

Ramsar Information Sheet

Published on 31 October 2022

India

Suchindram Theroor Wetland Complex



Designation date 8 April 2022 Site number 2492

Coordinates 08°09'03"N 77°27'14"E

Area 94,23 ha

Color codes

Fields back-shaded in light blue relate to data and information required only for RIS updates.

Note that some fields concerning aspects of Part 3, the Ecological Character Description of the RIS (tinted in purple), are not expected to be completed as part of a standard RIS, but are included for completeness so as to provide the requested consistency between the RIS and the format of a 'full' Ecological Character Description, as adopted in Resolution X.15 (2008). If a Contracting Party does have information available that is relevant to these fields (for example from a national format Ecological Character Description) it may, if it wishes to, include information in these additional fields.

1 - Summary

Summary

Suchindrum Theroor Wetland complex is part of the Suchindrum-Theroor Manakudi Conservation Reserve. It is declared an Important Bird Area and lies at the southern tip of the Central Asian flyway of migratory birds. The wetlands have two mounds, each one at Suchindram and Theroor. It was formed for birds' nesting purposes and it attracts thousands of birds every year. The total population dependent upon Theroor is about 10,500 and 75% of the population's livelihood hinges on agriculture which in turn is dependent upon the water released from the Theroor tank. The total population dependent upon Suchindram is about 25, 000 and 75% of the population's livelihood hinges on agriculture which in turn is dependent upon the water released from the Suchindram tank.

This is a man-made, inland Tank and is perennial. The history of this wetland complex is age-old, but it is known that kings contributed a great deal to the irrigation facilities. Copper plate inscriptions from the 9th century mention Pasumkulam, Venchikulam, Nedumarthukulam, Perumkulam, Elemchikulam and Konadunkulam. These tanks were located in Tiruneveli district on the northeast of the Gulf of Mannar. On the south and southwest, the wetland complex is bounded by the Indian Ocean and the Arabian Sea. Kanyakumari district receives rainfall from both the southwest and the northeast monsoons. The southwest monsoon starts in June and ends in September, while the northeast monsoon extends from October to the middle of December. As mentioned above, the wetland complex forms part of the Important Bird and Biodiversity Area (IBA) and hence part of the BirdLife International Data Zone.

The wetland complex lies at the intermittent point of kodaiyar river drainage system, where water stored at Perunchanidam, Pechipparai and Kodaiyar dams are released into the channel which drains thousands of ponds. While Theroor tank receives water from thovalai channel, Suchindram tank receives water from Pazhaiyar river Channel. Around 250 species of birds have been recorded in the area, of which 53 are migratory, 12 endemic, and 4 threatened.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Responsible compiler

Institution/agency Tamil Nadu State Wetland Authority

O/o Additional Principal Chief Conservator of Forests & Member Secretary

Postal address Tamil Nadu State Wetland Authority

No.1, Jeenis Road, Panagal Building, VIII Floor, Saidapet, Chennai 600 015

Tamil Nadu, INDIA

National Ramsar Administrative Authority

Institution/agency | Ministry of Environment, Forest & Climate Change

Office of the Secretary

Ministry of Environment, Forest & Climate Change

Indira Paryavaran Bhavan,

Postal address
Jorbagh Road

New Delhi - 110 003

INDIA

2.1.2 - Period of collection of data and information used to compile the RIS

From year 2004

To year 2021

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)

Suchindram Theroor Wetland Complex

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image

<1 file(s) uploaded>

Former maps 0

Boundaries description

Site comes under the jurisdiction of Tamil Nadu Forest Department, Kanniyakumari. Suchindram tank& Theroor tank is part of the Suchindram-Theroor Manakudi Conservation Reserve. Both are Located in Agestheeswaram Taluk. Nagercoil to Kanniyakumari State highway passes adjacent to Suchindram tank. The District Road Connecting Ozhuginasery to Marungoor passes adjacent to Theroor tank. Suchindram Wetland complex has Survey no. 7 over an extended area of 94.229 ha., Theroor Wetland complex as survey No. 895/1 & 914/4 over an extended area of 108.86 hectares.

