

3.52. UDHAYAMARTHANDAPURAM BIRDS SANCTUARY

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Section 1: Identification, Location and

- 1.1 *Name of the Wetland:* Udhayamarthandapuram Bird Sanctuary
- 1.2 *Name of the Village (s), Tehsil (s), Municipal area (s):* Thiruthuraipoondi, Udhayamarthandapuram, Vadakkupalliyamedu, Natchikulam, Tholi, Ezhilur, Munangkadu
- 1.3 *Name of the District (s) in which Wetlands complex located:* Thiruvavarur
- 1.4 *Geographical coordinates:*
 - ▶ Latitude: 10°27'02" N
 - ▶ Longitude: 79°33'16" E
- 1.5 *Name of the Department/ Agency which has jurisdiction over Wetland/ Wetland complex:* Forest Department

Section 2: Site Characteristics

- 2.1 *Area of Wetland:* 43.75 ha
- 2.2 *Wetland type:*

Category	Subcategory
✓ Natural (Inland)	☐ Permanent lakes ☒ Seasonal/ intermittent lakes ☐ Permanent streams/ creeks ☐ Seasonal/ intermittent streams/ creeks ☐ Oxbow ☐ River floodplain ☐ Permanent freshwater marshes ☐ Seasonal/ intermittent freshwater marshes ☐ Shrub-dominated Wetlands ☐ Tree-dominated Wetlands ☐ Geothermal Wetlands

	☐ Karst and other subterranean hydrological systems
☐ Natural (Coastal)	☐ Coastal lagoon ☐ Estuary ☐ Intertidal mud, sand or salt flats ☐ Mangroves ☐ Coral reef
☐ Human-made	☐ Aquaculture pond ☐ Tank ☐ Saltpan ☐ Dam/ Reservoir

2.3 *Depth (m):* Average - 2.5; Maximum - 4

2.4 *Elevation (m above mean sea level):* 1

2.5 *Water regimes*

a) Main source of water

- ☒ Rainfall inflow from river
- ☐ Groundwater
- ☒ Catchment runoff
- ☐ Direct/ indirect inflow from the river
- ☐ Others, please specify:
- ☐ Name of River/ Canal System

b) Water performance

- ☐ Mostly permanent
- ☒ Mostly intermittent

c) Destination of water from Wetland

- ☒ Feeds groundwater river to sea
- ☐ To downstream catchment

d) Water pH

- ☐ Acid (< 5.5)
- ☐ Circumneutral (5.5-7.4)
- ☒ Alkaline (> 7.4)

e) Water salinity

- ☒ Fresh (< 0.5 g/l)
- ☐ Brackish (0.5-30 g/l)
- ☐ Euhaline (30-40 g/l)
- ☐ Hypersaline (> 40 g/l)
- ☐ Not known

f) Nutrients in water

- ☒ Eutrophic
- ☐ Mesotrophic
- ☐ Oligotrophic
- ☐ Not known

2.6 *Climatic setting*

a) Annual rainfall/ Snowfall (mm): 175.3

b) Temperature (°C) Minimum 23.4 ; Maximum 36.85

c) Humidity (%) Minimum 74.5 ; Maximum 79.8

2.7 *Area of zone of influence (in ha):* 3791.53 ha (with an irregular radius of 3.5 km)

2.8 *Major land use within zone of influence*

Land Use	Percentage
Forest	0%
Vegetation (Plantation)	3%
Agriculture	77%
Settlements (Rural)	17%
Settlements (Urban)	0%
Industrial	0%
Waterbody	3%

2.9 *Map of Wetland complex and zone of influence:* Enclosed as Annexure 3.52 (Fig. 3.52.1-3.52.2)

Section 3: Biodiversity

3.1 *Notable plant species present in Wetland:* The Wetland is home to a diverse range of plant species, totaling 167 species. (refer to Table 3.52.1 in Annexure 3.52).

3.2 *Notable animal species present in Wetland:* The Wetland supports a variety of animal species, with a total of 123 recorded species. This includes 3 mammal species, 7 reptile species, 8 amphibian species, 94 bird species, and 11 species of butterflies (refer to Table 3.52.2-3.52.3 in Annexure 3.52).

3.3 *Species of conservation significance:* Highlighted in Table 3.52.1-3.52.3.

3.4 *Major plant invasive alien species:* The Wetland supports 12 plant invasive species (refer to Table 3.52.4 in Annexure 3.52).

3.5 *Major animal invasive alien species:* Not available.

Section 4: Ecosystem Services

Importance	Relevance	Details
Source of drinking water for people living and around	☐ Yes ☒ No	
Source of water for agriculture	☒ Yes ☐ No	Surpluses from the Wetland and then supplied to the fields, only when it reaches full supply level (FSL)
Fisheries	☐ Yes ☒ No	
Cultivation of aquatic food plants	☐ Yes ☒ No	
For buffalo wallowing and use of domesticated animals	☐ Yes ☒ No	
Medicinal plants	☒ Yes ☐ No	Few Medicinal plants around the Wetland and which listed in Table 3.52.5 in Annexure 3.52
Is a recreational site	☐ Yes ☒ No	
Buffering communities from extreme events as floods and storms	☐ Yes ☒ No	
Groundwater recharge	☒ Yes ☐ No	Major source of ground water recharge
Water purification	☐ Yes ☒ No	
Acts as a sink for sediments	☐ Yes ☒ No	
Has significant cultural and religious values	☐ Yes ☒ No	
Is a site for recreation and tourism	☐ Yes ☒ No	
Supports noteworthy plants species	☐ Yes ☒ No	
Support noteworthy animal species	☐ Yes ☒ No	

Site of high congregation of migratory water birds	☒ Yes ☐ No	Provides a suitable site for the high congregation of migratory water birds.
Supports life cycle of fish or amphibians	☒ Yes ☐ No	Almost 8 variants of amphibians has been surviving
Mining	☒ Yes ☐ No	Observed the traces of Mining also illegally mining activity is happening
Any other	☐ Yes ☒ No	

