus cafer</i>	LC	IV	+	+
	Campephagidae					
41	Small Minivet	<i>Pericrocotus cinnamomeus</i>	LC	IV	--	+
	Phalacrocoracidae					
42	Little cormorant	<i>Microcarbo niger</i>	LC	IV	--	+
	Megalaimidae					
43	Coppersmith Barbet	<i>Megalaima haemacephala</i>	LC	IV	--	+
	Phasianidae					
44	Indian peafowl	<i>Pavo cristatus</i>	LC	I	--	+
	Jacaniidae					
45	Pheasant-tailed jacana	<i>Hydrophasianus chirurgus</i>	LC	IV	--	+
46	Bronze winged Jacana	<i>Metopidius indicus</i>	LC	IV	--	+
	Accipitridae					
47	Brahminy Kite	<i>Haliastur indus</i>	LC	IV	--	+
	Ploceidae					
48	Baya Weaver	<i>Ploceus philippinus</i>	LC	IV	+	+
	Podicipedidae					
49	Little Grebe	<i>Tachybaptus ruficollis</i>	LC	IV	--	+

Check list of Mammals recorded in the Study area (Core and Buffer area)						
S.No.	Family/Scientific Name	Common Name	IUCN	IWPA Schedule	Core	Buffer
	Rallidae					
50	White Breasted Water Hen	<i>Amaurornis phoenicurus</i>	LC	IV	--	+
	Ciconiidae					
51	Asian openbill	<i>Anastomus oscitans</i>	LC	IV	--	+
Check list of Herpeto fauna recorded in the Study Area (Core and Buffer area)						
SI No	Order/Family/Common name	Species name	IUCN	IWPA Schedule	Core	Buffer
	Squamata:Agamidae					
1	Common garden lizard	<i>Calotes versicolor</i>	LC	NL	--	+
2	Fan throated lizard	<i>Citana ponticeriana</i>	LC	I	+	+
3	Common Indian cobra	<i>Naja naja</i>	LC	I	--	+
	Anura:Ranidae					
4	Paddy Field Frog	<i>Fejervarya limnocharis</i>	LC	IV	--	+
5	Common tree frog	<i>Polypedates maculatus</i>	LC	NL	--	+
6	Common Indian Toad	<i>Bufo melanostictus</i>	LC	NL	--	+
	Squamata: Viperidae					
7	Russell's Viper	<i>Daboia russelii</i>	LC	II	--	+
	Squamata: Elapidae					
8	Common Indian Krait	<i>Bungarus caeruleus</i>	LC	NL	--	+
	Squamata;Varanidae					
9	Indian Monitor Lizard	<i>Varanus bengalensis</i>	LC	I	--	+
	Squamata;Chamaeleonidae					
10	Indian Chameleon	<i>Chamaeleo zeylanicus</i>	LC	II	--	+
	Colubridae					
11	Indian rat snake	<i>Ptyas mucosa</i>	LC	II	+	+
	Scincidae					
12	Common skink	<i>Mabuya carinata</i>	LC	NL	+	+
Check list of Invertebrates recorded in the Study Area (Core and Buffer area)						