Boundaries of Suchindram wetland: Re.Sy.No. 7 of Suchindram Village:--North- Survey Number 12 of Vadiweeswaram village; East- Survey number 8/1A2, 11/1A1, 7A1, 10, 12/1, 2B, 3, 4, 5, 16/1, 2, 17, 55/1,56/1,2,6,7, 62/1,2,3, 63/1,4,5,6,8, 64/3,4,5, 72/1,2, 72/4,5, 73/1,2,3,8, 80/1,2,6, 81/1,2,3, 88/1,2,3,9 89/1,3,7, 96/1, 67,8,10, 97/1,2, 90/1,6,7,9, 99/1,108/1,2;109/1,2,3, 110/1,2,3 and 111/7 of Suchindram village; South-Survey Numbers 111/1, 11/2, 11/3, and Parakkai village & West-Nagercoil town; Boundaries of Theroor wetland: Re Sy.No. 895/1 and 914/4 of Theroor village:-- North-Survey Number: 886/3, 4, 5; 887/1,2,3B, 4; 893, 894/1,6,735/12,13,734/4 and 732 of Theroor village; Survey Number: 709/1 A2, 1A1, 1AC, 1A1D, 4A, 710, 711/2 a, 2b, 731/3A4, 3C and 732 of Theroor village;

East-Survey number: 875/1,2,21; 874/1,2,8,9,12,14; 896/8,95/10,11; 864/13 and 14 of Theroor Village; Survey number: 905,906,907,908 and 902 of Theroor Village; South-Survey No 5 of Marungoor Village, Sy.No. 967/1,5,968/1,2,3,5,6, 969/8,9,970/1, 105/1,2,3, 1053/1,3,4,5, 1054/1,2, 1055/1,2,3,6, 1056/10, 1068/1, 1071/1,4,5,6,7,10,11 and 1074 of

Theroor Village; West-Survey numbers 908,909,907,906,905,901,902, and 1794 of Theroor village; Sy.No. 935/4,5, 924/7, 9, 918/1,3,4,5,6,2 and 919 of Theroor village.

2.2.2 - General location

a) In which large administrative region does the site lie?

Commonly known as Suchindrum Eri & Theroor kulam; located at Kanniyakumari Dist. of Tamil Nadu State; is a Protected Area; declared as Conservation Reserve as per Sec 36 A of Wild Life Protection Act 1972; Env. Forest Dept., G.O. (Ms) No. 41, Dated: 19.3.2015

b) What is the nearest town or population centre?

Village that has surrounded by wetland include Pudugramam, Theroor, Suchindrum, Nalloor, Idallakkudi, Parakkai.

2.2.3 - For wetlands on national boundaries only

a) Does the wetland extend onto the territory of one or more other Yes O No

Yes O No countries?

b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party?

2.2.4 - Area of the Site

Official area, in hectares (ha): 94.229

Area, in hectares (ha) as calculated from 94.229

GIS boundaries

2.2.5 - Biogeography

Biogeographic regions

<u></u>								
Regionalisation scheme(s)	Biogeographic region							
Freshwater Ecoregions of the World (FEOW)	Southeastern Ghats-716							
WWF Terrestrial Ecoregions	Tropical & Sub tropical Moist Deciduous Forest with specific biogeographic region being Malabar Coast Moist Forest							

Other biogeographic regionalisation scheme

Site comes under WWF Terrestrial Ecoregion of the World-Tropical& Sub tropical Moist Deciduous Forest with specific biogeographic region being Malabar Coast Moist Forest. More than 95% of the Eco region's natural habitat is cleared/converted. Moist southern regions have been converted to coconut plantation, rice paddy& northern forest into teak, rosewood& rubber plantations. No large areas of intact forest habitat exists although many forest fragments are being preserved by local people as sacred groves. The site is placed as the lowland moist deciduous forests of Malabar coast moist deciduous Forest (IM0124).

Other biogeographic regionalisation-The area covers the South Deccan Plateau Dry Deciduous Forests with a predominantly deciduous vegetation and also known for thorn forests& pockets of Semi Evergreen Forests. It also represents catchment area of major indian rivers. The main contribution to the rainfall is from the NE Monsoon (Oct-Dec), and to considerably lesser degree, the SW monsoon (Jun-Sep). There is much variation in the quantum of rainfall from year to year, as it is vulnerable to cyclonic storms influencing the distribution and quantum of rainfall considerably. The rainfall ranges from 1000-1500 mm annual rainfall is 1460mm. Highest temperatures of 38°C are recorded in May, and minimum of 10°C in Jan & Feb. Humidity remains relatively high and constant throughout the year. Further the area has Central Asian Flyway (CAF) covers Indian Oceans. This flyway comprises several important migration routes of birds. As per the IUCN category this area is one of the IBA (Important Birds Area) Site name as Suchindram, Therur and Vembanoor Wetlands, IBA category as A1, A4i.