Section 5: Pre-Existing Rights and Privileges

Nature of right and privilege	Relevant for the site	Does this negatively impact the Wetland's ecological health?	Brief description
Community Fishing (without any lease or permission from government department)	☐ Yes ☒ No	☐ Yes ☐ No ☐ Not assessed	
Fishing under lease from government department	☐ Yes ☒ No	☐ Yes ☐ No ☐ Not assessed	
Harvest of plants (without any lease or permission from government department)	☐ Yes ☒ No	☐ Yes ☐ No ☐ Not assessed	
Harvest of plants under lease from government department	☐ Yes ☒ No	☐ Yes ☐ No ☐ Not assessed	
Agriculture or horticulture within Wetland	☐ Yes ☒ No	☐ Yes ☐ No ☐ Not assessed	
Grazing	☒ Yes ☐ No	☐ Yes ☐ No ☒ Not assessed	Activity of Grazing has observed
Religious practices	☐ Yes ☒ No	☐ Yes ☐ No ☐ Not assessed	

Withdrawal of water for domestic use	☐ Yes ☒ No	☐ Yes ☐ No ☐ Not assessed	
Withdrawal of water for agriculture or fisheries	☒ Yes ☐ No	☐ Yes ☐ No ☐ Not assessed	When it reaches the FSL
Bathing or wallowing of domestic animals	☐ Yes ☒ No	☐ Yes ☐ No ☐ Not assessed	
Plying of boats	☐ Yes ☒ No	☐ Yes ☐ No ☐ Not assessed	
Any other	☐ Yes ☒ No	☐ Yes ☐ No ☐ Not assessed	

Section 6: Present and Potential Threats

Threat	Degree	Present/ Potential	Additional info.
Changes in water inflow and outflow	☐ High ☐ Medium ☐ Low	☐ Present ☐ Potential	
Pollution	☐ High ☐ Medium ☒ Low	☒ Present ☐ Potential	Household sewage discharge poses a significant threat
Unsustainable harvest of biological resources	☐ High ☐ Medium ☐ Low	☐ Present ☐ Potential	
Mining	☐ High ☐ Medium ☒ Low	☒ Present ☐ Potential	Observed the traces of Mining also illegally mining activity is happening
Siltation	☐ High ☐ Medium ☐ Low	☐ Present ☐ Potential	
Encroachment	☐ High	☐ Present	

	☐ Medium ☐ Low	☐ Potential	
Spread of invasive species	☐ High ☐ Medium ☒ Low	☐ Present ☒ Potential	Listed in Table 3.52.4-3.52.5 in Annexure 3.52
Any other, please list	☐ High ☐ Medium ☐ Low	☐ Present ☐ Potential	

Section 7: Activities Proposed to Be Prohibited (other than those listed in Rule 4 (2) of Wetlands Rules and Regulated

Activity	Whether prohibited or regulated	Regulation within Wetlands zone of influence	If regulated indicates the level of regulation	Name of department/ agency responsible for regulation/ prohibition	Additional info.
Withdrawal of water / impoundment/diversion or any other hydrological intervention		☐ Wetland/ Wetland complex boundary ☐ Zone of influence			
Harvesting of resources (living / non-living)		☐ Wetland/ Wetland complex boundary ☐ Zone of influence			
Grazing	Regulated	☒ Wetland/ Wetland complex boundary ☐ Zone of influence	Upto the boundary is well		
Discharge of treated sewage/ effluent / wastewater	Prohibited	☒ Wetland/ Wetland complex boundary	disruption to Biodiversity		

		☐ Zone of influence			
Construction of boat jetties, and facilities for temporary use, as pantoon bridges		☐ Wetland/ Wetland complex boundary ☐ Zone of influence			
Aquaculture, agriculture and horticulture activities within the Wetland boundaries.		☐ Wetland/ Wetland complex boundary ☐ Zone of influence			
Any other, please list		☐ Wetland/ Wetland complex boundary ☐ Zone of influence			

Section 8: Activities Proposed to be permitted

Activity	Relevance	Within Wetlands or zone of influence	Additional info.
Withdrawal of water for agriculture		☐ Wetland/ Wetlands complex boundary ☒ Zone of influence	May permitted, since the surrounding area is rich in agriculture

Section 9: Listing of Available Scientific Resources

1. Aengals, R., Sathish Kumar, V.M., Palot, M.J. & Ganesh, S.R. (2018). A Checklist of Reptiles of India. 35 pp. Version 3.0. Online publication is available at www.zsi.gov.in (Last update: May 2018)
2. Ali, S. (2002). The Book of Indian Birds (13th Revised Edition). Oxford University Press, New Delhi, 326pp.
3. Balachandran, S. (1998) Migratory, Threatened and Rare birds of Kanyakumari District. Proc. Seminar on endangered fauna of Kanyakumari district, Tamil Nadu (Ed.: R. S. Lal Mohan, 38-39).
4. Bibby, C.J., N.D. Burgess & D.A. Hill (1993). Bird Census Techniques. Academic Press Limited, London, 257pp.

5. BirdLife International (2024) Important Bird Area factsheet: Suchindram Therur, Vembanoor. Downloaded from <https://datazone.birdlife.org/site/factsheet/suchindram-therur-vembanoor-iba-india> on 07/08/2024.
6. Gamble, J.S. and C.E.C. Fischer. 1915-1935. Flora of Presidency of Madras, Adlard and Son, London. pp. 1-3.
7. Grimmet, R., C. Inskipp & T. Inskipp (2000). Pocket Guide to the Birds of the Indian Subcontinent. Oxford University Press, New York, 384pp.
8. Grubh, R. and Grubh, S. (1989) Suchindram Kulam: A Waterbird Sanctuary for Kumari Distict. Bombay Natural History Society, Mumbai. Wetlands International (2002) Waterbirds Population Estimates: Third Edition. Wetlands International Global Series No. 12. Wageningen, the Netherlands.
9. Henry, A.N., Chithra, V.N. and Balakrishnan, P. (1989) Flora of Tamil Nadu India. Series 1: Analysis. Vol. III. Botanical Survey of India, Coimbatore.
10. K. Ratnam Bird of Tamil Nadu
11. Kamalakannan, M.& P.O.Nameer (2019). A checklist of mammals of Tamil Nadu, India. Journal of Threatened Taxa 11(8): 13992–14009; <https://doi.org/10.11609/jott.4705.11.8.13992-14009>.
12. Kehimkar I. The Book of Indian Butterflies. Bombay Natural History Society, 2008, 497.
13. Manakadan, R. and Kannan, V. (2001-2002) A study of Spot-billed Pelicans *Pelecanus philippensis* with special reference to its conservation. Annual Report, Bombay Natural History Society.
14. Mathew, K. M. 1981. The Material for the Flora of the Tamilnadu Carnatic, Madras, India.
15. Matthew, K. M. 1982. Illustrations on the Flora of the Tamilnadu Carnatic. Vol. II. The Diocesan press, Madras, India.
16. Matthew, K. M. 1983. The Flora of Tamilnadu Carnatic. Vol. III. The Diocesan press, Madras, India.
17. Matthew, K. M. 1988. Further Illustrations on the Flora of the Tamilnadu Carnatic. Vol. IV. The Diocesan press, Madras, India.
18. Nair, N.C. and A.N. Henry. 1983. Flora of Tamil Nadu, India. Series 1, Vol. 1, Botanical Survey of India, Southern Circle, Coimbatore. 1-184.
19. Sridharan, N., Somasundaram, S., Thiyakesan, K., & Vijayan, L. (2011). Status of Wetland birds in Kanyakumari, Thanjavur, Cuddalore and Nagapattinam districts of Tamil Nadu, India. Indian Forester, 137(10), 1177–1182.