Check list of Mammals recorded in the Study area (Core and Buffer area)						
S.No.	Family/Scientific Name	Common Name	IUCN	IWPA Schedule	Core	Buffer
SI No	Order/Family/ Common name	Species name	IUCN	IWPA Schedule	Core	Buffer
	Araneae:Lycosidae					
1	Common Funnel Web Spider	<i>Hippasa agelenoides</i>	NA	NL	+	+
	Vespidae					
2	Paper wasp	<i>Ropalidia marginata</i>	NA	NL	+	+
	Apidae					
3	Carpenter bee		NA	NL	+	+
4	Honeybee	<i>Apis mellifera</i>	NA	NL	+	+
5	Honeybee	<i>Apis indica</i>	NA	NL	--	+
	Lepidoptera:Lycaenidae					
6	Grass Jewel	<i>Freyeria trochylus</i>	NA	NL	--	+
7	Tiny grass blue	<i>Zizula hylax</i>	NA	NL	--	+
	Nymphalidae					
8	Blue Pancy	<i>Junonia orithya</i>	NA	NL	--	+
9	Blue tiger	<i>Tirumala hamata</i>	NA	NL	+	+
10	Common castor	<i>Ariadne merione</i>	NA	NL	--	+
11	Danaid egg fly	<i>Hypolimnas misippus</i>	NA	NL	+	+
12	Lemon Pansy	<i>Junonia lemonias</i>	NA	NL	--	+
13	Peacock Pansy	<i>Precis almana almanac</i>	NA	NL	--	+
14	Plain Tiger	<i>Danaus chrysippus</i>	NA	NL	--	+
15	Tawny Coster	<i>Acraea violae</i>	NA	NL	+	+
	Pieridae					
16	Plain Orange Tip	<i>Colotis eucharis</i>	NA	NL	--	+
17	Mottled emigrant	<i>Catopsilia pyranthe</i>	NA	NL	--	+
	Papilionidae					
18	Common Mormon	<i>Papilio polytes</i>	NA	NL	+	+
	Hesperiidae					

Check list of Mammals recorded in the Study area (Core and Buffer area)						
S.No.	Family/Scientific Name	Common Name	IUCN	IWPA Schedule	Core	Buffer
19	Indian skipper	<i>Pelopidas sp</i>	NA	NL	--	+
	Odonata:Libellulidae					
20	Blue Marsh Hawk	<i>Orthetrum glaucaum</i>	NA	NL	--	+
	Aeshnidae					
21	Blue-tailed Green Darner	<i>Anax guttatus</i>	LC	NL	--	+
	Gomphidae					
22	Common Clubtail	<i>Ictinogomphus rapax</i>	LC	NL	+	+
	Libellulidae					
23	Dragon fly	<i>Urothemis signata signata</i>	NA	NL	--	+
	Nymphalidae					
24	Stripped tiger	<i>Danaus genutia</i>	NA	NL	--	+
	Pieridae					
25	Common gull	<i>Cepora nerissa</i>	NA	NL	--	+
	Nymphalidae					
26	Common Indian Crow	<i>Euploea core</i>	NA	NL	+	+
	Pieridae					
27	Common jezebel	<i>Delias eucharis</i>	NA	NL	--	+
	Libellulidae					
28	Diplacodes trivialis	<i>Dragon fly</i>	NA	NL	--	+
	Aeshnidae					
29	Anax guttatus	<i>Dragon fly</i>	NA	NL	--	+
Checklist of Fishes recorded in the study area (Buffer area)						
S.No.	Vernacular name	Family/Scientific name	IUCN	IWPA Schedule	Core	Buffer
		Channidae				
1	Korrameenu	<i>Channa striata</i>	LC	NL	--	+
2	Matta	<i>Channa punctatus</i>	LC	NL	--	+

Check list of Mammals recorded in the Study area (Core and Buffer area)						
S.No.	Family/Scientific Name	Common Name	IUCN	IWPA Schedule	Core	Buffer
		Cyprinidae				
3	Rohu	<i>Labeo rohita</i>	LC	NL	--	+
4	Bocha	<i>Catla catla</i>	LC	NL	--	+
		Bagridae				
5	Jella	<i>Mystus gulio</i>	LC	NL	--	+
6	Nahara Jella	<i>Mystus cavasius</i>	LC	NL	--	+
		Cyprinidae				
7	Budda pakke	<i>Puntius sophore</i>	LC	NL	--	+
8	Parigi	<i>Pethia ticto</i>	LC	NL	--	+

- IUCN: International Union for Conservation of Nature
- Sign (-) absent in the study area
- (+) present in the study area
- LC: Least Concern
- NT: Near Threatened
- VU: Vulnerable
- IWPA – Indian Wildlife Protection Act 1972
- NL- Not listed in IWPA