3 - Why is the Site important?

3.1 - Ramsar Criteria and their justification

<no data available>

Criterion 2 : Rare species and threatened ecological communities

The wetland houses the following floral species qualifying for Criteria 2:

Cavratia pedate

Commelina tricolor

Tephrosia purpurea

Optional text box to provide further information

And the following faunal species qualifying for Criteria 2::

Channa orientalis

Sterna aurantia

Tringa guttifer

Horadandia atukorali

Criterion 3 : Biological diversity

The wetland complex sustains more than 183 floral and faunal species. The estuarine unit alone provides Justification important habitats for at least 84 species of resident and migratory water birds. These habitats serve as crucial staging and foraging grounds for the resident and migratory birds.

Criterion 4 : Support during critical life cycle stage or in adverse conditions

Suchindram Theroor Wetland Complex has a diverse habitat including large and deep reservoirs with a number of inlets and surrounding agricultural fields which provide good nesting and foraging habitats for Optional text box to provide further birds. This diversity of habitats enable the wetland to act as an important breeding site for some important information bird species including Tringa guttifer, Threskiornis melanocephalus, Pelecanus philippensis, and Anhinga melanogaster. Thus, the site provides support to the species listed above during critical stages of their

☑ Criterion 5 : >20.000 waterbirds

31960 Overall waterbird numbers

Start year 2017

End year 2021

Source of data: Tamil Nadu Forest Department; Indian Bird Conservation Network and Bird Life International

information

Optional text box to provide further Fifteen plus waterbird species contribute to more than 20000 population of waterbirds.

☑ Criterion 6 : >1% waterbird population

information

Optional text box to provide further The site supports more than 1% threshold population of Threskiornis melanocephalus.

☑ Criterion 7 : Significant and representative fish

Justification

About nine species of fish are known to use this site for feeding, breeding, and migration purposes from adjoining wetlands and vice-versa. Some of these fish are exclusively restricted to this area. Some of these fish species show migration cues i.e., some are local migrants while others are long distance migrants. These species include Anguilla bengalensis, Anguilla bicolor, Channa orientalis, Channa punctata, Glossogobius giuris, Heteropneustes fossilis, Horadandia atukorali, Macrognathus guentheri, and Xenentodon cancila.

3.2 - Plant species whose presence relates to the international importance of the site

Phylum	Scientific name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification		
Plantae	Plantae									
TRACHEOPHYTA/ MAGNOLIOPSIDA	Cayratia pedata	Ø	Ø		VU		Listed Vulnerable under IUCN and available in the India Biodiversity Portal	Has a wider use for different ailments due to its high medicinal value. Pharmacognostical profile has been generated from macroscopical analysis, studies, powder analysis, physico-chemical constituent values, fluorescence analysis and preliminary phytochemical evaluation. The antibacterial activity of this plant confirms the therapeutic power.		
TRACHEOPHYTA/ LILIOPSIDA	Commelina tricolor	2	2		VU		Vulnerable Species	Vulnerable Species hence requires attention for conservation.		
TRACHEOPHYTA/ MAGNOLIOPSIDA	Tephrosia purpurea	V			EN		Endangered as per national records	An indigenous species, serving as roosting vegetation for the visiting birds. Has strong positive correlation with the vegetation structure of the site and the bird diversity Used by local communities as cattle feed, manure, fish poison, as well as in ethnomedicine		

Rare, endemic and threatened flora are present in the Site. Two species namely Alocasiamacrorrhizosand Kyllingasquamulataare the new distributional record for the flora of Tamil Nadu. The rare and endemic plants (Commelina hasskarlii, Cyrtococcum longipes, Indotristichara mosissimaand Eriochrysis rangacharii) have also been collected from the wetlands of the study area. The present collection clearly indicates that wetlands are conservation pockets of some rare and endemic plants.

3.3 - Animal species whose presence relates to the international importance of the site

Phylum	Scientific name	qua un crite	ecies lifies der erion 6 9	Species contributes under criterion 3 5 7 8	Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
Fish, Mollusc a	nd Crustacea											
CHORDATA/ ACTINOPTERYGII	Anguilla bengalensis							NT				The wetland houses significant population of this indigenous fish species.
CHORDATA/ ACTINOPTERYGII	Anguilla bicolor							NT				The wetland houses significant population of this indigenous fish species.