ANNEXURE 3.52

Fig 3.52.1. Zone of Influence of Udhayamarthandapuram Bird Sanctuary

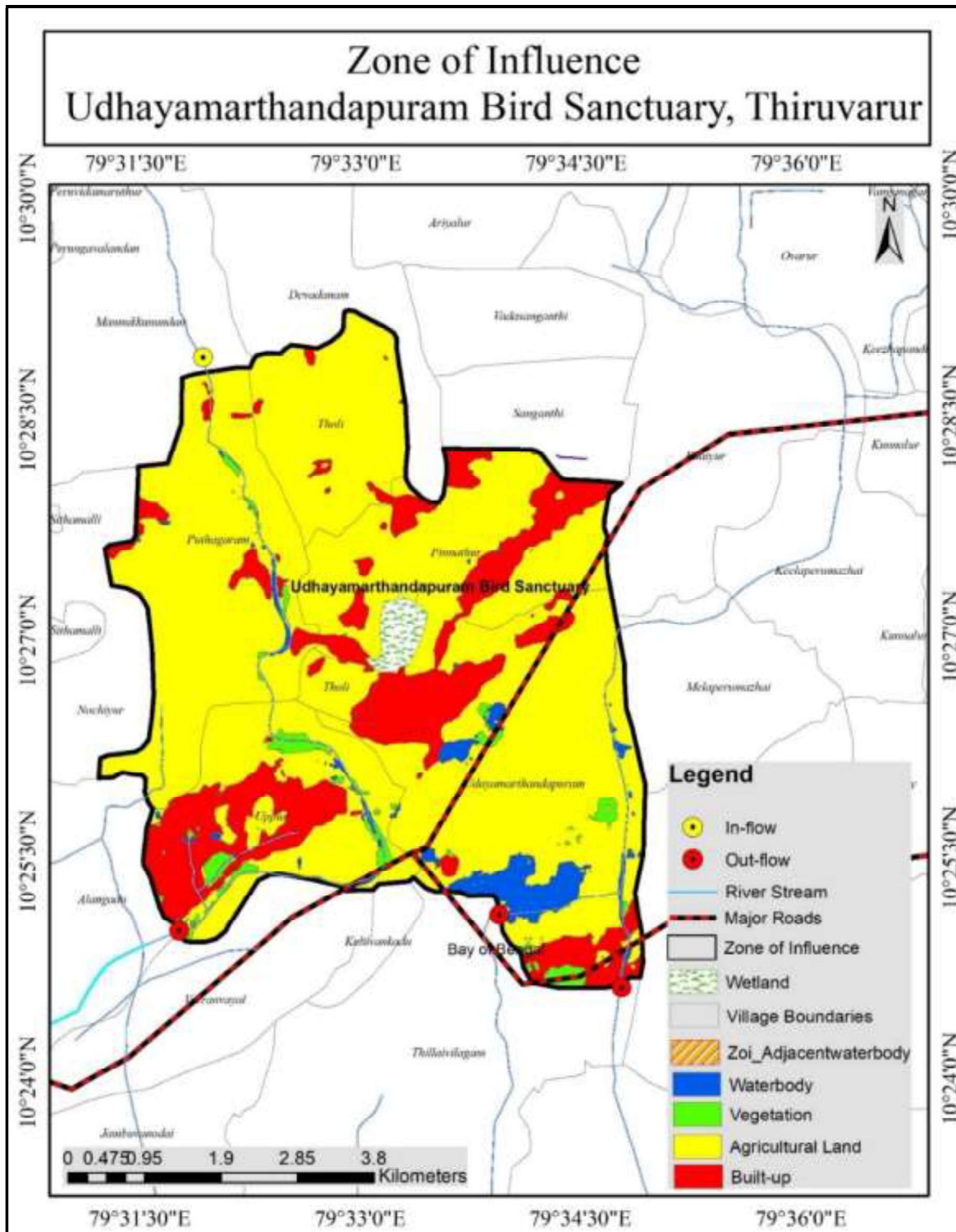


Fig 3.52.2. Map (2004 vs. 2024) and Land Use/ Land Cover of Udhayamarthandapuram Bird Sanctuary

Map of the Wetland in 2011



Map of the Wetland in 2024



Land Use/ Land Cover of the Wetland

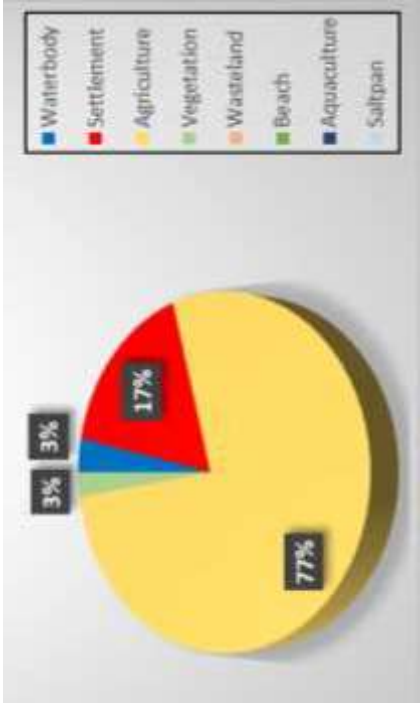


Table 3.52.1. IUCN Status of Floral Species in Udhayamarthandapuram Bird Sanctuary

S. No.	Scientific Name of the Species	Family	Tamil Name	Habit	IUCN
1.	<i>Abrus precatorius</i>	Fabaceae	Kundumani	Climber	NE
2.	<i>Abutilon indicum</i>	Malvaceae	Thuthi	Shrub	LC
3.	<i>Acacia catechu</i>	Mimosaceae	Karuvali	Tree	LC
4.	<i>Acacia leucophloea</i>	Mimosaceae	Velvelam	Tree	LC
5.	<i>Acacia auriculiformis</i>	Mimosaceae		Tree	LC
6.	<i>Acacia nilotica</i>	Mimosaceae	Karuvelam	Tree	LC
7.	<i>Acalypha ciliata</i>	Euphorbiaceae	Agal	Herb	LC
8.	<i>Acalypha fruticosa</i>	Euphorbiaceae	Sinni	Herb	LC
9.	<i>Acalypha indica</i>	Euphorbiaceae	Kuppaimeni	Herb	NE
10.	<i>Acanthospermum hispidum</i>	Compositae		Herb	NE
11.	<i>Achyranthes aspera</i>	Amaranthaceae	Nayurivi	Herb	NE
12.	<i>Aegle marmelos</i>	Rutaceae	Vilvam	Tree	NT
13.	<i>Aerva lanata</i>	Amaranthaceae	Peelai	Herb	NE
14.	<i>Aerva persica</i>	Amaranthaceae	Pulaippoo	Herb	NE
15.	<i>Aeschynomene indica</i>	Fabaceae	Kothiram	Herb	NE
16.	<i>Agave americana</i>	Agavaceae	Kathazhai	Shrub	LC
17.	<i>Ageratum conyzoides</i>	Compositae	Poom pillu	Herb	NE
18.	<i>Ailanthus excelsa</i>	Simaroubaceae	Perumaram	Tree	NE
19.	<i>Alangium salvifolium</i>	Alangiaceae	Alinjil	Tree	NE
20.	<i>Albizia lebbek</i>	Mimosaceae	Vaagai	Tree	LC
21.	<i>Allmania nodiflora</i>	Amaranthaceae	-	Herb	LC
22.	<i>Alloteropsis cimicina</i>	Poaceae		Grass	LC
23.	<i>Alternanthera pungens</i>	Amaranthaceae		Herb	NE
24.	<i>Alternanthera sessilis</i>	Amaranthaceae	Ponnanganni	Herb	NE
25.	<i>Alysicarpus longifolius</i>	Fabaceae		Herb	NE
26.	<i>Alysicarpus monilifer</i>	Fabaceae		Herb	NE

27.	<i>Ampelocissus araneosa</i>	Vitaceae		Climber	NE
28.	<i>Andrographis paniculata</i>	Acanthaceae	Siriyangai	Herb	NE
29.	<i>Anisomeles indica</i>	Labiatae		Shrub	NE
30.	<i>Annona squamosa</i>	Annonaceae	Seetha	Tree	LC
31.	<i>Apluda mutica</i>	Poaceae	Mandapul	Grass	NE
32.	<i>Aristida adscensionis</i>	Poaceae	Oocipul	Grass	NE
33.	<i>Aristida setacea</i>	Poaceae	Variyapul	Grass	NE
34.	<i>Azadirachta indica</i>	Meliaceae	Vaambu	Tree	LC
35.	<i>Bacopa monnieri</i>	Scrophulariaceae	Neerbrahmi	Herb	NE
36.	<i>Bambusa bambos</i>	Poaceae	Mungil	Tree	NE
37.	<i>Barleria longiflora</i>	Acanthaceae		Herb	NE
38.	<i>Bauhinia racemosa</i>	Caesalpiniaceae	Aathi	Tree	NE
39.	<i>Baunihia purpurea</i>	Fabaceae	Purple orchid	Tree	LC
40.	<i>Bidens pilosa</i>	Compositae	-	Herb	LC
41.	<i>Biophytum sensitivum</i>	Oxalidaceae		Herb	NE
42.	<i>Boerhavia diffusa</i>	Nyctaginaceae	Mookarattai	Herb	NE
43.	<i>Boerhavia erecta</i>	Nyctaginaceae	Seemai mookarattai	Herb	LC
44.	<i>Bombax ceiba</i>	Bombacaceae	Ilavu	Tree	LC
45.	<i>Borassus flabellifer</i>	Arecaceae	Pania	Tree	NE
46.	<i>Butea monosperma</i>	Fabaceae	Thalasu	Tree	LC
47.	<i>Calotropis gigantea</i>	Asclepiadaceae	Erukku	Shrub	NE
48.	<i>Cardiospermum halicacabum</i>	Sapindaceae	Mudakotthan	Herb	NE
49.	<i>Cassia fistula</i>	Caesalpiniaceae	Kondrai	Tree	LC
50.	<i>Cassia roxburghii</i>	Caesalpiniaceae	Vakai	Tree	NE
51.	<i>Cassia siamea</i>	Caesalpiniaceae	Manjakondrai	Tree	LC
52.	<i>Casuarina equisetifolia</i>	Casuarinaceae	Savukku	Tree	LC
53.	<i>Celosia argentea</i>	Amaranthaceae	Pannai keera	Herb	LC

54.	<i>Cereus pterogonus</i>	Cactaceae		Shrub	NE
55.	<i>Ceropegia candelabrum</i>	Asclepiadaceae		Climber	NE
56.	<i>Chloris barbata</i>	Poaceae	Kodaipul	Grass	NE
57.	<i>Chromolaena odorata</i>	Compositae		Shrub	NE
58.	<i>Chrysopogon fulvus</i>	Poaceae	-	Grass	LC
59.	<i>Cissus quadrangularis</i>	Vitaceae	Pirandai	Climber	NE
60.	<i>Citrullus colocynthis</i>	Cucurbitaceae	Aattrukumatti	Climber	NE
61.	<i>Cleome viscosa</i>	Capparidaceae	Nai vaelai	Herb	NE
62.	<i>Clitoria ternatea</i>	Fabaceae	Kaarkataan	Climber	NE
63.	<i>Coccinia grandis</i>	Cucurbitaceae	Kovai	Climber	NE
64.	<i>Cocculus hirsutus</i>	Menispermaceae	Kattukodi	Climber	NE
65.	<i>Cynodon dactylon</i>	Poaceae	Aruhampul	Grass	NE
66.	<i>Cyperus alternifolius</i>	Cyperaceae		Sedge	NE
67.	<i>Cyperus iria</i>	Cyperaceae		Sedge	NE
68.	<i>Cyperus rotundus</i>	Cyperaceae	Koraikizhanghu	Sedge	NE
69.	<i>Cyphostemma setosum</i>	Vitaceae	Pulinaralai	Herb	NE
70.	<i>Dactyloctenium aegyptium</i>	Poaceae		Grass	NE
71.	<i>Dalbergia sissoo</i>	Fabaceae	Totakatti	Tree	LC
72.	<i>Delonix regia</i>	Fabaceae		Tree	LC
73.	<i>Dendrocalamus strictus</i>	Poaceae	Kal Moongil	Grass	LC
74.	<i>Dendrophthoe falcata</i>	Loranthaceae	Pulluruvi	Shrub	NE
75.	<i>Dichanthium annulatum</i>	Poaceae		Grass	NE
76.	<i>Dichanthium caricosum</i>	Poaceae		Grass	NE
77.	<i>Echinochloa colona</i>	Poaceae		Grass	LC
78.	<i>Echinochloa crus-galli</i>	Poaceae	-	Grass	LC
79.	<i>Eclipta prostrata</i>	Compositae	Karisaalai	Herb	LC
80.	<i>Elephantopus scaber</i>	Compositae	Anashovadi	Herb	NE