Phylum	Scientific name	qua un crite	cies lifies der erion	Specie contribut under criterio	Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
CHORDATA/ ACTINOPTERYGII	Channa orientalis							VU				The wetland houses significant population of this indigenous fish species.
CHORDATA/ ACTINOPTERYGII	Channa punctata							LC				The wetland houses significant population of this indigenous fish species.
CHORDATA/ ACTINOPTERYGII	Glossogobius giuris							LC				The wetland houses significant population of this indigenous fish species.
CHORDATA/ ACTINOPTERYGII	Heteropneustes fossilis							LC				The wetland houses significant population of this indigenous fish species.
CHORDATA/ ACTINOPTERYGII	Horadandia atukorali							VU				The wetland houses significant population of this indigenous fish species.
CHORDATA/ ACTINOPTERYGII	Macrognathus guentheri							LC				The wetland houses significant population of this indigenous fish species.
CHORDATA/ ACTINOPTERYGII	Xenentodon cancila							LC				The wetland houses significant population of this indigenous fish species.
Birds												
CHORDATA/ AVES	Acridotheres fuscus							LC				Contributes to 20000 plus waterbird population and is representative of the biodiversity of the biogeographic region.
CHORDATA/ AVES	Anhinga melanogaster							NT				These Near Threatened Species are spotted in the site every year and they also breed here. This site is an Important Bird Area Zone.
CHORDATA/ AVES	Ardea purpurea							LC				Contributes to 20000 plus waterbird population and is representative of the biodiversity of the biogeographic region.
CHORDATA/ AVES	Bubulcus ibis							LC				Contributes to 20000 plus waterbird population and is representative of the biodiversity of the biogeographic region.
CHORDATA/ AVES	Centropus sinensis							LC				Contributes to 20000 plus waterbird population and is representative of the biodiversity of the biogeographic region.
CHORDATA/ AVES	Ceryle rudis							LC				Contributes to 20000 plus waterbird population and is representative of the biodiversity of the biogeographic region.
CHORDATA/ AVES	Charadrius alexandrinus							LC				Contributes to 20000 plus waterbird population and is representative of the biodiversity of the biogeographic region.
CHORDATA/ AVES	Chlidonias hybrida							LC				Contributes to 20000 plus waterbird population and is representative of the biodiversity of the biogeographic region.
CHORDATA/ AVES	Clamator jacobinus							LC				Contributes to 20000 plus waterbird population and is representative of the biodiversity of the biogeographic region.
CHORDATA/ AVES	Copsychus saularis							LC				Contributes to 20000 plus waterbird population and is representative of the biodiversity of the biogeographic region.
CHORDATA/ AVES	Corvus splendens							LC				Contributes to 20000 plus waterbird population and is representative of the biodiversity of the biogeographic region.

Phylum	Scientific name	qua ur	ecies alifies ader erio	s n	cont u cri	ecies ributes nder erion	Size	Period of pop. Est.		IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
CHORDATA/ AVES	Pelecanus philippensis							2019-2022		NT				These Near Threatened Species are spotted in the site every year and they also breed here. This site is an Important Bird Area Zone.
CHORDATA/ AVES	Sterna aurantia				V					VU				Vulnerable. Representative of the biodiversity of the biogeographic realm.
CHORDATA/ AVES	Threskiornis melanocephalus		9		2		225	2019-2022	5.62	NT				These Near Threatened Species are spotted in the site every year and they also breed here. This site is an Important Bird Area Zone.
CHORDATA/ AVES	Tringa guttifer	V								EN	¥	√		The wetland supports about 3% population of this species.

¹⁾ Percentage of the total biogeographic population at the site

References:

Collar, N.J., Andreev, A.V., Chan, S., Crosby, M.J., Subramanya, S., Tobias, Ja., Rudyanto. And Crosby, M.J., (2001) Spot –billed pelican (Pelecanusphilippensis) Threatened birds of Asia, Birdlife International (2001) Threatened bird of Asia: The Birdlife International Red Data Book".