81.	<i>Eleusine indica</i>	Poaceae	Tipparagai	Grass	LC
82.	<i>Elytraria acaulis</i>	Acanthaceae		Herb	NE
83.	<i>Enicostema axillare</i>	Gentianaceae	Vellaragu	Herb	LC
84.	<i>Eragrostis amabilis</i>	Poaceae	-	Grass	LC
85.	<i>Eragrostis ciliaris</i>	Poaceae	-	Grass	LC
86.	<i>Eragrostis Pilosa</i>	Poaceae		Grass	NE
87.	<i>Eragrostis viscosa</i>	Poaceae	-	Grass	LC
88.	<i>Euphorbia hirta</i>	Euphorbiaceae	Ammanpacharisi	Herb	NE
89.	<i>Ficus benghalensis</i>	Moraceae	Alamaram	Tree	NE
90.	<i>Ficus hispida</i>	Moraceae		Tree	LC
91.	<i>Ficus racemosa</i>	Moraceae	Athi	Tree	LC
92.	<i>Ficus religiosa</i>	Moraceae	Arasu	Tree	LC
93.	<i>Gmelina arborea</i>	Verbenaceae	Kumalaamaram	Tree	LC
94.	<i>Gmelina asiatica</i>	Verbenaceae	Nilakkumizh	Shrub	LC
95.	<i>Gomphrena serrata</i>	Amaranthaceae		Herb	NE
96.	<i>Grewia tenax</i>	Tiliaceae		Shrub	LC
97.	<i>Hedyotis aspera</i>	Rubiaceae		Herb	NE
98.	<i>Hemidesmus indicus</i>	Periplocaceae	Nannaari	Herb	NE
99.	<i>Heteropogon contortus</i>	Poaceae		Grass	NE
100	<i>Hydrilla verticillata</i>	Hydrocharitaceae		Herb	LC
101	<i>Hyptis suaveolens</i>	Labiatae		Shrub	NE
102	<i>Ichnocarpus frutescens</i>	Apocynaceae	Udarkodi, Paravalli	Climber	NE
103	<i>Indigofera linnaei</i>	Fabaceae		Herb	NE
104	<i>Jatropha gossypifolia</i>	Euphorbiaceae	Kaatu-amanakku	Shrub	NE
105	<i>Lannea coromandelica</i>	Anacardiaceae	Odhiya maram	Tree	LC
106	<i>Lantana camara</i>	Verbenaceae	Unnichedi	Shrub	LC
107	<i>Leucaena leucocephala</i>	Fabaceae		Tree	LC

108	<i>Leucas aspera</i>	Labiatae	Thumbai	Herb	LC
109	<i>Mangifera indica</i>	Anacardiaceae	Maa maram	Tree	LC
110	<i>Merremia emarginata</i>	Convolvulaceae	Perettaikkeerai	Herb	NE
111	<i>Morinda tinctoria</i>	Rubiaceae	Manjanathi	Tree	NE
112	<i>Nerium oleander</i>	Apocynaceae	Karaviram	Shrub	LC
113	<i>Nymphaea nouchali</i>	Nymphaeaceae		Herb	LC
114	<i>Ocimum americanum</i>	Labiatae	Ganjaankorai	Herb	NE
115	<i>Ocimum basilicum</i>	Labiatae	Karpura thulasi	Herb	NE
116	<i>Ocimum sanctum</i>	Labiatae	Thulasi	Herb	LC
117	<i>Ocimum tenuiflorum</i>	Labiatae	Thulasi	Herb	LC
118	<i>Panicum repens</i>	Poaceae	Injipillu	Grass	LC
119	<i>Paspalidium flavidum</i>	Poaceae	Arisi pullu	Grass	LC
120	<i>Paspalidium geminatum</i>	Poaceae		Grass	LC
121	<i>Passiflora foetida</i>	Passifloraceae	Poonaipidukku	Climber	NE
122	<i>Pennisetum glaucum</i>	Poaceae	Kambu	Grass	LC
123	<i>Pergularia daemia</i>	Asclepiadaceae	Uthamani	Climber	LC
124	<i>Perotis indica</i>	Poaceae	Narival pullu	Grass	LC
125	<i>Phoenix sylvestris</i>	Arecaceae	Eecham	Tree	LC
126	<i>Phyllanthus emblica</i>	Euphorbiaceae	Nelli	Tree	LC
127	<i>Phyllanthus maderaspatensis</i>	Euphorbiaceae		Herb	LC
128	<i>Phyllanthus reticulatus</i>	Euphorbiaceae	Inki pazham	Shrub	LC
129	<i>Pithecellobium dulce</i>	Fabaceae	Kodukkapuli	Tree	LC
130	<i>Polygonum glabrum</i>	Polygonaceae		Herb	NE
131	<i>Polyalthia longifolia</i>	Annonaceae	Asogam	Tree	NE
132	<i>Pongamia pinnata</i>	Fabaceae	Punga maram	Tree	LC
133	<i>Prosopis juliflora</i>	Fabaceae	Seemai karuvai	Tree	LC
134	<i>Rhynchosia cana</i>	Fabaceae		Shrub	NE