Kannan, V. and Ranjit Manakadan (2005) the status and distribution of spot billed pelican Pelecanusphilippensis in southern India. Forktail. 2:9-14

Kannan, Vaithianathan & Pandiyan, Jeganathan. (2012). Nesting Ecology of the Spot-Billed Pelican Pelecanus Philippensis in Southern India. World Journal of Zoology. 7. 295-302. 10.5829/idosi.wjz.2012.7.4.6519.

3.4 - Ecological communities whose presence relates to the international importance of the site

<no data available>

4 - What is the Site like? (Ecological character description)

4.1 - Ecological character

The Theroor and Suchindrum tanks are manmade created primarily for the purpose of irrigation. These two wetland receives water from kodayar river basin which receives water from western Ghats as Kanniyakumari District receives rainfall both in north east monsoon and south west monsoon kodayar river basin of agasthiyamalai biosphere reserve is effectively able to supply these in land manmade wetlands permanently except some drought years. This wetland complex is ideal for winter migratory birds. The migratory Birds like northern shoveller cotton teal, Garganey arrives here for nesting these to tanks are surrounded by agricultural fields and rural and urban settlement area the pond supports number of mollusks, Fishes reptiles, amphibians etc. more than 108 species were recorded during bird census carried out by Tamil Nadu Forest Department. This water was once used for drinking purpose and for preparing food but as Nagercoil city expanded and subsequent population surge around the ponds without adequate drainage facility led to discharge of waste water into pazhayar river channel and directly into the wetland complex thereby making the water non-potable As these wetlands are surrounded by human habitations and agricultural fields, there are no wild large mammal. Various species of commercial fish are found. Five rare, endemic and threatened flora are present in the site. Two species namely Alocasiamacrorrhizos and Kyllingasquamulata are the new distributional record for the flora of Tamil Nadu. The rare and endemic plants. (Commelinahasskarlii, Cyrtococcumlongipes, Indotristicharamosissima and Eriochrysisrangacharii) have also been collected from the wetlands of the study area. The present collection clearly indicates that wetlands are conservation pockets of some rare and endemic plants. These wetlands are one of the important staging and foraging grounds for several species of waterbirds. The wetland harbors two IUCN red-listed threatened species which are namely The vulnerable River tern(Sterna aurantia) and Endangered Spotted Greenshank (Tringa guttifer). Moreover, the site also supports 3% of the individuals in a population of the endangered spotted greenshank(Tringa guttifer).

4.2 - What wetland type(s) are in the site?

Human-made wetlands

Trainian made wellands			
Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type
6: Water storage areas/Reservoirs		1	94.229

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Phylum	Scientific name	Position in range / endemism / other		
TRACHEOPHYTA/LILIOPSIDA	Commelina caroliniana	Endemic to TN		

Phylum	Scientific name	Impacts		
TRACHEOPHYTA/LILIOPSIDA	Eichhornia crassipes	Actual (major impacts)		
TRACHEOPHYTA/MAGNOLIOPSIDA	Ipomoea purpurea	Actual (minor impacts)		
TRACHEOPHYTA/MAGNOLIOPSIDA	Prosopis juliflora	Actual (major impacts)		

4.3.2 - Animal species

Other noteworthy animal species

Phylum	Scientific name	Pop. size	Period of pop. est.	%occurrence	Position in range /endemism/other
CHORDATA/AVES	Acrocephalus dumetorum				
CHORDATA/AVES	Actitis hypoleucos				
CHORDATA/AVES	Alcedo atthis				
CHORDATA/AVES	Amaurornis phoenicurus				
CHORDATA/AVES	Anas acuta				
CHORDATA/AVES	Anas poecilorhyncha zonorhyncha				
CHORDATAVAVES	Anas querquedula				
CHORDATAVAVES	Anastomus oscitans				
CHORDATA/AVES	Anthus rufulus				
CHORDATA/AVES	Apus nipalensis				
CHORDATA/AVES	Ardeola grayii				

Phylum	Scientific name	Pop. size	Period of pop. est.	% occurrence	Position in range /endemism/other
CHORDATA/AVES	Artamus fuscus				
CHORDATA/AVES	Calidris minuta				
CHORDATA/ACTINOPTERYGII	Channa striata				
CHORDATA/AVES	Charadrius dubius				
CHORDATA/AVES	Charadrius mongolus				
CHORDATA/AVES	Ciconia episcopus				
CHORDATA/AVES	Columba livia				
CHORDATA/AVES	Coracias benghalensis				
CHORDATA/AVES	Coturnix coturnix				
CHORDATA/AVES	Cyornis tickelliae				
CHORDATA/AVES	Cypsiurus balasiensis				
CHORDATA/AVES	Dendrocitta vagabunda				
CHORDATA/AVES	Dendrocygna javanica				
CHORDATA/AVES	Dicrurus macrocercus				
CHORDATA/AVES	Dinopium benghalense				
CHORDATA/AVES	Egretta garzetta				
CHORDATA/AVES	Eremopterix griseus				
CHORDATA/AVES	Eudynamys scolopaceus				
CHORDATA/AVES	Fulica atra				
CHORDATA/AVES	Gallinula chloropus				
CHORDATA/AVES	Haliastur indus				
CHORDATA/AVES	Himantopus himantopus				
CHORDATA/AVES	Hirundo rustica				
CHORDATA/AVES	Hydrophasianus chirurgus				
CHORDATA/AVES	Hydroprogne caspia				
CHORDATA/ACTINOPTERYGII	Hypophthalmichthys molitrix				
CHORDATA/AVES	Leptocoma zeylonica				
MOLLUSCA/GASTROPODA	Lymnaea stagnalis				
ARTHROPODA/MALACOSTRACA					
CHORDATA/AVES	Megalaima haemacephala				
CHORDATA/AVES	Megalaima zeylanica				
CHORDATA/AVES	Merops orientalis				
CHORDATA/AVES	Merops philippinus				
CHORDATA/AVES	Metopidius indicus				
CHORDATA/AVES	Microcarbo niger				
CHORDATA/AVES	Motacilla cinerea				
CHORDATA/AVES	Motacilla maderaspatensis				
CHORDATA/AVES	Nettapus coromandelianus				
CHORDATA/AVES	Orthotomus sutorius				

Phylum	Scientific name	Pop. size	Period of pop. est.	%occurrence	Position in range /endemism/other
CHORDATA/AVES	Passer domesticus				
CHORDATA/AVES	Pastor roseus				
CHORDATA/AVES	Pelecanus onocrotalus				
CHORDATA/AVES	Phalacrocorax fuscicollis				
CHORDATAVAVES	Platalea leucorodia				
CHORDATAVAVES	Plegadis falcinellus				
CHORDATAVAVES	Pluvialis fulva				
CHORDATAVAVES	Pluvialis squatarola				
CHORDATAVAVES	Porphyrio porphyrio				
CHORDATAVAVES	Pseudibis papillosa				
CHORDATAVAVES	Psittacula krameri				
CHORDATAVAVES	Pycnonotus cafer				
CHORDATA/AMPHIBIA	Rhinella achavali				
CHORDATA/AVES	Rhopodytes tristis				
CHORDATA/AVES	Spilopelia chinensis				
CHORDATA/AVES	Sternula albifrons				
CHORDATA/AVES	Tringa erythropus				
CHORDATAVAVES	Tringa glareola				
CHORDATAVAVES	Tringa ochropus				
CHORDATAVAVES	Tringa stagnatilis				
CHORDATAVAVES	Turdoides caudata				
CHORDATA/AVES	Turdoides leucocephala				
CHORDATA/AVES	Vanellus indicus				

invasive alien animal species				
Phylum	Scientific name	Impacts		
CHORDATA/ACTINOPTERYGII	Cyprinus carpio	Actual (major impacts)		
CHORDATA/ACTINOPTERYGII	Oreochromis mossambicus	Actual (major impacts)		
CHORDATA/ACTINOPTERYGII	Oreochromis niloticus	Actual (major impacts)		

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
A: Tropical humid climate	Am: Tropical monsoonal (Short dry season; heavy monsoonal rains in other months)

4.4.2 -	Geomor	phic	setting

a) Minimum elevation above sea level (in metres)	30
a) Maximum elevation above sea level (in metres)	30
	Entire river basin
	Upper part of river basin \Box
	Middle part of river basin

Acid (pH<5.5)

Circumneutral (pH: 5.5-7.4)