135	<i>Ricinus communis</i>	Euphorbiaceae	Amanakku	Shrub	NE
136	<i>Rivea hypocrateriformis</i>	Convolvulaceae	Boodhikeerai	Climber	LC
137	<i>Senna alata</i>	Caesalpiniaceae	Seemai agathi	Shrub	LC
138	<i>Senna auriculata</i>	Caesalpiniaceae	Avaram	Shrub	NE
139	<i>Senna occidentalis</i>	Caesalpiniaceae	Thagarai	Shrub	NE
140	<i>Senna siamea</i>	Fabaceae		Tree	LC
141	<i>Senna tora</i>	Caesalpiniaceae	Oosi thagarai	Herb	NE
142	<i>Simarouba glauca</i>	Simaroubaceae		Tree	LC
143	<i>Solanum americanum</i>	Solanaceae	Manatakkali	Herb	NE
144	<i>Solanum trilobatum</i>	Solanaceae	Thoodhuvalai	Herb	NE
145	<i>Spathodea campanulata</i>	Bignoniaceae	Squirt tree	Tree	LC
146	<i>Spermacoce hispida</i>	Rubiaceae	Nathaichoori	Herb	NE
147	<i>Streblus asper</i>	Moraceae	Kuruvipala	Tree	LC
148	<i>Syzygium cumini</i>	Myrtaceae	Navaal	Tree	LC
149	<i>Tabebuia rosea</i>	Bignoniaceae	Rosy trumpet tree	Tree	LC
150	<i>Tamarindus indica</i>	Caesalpiniaceae	Puliya maram	Tree	LC
151	<i>Tecoma stans</i>	Bignoniaceae	Yellow elder	Tree	LC
152	<i>Tephrosia purpurea</i>	Fabaceae	Kozhinji	Herb	NE
153	<i>Tephrosia tinctoria</i>	Fabaceae		Herb	LC
154	<i>Terminalia arjuna</i>	Combretaceae	Maruthamaram	Tree	NE
155	<i>Terminalia catappa</i>	Combretaceae	Natvadumai	Tree	LC
156	<i>Terminalia chebula</i>	Combretaceae	Kadukaai	Tree	LC
157	<i>Thespesia populnea</i>	Malvaceae	Poovarasu	Tree	LC
158	<i>Thevetia peruviana</i>	Apocynaceae	Ponnarali	Shrub	NE
159	<i>Tinospora cordifolia</i>	Menispermaceae	Seendhil	Climber	NE
160	<i>Trachys muricata</i>	Poaceae	-	Grass	LC
161	<i>Trianthema portulacastrum</i>	Aizoaceae		Herb	NE

162	<i>Tridax procumbens</i>	Compositae	Vettukkaayam	Herb	LC
163	<i>Tylophora indica</i>	Asclepiadaceae	Naippalai	Climber	NE
164	<i>Typha angustifolia</i>	Typhaceae	Sambu	Herb	LC
165	<i>Vitex negundo</i>	Verbenaceae	Nochi	Tree	LC
166	<i>Ziziphus mauritiana</i>	Rhamnaceae	Illandhai	Tree	LC
167	<i>Ziziphus oenoplia</i>	Rhamnaceae	Soorai pazham	Shrub	NE

**Table 52.2. IUCN Status of Selected Fauna Species in
Udhayamarthandapuram Bird Sanctuary**

S. No.	Scientific Name of the Species	Family	Common Name	IUCN	Present study
<i>A. Mammal</i>					
1.	<i>Funambulus pennantii</i>	Sciuridae	Five striped Palm squirrel	LC	*
2.	<i>Urva edwardsii</i>	Herpestidae	Indian grey mongoose	LC	*
3.	<i>Rattus argentiventer</i>	Muridae	Field Rat	LC	*
<i>B. Reptile</i>					
1.	<i>Calotes versicolor</i>	Agamidae	Oriental Garden lizard	LC	*
2.	<i>Ptyas mucosa</i>	Colubridae	Indian Rat Snake	LC	*
3.	<i>Psammophilus dorsalis</i>	Agamidae	Peninsular Rock Agama	LC	
4.	<i>Xenochrophis piscator</i>	Colubridae	Checkered keelback	LC	
5.	<i>Ophisops leschenaultii</i>	Lacertidae	Leschenault's snake-eye	LC	
6.	<i>Sitana ponticeriana</i>	Agamidae	Fan-throated lizard	LC	*
7.	<i>Bungarus caeruleus</i>	Elapidae	Common krait	LC	
<i>C. Amphibian</i>					
1.	<i>Bufo scaber</i>	Bufo	Fergusons toad	LC	*

2.	<i>Duttaphrynus melanostictus</i>	Bufonidae	Common indian toad	LC	*
3.	<i>Kaloula taprobanica</i>	Microhylidae	Painted frog	LC	*
4.	<i>Uperodon systoma</i>	Microhylidae	Marbled ballon frog	LC	*
5.	<i>Polypedates maculatus</i>	Rhacophoridae	Common tree frog	LC	*
6.	<i>Euphlyctis cyanophlyctis</i>	Dicroglossidae	Indian skipper frog	LC	*
7.	<i>Fejervarya caperata</i>	Dicroglossidae	Cricket frog	LC	*
8.	<i>Fejervarya limnocharis</i>	Dicroglossidae	Paddy field frog	LC	*
D. Butterfly					
1.	<i>Euploea core</i>	Common crow	Nymphalidae	LC	PS
2.	<i>Catopsilia pomona</i>	Common Emigrant	Pieridae	NE	*
3.	<i>Melanitis leda</i>	Common evening brown	Nymphalidae	LC	*
4.	<i>Eurema hecabe</i>	Common grass yellow	Pieridae	LC	*
5.	<i>Papilio demoleus</i>	Common lime	Papilionidae	NE	*
6.	<i>Papilio polytes</i>	Common mormon	Papilionidae	NE	*
7.	<i>Junonia lemonias</i>	Lemon pansy	Nymphalidae	NE	*
8.	<i>Catopsilia pyranthe</i>	Mottled Emigrant	Pieridae	NE	*
9.	<i>Pseudozizeeria maha</i>	Pale Grass Blue	Lycaenidae	NE	*
10.	<i>Junonia almana</i>	Peacock pansy	Nymphalidae	LC	*
11.	<i>Atrophaneura hector</i>	Papilionidae	Crimson rose	LC	*

LC – Least Concern; * - Yes

Table 52.3. IUCN Status of Bird Species in Udhayamarthandapuram Bird Sanctuary

S. No.	Scientific Name of the Species	Common name	Habitat	IUCN	PS
1.	<i>Acridotheres tristis</i>	Common Myna	T	LC	*
2.	<i>Actitis hypoleucos</i>	Common Sandpiper	D	LC	*

3.	<i>Alauda gulgula</i>	Oriental Skylark	T	LC	
4.	<i>Alcedo atthis</i>	Common Kingfisher	T	LC	*
5.	<i>Amaurornis phoenicurus</i>	White-breasted Waterhen	A	LC	
6.	<i>Anas poecilorhyncha</i>	Spot-billed Duck	A	LC	
7.	<i>Anastomus oscitans</i>	Asian Openbill	A	LC	
8.	<i>Anhinga melanogaster</i>	Darter	A	LC	*
9.	<i>Anthus rufulus</i>	Paddy-field Pipit	D	LC	*
10.	<i>Ardea cinerea</i>	Grey Heron	A	LC	*
11.	<i>Ardea purpurea</i>	Purple Heron	A	LC	
12.	<i>Ardeola grayii</i>	Indian Pond Heron	A	LC	*
13.	<i>Bubulcus ibis</i>	Cattle Egret	D	LC	*
14.	<i>Casmerodius albus</i>	Great Egret	A	LC	
15.	<i>Ceryle rudis</i>	Pied Kingfisher	D	LC	*
16.	<i>Charadrius dubius</i>	Little Ringed Plover	A	LC	
17.	<i>Chlidonias hybridus</i>	Whiskered Tern	A	LC	
18.	<i>Circus macrourus</i>	Pallid Harrier	T	LC	
19.	<i>Circus melanoleucos</i>	Pied Harrier	T	LC	
20.	<i>Cisticola juncidis</i>	Zitting Cisticola	T	LC	
21.	<i>Clamator jacobinus</i>	Pied Cuckoo	T	LC	
22.	<i>Columba livia</i>	Rock Pigeon	T	LC	
23.	<i>Copsychus saularis</i>	Oriental Magpie Robin	T	LC	
24.	<i>Coracias benghalensis</i>	Indian Roller	T	LC	*
25.	<i>Corvus macrorhynchus</i>	Large-billed Crow	T	LC	*
26.	<i>Corvus splendens</i>	House Crow	T	LC	*
27.	<i>Cypsiurus balasiensis</i>	Asian Palm Swift	T	LC	*
28.	<i>Dendrocitta vagabunda</i>	Rufous Treepie	T	LC	*
29.	<i>Dicrurus adsimilis</i>	Black Drongo	T	LC	*
30.	<i>Dinopium benghalense</i>	Black-rumped Flameback	T	LC	
31.	<i>Dupetor flavicollis</i>	Black Bittern	A	LC	
32.	<i>Egretta garzetta</i>	Little Egret	A	LC	*
33.	<i>Elanus caeruleus</i>	Black-shouldered Kite	T	LC	*

34.	<i>Eremopterix grisea</i>	Ashy-crowned Sparrow Lark	T	LC	
35.	<i>Eudynamys scolopacea</i>	Asian Koel	T	LC	*
36.	<i>Falco tinnunculus</i>	Common Kestrel	T	LC	
37.	<i>Francolinus pondicerianus</i>	Grey Francolin	T	LC	*
38.	<i>Fulica atra</i>	Coot	A	LC	
39.	<i>Gallicrex cinerea</i>	Watercock	A	LC	
40.	<i>Gallinula chloropus</i>	Common Moorhen	A	LC	*
41.	<i>Gelochelidon nilotica</i>	Gull-billed Tern	A	LC	
42.	<i>Glareola maldivarum</i>	Oriental Pratincole	A	LC	
43.	<i>Halcyon smyrnensis</i>	White-throated Kingfisher	D	LC	*
44.	<i>Haliastur indus</i>	Brahminy Kite	T	LC	*
45.	<i>Hierococcyx varius</i>	Common Hawk Cuckoo	T	LC	
46.	<i>Himantopus himantopus</i>	Black-winged Stilt	A	LC	
47.	<i>Hirundo rustica</i>	Barn Swallow	T	LC	
48.	<i>Hirundo smithii</i>	Wire-tailed Swallow	T	LC	
49.	<i>Hydrophasianus chirurgus</i>	Pheasant-tailed Jacana	A	LC	
50.	<i>Ixobrychus cinnamomeus</i>	Cinnamon Bittern	A	LC	
51.	<i>Ixobrychus sinensis</i>	Yellow Bittern	A	LC	
52.	<i>Limosa limosa</i>	Black-tailed Godwit	A	LC	
53.	<i>Lonchura malacca</i>	Black-headed Munia	D	LC	
54.	<i>Merops orientalis</i>	Green Bee-eater	T	LC	*
55.	<i>Merops philippinus</i>	Blue-tailed Bee-eater	T	LC	
56.	<i>Mesophoyx intermedia</i>	Intermediate Egret	A	LC	
57.	<i>Metrpidius indicus</i>	Bronze- Winged Jacana	A	LC	
58.	<i>Milvus migrans</i>	Black Kite	T	LC	*
59.	<i>Motacilla flava</i>	Yellow Wagtail	D	LC	
60.	<i>Motacilla maderaspatensis</i>	White-browed Wagtail	T	LC	
61.	<i>Mycteria leucocophala</i>	Painted stork	A	NT	
62.	<i>Nectarinia lotenia</i>	Loten's Sunbird	T	LC	
63.	<i>Nettapus coromandelianus</i>	Cotton Pygmy Goose	A	LC	
64.	<i>Nycticorax nycticorax</i>	Black-crowned Night Heron	A	LC	