RIS for Site no. 2492, Suchindram Theroor Wetland Comp	lex, India
Alkaline (pH>7.4) ☐	
Unknown ☑	
4.4.7 - Water salinity	
Fresh (<0.5 g/l) ✓	
Fresn (<∪.5 g/l) ■ Mixohaline (brackish)/Mixosaline (0.5-30 g/l) □	
Euhaline/Eusaline (30-40 q/l)	
Hyperhaline/Hypersaline (>40 g/l)	
Unknown	
Please provide further information on salinity (optional):	
Salinity Level is 0.1	
(ECD) Dissolved gases in water	
Dissolved Oxygen (ppm) - 4.6 ± 0.18	
4.4.8 - Dissolved or suspended nutrients in water	
Eutrophic 🗆	
Mesotrophic 🗆	
Oligotrophic ☑	
Dystrophic □	
Unknown □	
Please provide further information on dissolved or suspended nutrients (option	· · · · · · · · · · · · · · · · · · ·
	the growth of phytoplanktons. Though the water is polluted, it supports many es that due to increased nutrient content from sewage as agricultural runoff there is
(ECD) Water conductivity 178.22 ± 13.79(us)	
4.4.9 - Features of the surrounding area which may affect the S	ite
Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar Site differ from the i) br site itself:	oadly similar ○ ii) significantly different ⑤
Surrounding area has greater urbanisation or development \Box	
Surrounding area has higher human population density \Box	
Surrounding area has more intensive agricultural use $lacksquare$	
Surrounding area has significantly different land cover or habitat types \qed	
Please describe other ways in which the surrounding area is different:	
addition, Indian Lotus planting and cultivation is another impo	the surrounding areas on which more than 1500 families are dependent. In rtant economic activity. The surrounding area has drinking water supply from ne wetland water is used for irrigation. They also are engaged in Fishing for their
4.5. Econyotem convices	

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

Provisioning Services				
Ecosystem service Examples I		Importance/Extent/Significance		
Food for humans	Sustenance for humans (e.g., fish, molluscs, grains)	High		
Fresh water Drinking water for humans and/or livestock		High		
Fresh water	Water for irrigated agriculture	High		

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	High
Maintenance of hydrological regimes	Storage and delivery of water as part of water supply systems for agriculture and industry	High
Climate regulation	Local climate regulation/buffering of change	High
Climate regulation	Regulation of greenhouse gases, temperature, precipitation and other climactic processes	High

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Nature observation and nature-based tourism	High
Spiritual and inspirational	Cultural heritage (historical and archaeological)	High
Spiritual and inspirational	Contemporary cultural significance, including for arts and creative inspiration, and including existence values	High
Scientific and educational	Educational activities and opportunities	High
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	High
Scientific and educational	Long-term monitoring site	High

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Biodiversity	Supports a variety of all life forms including plants, animals and microorganizms, the genes they contain, and the ecosystems of which they form a part	High
Soil formation	Sediment retention	High
Soil formation	Accumulation of organic matter	High
Nutrient cycling	Storage, recycling, processing and acquisition of nutrients	High
Nutrient cycling	Carbon storage/sequestration	High

Other ecosystem service(s) not included above:

Supports a variety of all life forms including plants, animals and microorganisms, the genes they contain, and the ecosystems of which they form a part, Sediment retention, Accumulation of organic matter, Storage, recycling, processing and acquisition of nutrients, Carbon storage/sequestration

Within the site: 1000
Outside the site: 10000

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site? Yes ○ No ○ Unknown ●

4.5.2 - Social and cultural values

i) the site provides a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland

Description if applicable

There are no historical monuments or archeological buildings in the vicinity. The wetland does have five temples and one church religious institution along its bank. A few cultural activities are organized around the wetland during some specific festivals. While agriculture is practiced around the wetland, no commercial fishing activities are undertaken. They wetlands receive a good population of Nature enthusiast as tourists. In addition, Theroor and Suchindram play the primary role off buffering by acting as a sponge during events of floods and extreme rainfall. It is major source of ground water recharge. There is a significant runoff from the surrounding catchment area and the wetland acts as a sink for sediments.

ii) the site has exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland

Description if applicable

There are five temples and a church which are the religious institution along its bank. A few cultural activities are organized around the wetland during some specific festivals

iii) the ecological character of the wetland depends on its interaction with local communities or indigenous peoples

Description if applicable

Agricultural	needs, Drinkin	a water pu	rposes. Cul	Itural activities

iv) relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland

4.6 - Ecological processes

<no data available>

5 - How is the Site managed? (Conservation and management)

5.1 - Land tenure and responsibilities (Managers)

5.1.1 - Land tenure/ownership

		owners	
I UL	JIIC	OWITEIS	HIIP

Category	Within the Ramsar Site	In the surrounding area
Provincial/region/state government	✓	✓
Local authority, municipality, (sub)district, etc.	2	V