65.	<i>Oriolus oriolus</i>	Eurasean Golden Oriole	T	LC	
66.	<i>Orthotomus sutorius</i>	Common Tailorbird	T	LC	
67.	<i>Passer domesticus</i>	House Sparrow	T	LC	*
68.	<i>Pelecanus philippensis</i>	Spot-billed Pelican	A	LC	
69.	<i>Phalacrocorax carbo</i>	Great Cormorant	A	LC	
70.	<i>Phalacrocorax niger</i>	Little Cormorant	A	LC	*
71.	<i>Phalaropus lobatus</i>	Red-necked Phalarope	A	LC	
72.	<i>Platalea leucorodia</i>	Eurasian Spoonbill	A	LC	
73.	<i>Plegadis falcinellus</i>	Glossy Ibis	A	LC	*
74.	<i>Ploceus manyar</i>	Streaked Weaver	T	LC	
75.	<i>Pluvialis squatarola</i>	Grey Plover	A	LC	
76.	<i>Porphyrio porphyria</i>	Purple Swamphen	A	LC	*
77.	<i>Prinia inornata</i>	Plain Prinia	T	LC	
78.	<i>Prinia socialis</i>	Ashy Prinia	T	LC	*
79.	<i>Psittacula krameri</i>	Rose-ringed Parakeet	T	LC	
80.	<i>Pycnonotus cafer</i>	Red-vented Bulbul	T	LC	
81.	<i>Pycnonotus jocosus</i>	Red-whiskered Bulbul	T	LC	
82.	<i>Rostratula benghalensis</i>	Greater Painted-snipe	A	LC	
83.	<i>Sarkidiornis melanotos</i>	Comb Duck			
84.	<i>Saxicola caprata</i>	Pied Bush Chat	T	LC	*
85.	<i>Sterna aurantia</i>	River Tern	A	LC	
86.	<i>Sternula albifrons</i>	Little Tern	A	LC	*
87.	<i>Streptopelia chinensis</i>	Spotted Dove	T	LC	*
88.	<i>Sturnus pagodarum</i>	Brahminy Starling	T	LC	
89.	<i>Tachybaptus ruficollis</i>	Little Grebe	A	LC	
90.	<i>Threskiornis melanocephalus</i>	Black-headed Ibis	A	NT	*
91.	<i>Tringa glareola</i>	Wood Sandpiper	A	LC	*
92.	<i>Vanellus indicus</i>	Red-wattled Lapwing	D	LC	*
93.	<i>Vanellus malabaricus</i>	Yellow-wattled Lapwing	D	LC	
94.	<i>Zoothera citrine</i>	Orange-headed Thrush	T	LC	

LC – Least Concern; * - Yes; T – Terrestrial; A – Aquatic; D – Dry/ desert; NT – Near Threatened

**Table 52.4. IUCN Status of major plant invasive alien species in
Udhayamarthandapuram Wetland**

S. No.	Species	Family	Tamil Name
1.	<i>Agave americana</i>	Agavaceae	Kathazhai
2.	<i>Alternanthera sessilis</i>	Amaranthaceae	Ponnanganni
3.	<i>Cassia siamea</i>	Caesalpiniaceae	Manjakondrai
4.	<i>Casuarina equisetifolia</i>	Casuarinaceae	Savukku
5.	<i>Lantana camara</i>	Verbenaceae	Unnichedi
6.	<i>Leucaena leucocephala</i>	Fabaceae	
7.	<i>Nerium oleander</i>	Apocynaceae	Karaviram
8.	<i>Prosopis juliflora</i>	Fabaceae	Seemaikaruvai
9.	<i>Senna occidentalis</i>	Caesalpiniaceae	Thagarai
10.	<i>Senna tora</i>	Caesalpiniaceae	Oosithagarai
11.	<i>Tecoma stans</i>	Bignoniaceae	Yellow elder
12.	<i>Typha angustifolia</i>	Typhaceae	Sambu

**Table 52.5. IUCN Status of major medicinal plant species in
Udhayamarthandapuram Wetland**

S. No.	Species	Family	Tamil Name	Habit
1.	<i>Abrus precatorius</i>	Fabaceae	Kundumani	Climber
2.	<i>Acalypha ciliata</i>	Euphorbiaceae	Agal	Herb
3.	<i>Acalypha fruticosa</i>	Euphorbiaceae	Sinni	Herb
4.	<i>Acalypha indica</i>	Euphorbiaceae	Kuppaimeni	Herb
5.	<i>Acanthospermum hispidum</i>	Compositae		Herb
6.	<i>Achyranthes aspera</i>	Amaranthaceae	Nayurivi	Herb
7.	<i>Aegle marmelos</i>	Rutaceae	Vilvam	Tree
8.	<i>Azadirachta indica</i>	Meliaceae	Vaambu	Tree
9.	<i>Bacopa monnieri</i>	Scrophulariaceae	Neerbrahmi	Herb
10.	<i>Borassus flabellifer</i>	Arecaceae	Pania	Tree
11.	<i>Cissus quadrangularis</i>	Vitaceae	Pirandai	Climber
12.	<i>Citrullus colocynthis</i>	Cucurbitaceae	Aattrukumatti	Climber
13.	<i>Clitoria ternatea</i>	Fabaceae	Kaarkataan	Climber

14.	<i>Coccinia grandis</i>	Cucurbitaceae	Kovai	Climber
15.	<i>Cocculus hirsutus</i>	Menispermaceae	Kattukodi	Climber
16.	<i>Leucas aspera</i>	Labiatae	Thumbai	Herb
17.	<i>Ocimum basilicum</i>	Labiatae	Karpura thulasi	Herb
18.	<i>Ocimum sanctum</i>	Labiatae	Thulasi	Herb
19.	<i>Solanum americanum</i>	Solanaceae	Manatakkali	Herb
20.	<i>Solanum trilobatum</i>	Solanaceae	Thoodhuvalai	Herb
21.	<i>Tinospora cordifolia</i>	Menispermaceae	Seendhil	Climber
22.	<i>Tridax procumbens</i>	Compositae	Vettukkaayam	Herb
23.	<i>Tylophora indica</i>	Asclepiadaceae	Naippalai	Climber
24.	<i>Vitex negundo</i>	Verbenaceae	Nochi	Tree
25.	<i>Ziziphus mauritiana</i>	Rhamnaceae	Illandhai	Tree

CHECK LIST

- ✓ Responsible agency has been clearly identified and details of contact person included
- ✓ Wetland/Wetlands complex boundary has been delineated using GIS and
firmed up by adequate ground truthing
- ✓ Wetland/Wetlands complex map has been provided at required scale
- ✓ Zone of influence has been delineated and included in Wetland map or a separate map
- ✓ Wetland zone of influence is sufficient to manage all activities
- ✓ Site's importance have been listed, and for major categories, justification provided
- ✓ Site's biodiversity values are listed, and for major categories, justification provided
- ✓ List of pre-existing rights and privileges provided
- ✓ Consistency or, inconsistency of pre-existing rights and privileges
indicated to be best of available knowledge
- ✓ Threats to site listed, and for major categories details provided
- ✓ Activities prohibited, beyond those already listed in Rule 4 (2) have been mentioned
- ✓ List of activities to be regulated within Wetlands and zone of influence is provided
- ✓ List of activities to be permitted is provided