5.1.2 - Management authority

agency or organization responsible for managing the site:

Please list the local office / offices of any DISTRICT FOREST OFFICE

Provide the name and/or title of the person or people with responsibility for the wetland:

DISTRICT FOREST OFFICER & WILDLIFE WARDEN

E-mail address: kkforestdiv@yahoo.com

5.2 - Ecological character threats and responses (Management)

5.2.1 - Factors (actual or likely) adversely affecting the Site's ecological character

Human settlements (non agricultural)

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Housing and urban areas	High impact			✓

Water regulation

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Drainage	Medium impact		1	✓
Water releases	Medium impact		✓	✓

Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Annual and perennial non- timber crops	Medium impact			/
Livestock farming and ranching	Medium impact			>

Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Gathering terrestrial plants	Medium impact		1	✓
Fishing and harvesting aquatic resources	Medium impact		✓	✓

Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area	
Recreational and tourism activities	Medium impact		1	✓	

Invasive and other problematic species and genes

invadive and eater problem and operate and gener					
Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area	
Invasive non-native/alien species	Medium impact		✓	✓	

Pollution

Foliution				
Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Agricultural and forestry effluents	Medium impact		 ✓	2
Household sewage, urban waste water	Medium impact		 ✓	2
Garbage and solid waste	Medium impact			✓

Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Droughts	Medium impact		✓	✓
Storms and flooding	Medium impact		✓	✓

5.2.2 - Legal conservation status

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Conservation Reserve	Suchindram Theroor Wetland Complex	wiienvis.nic.in	whole

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Suchindram Theroor Wetland Complex	http://datazone.birdife.org/site /factsheet/suchindram-therur-vem banoor-iba-india	whole

5.2.3 - IUCN protected areas categories (2008)

la Strict Nature Reserve
lb Wilderness Area: protected area managed mainly for wilderness protection
Il National Park: protected area managed mainly for ecosystem protection and recreation
III Natural Monument: protected area managed mainly for conservation of specific natural features
IV Habitat/Species Management Area: protected area managed mainly for conservation through management intervention
V Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation
VI Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems

<no data available>

5.2.4 - Key conservation measures

Legal protection

20ga. p. oto ouo				
Measures	Status			
Legal protection	Implemented			

Habitat

Measures	Status
Catchment management initiatives/controls	Implemented
Re-vegetation	Implemented

Species

Measures	Status
Threatened/rare species management programmes	Partially implemented
Control of invasive alien plants	Partially implemented
Control of invasive alien animals	Partially implemented

Human Activities

Measures	Status
Management of water abstraction/takes	Partially implemented
Regulation/management of wastes	Partially implemented
Fisheries management/regulation	Partially implemented
Harvest controls/poaching enforcement	Partially implemented
Regulation/management of recreational activities	Partially implemented
Communication, education, and participation and awareness activities	Partially implemented

5.2.5 - Management planning

Is there a site-specific management plan for the site? Yes

Has a management effectiveness assessment been undertaken for the site?

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning Yes O No

processes with another Contracting Party?

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? No need identified

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Water regime monitoring	Implemented
Water quality	Implemented
Soil quality	Implemented
Plant community	Implemented
Animal community	Implemented
Animal species (please specify)	Implemented

Birds population is estimated every year for understating the migratory birds and residential bird population status.

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Collar, N.J., Andreev, A.V., Chan, S., Crosby, M.J., Subramanya, S., Tobias, Ja., Rudyanto. And Crosby, M.J., (2001) Spot -billed pelican (Pelecanusphilippensis) Threatened birds of Asia, Birdlife International (2001) Threatened bird of Asia: The Birdlife International Red Data

Kannan, V. and Ranjit Manakadan (2005) the status and distribution of spot billed pelican Pelecanusphilippensis in southern India. Forktail. 2:9-

Kannan, Vaithianathan & Pandiyan, Jeganathan. (2012). Nesting Ecology of the Spot-Billed Pelican Pelecanus Philippensis in Southern India. World Journal of Zoology. 7. 295-302. 10.5829/idosi.wjz.2012.7.4.6519.

6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)

ii. a detailed Ecological Character Description (ECD) (in a national format)

iii. a description of the site in a national or regional wetland inventory

iv. relevant Article 3.2 reports

<no file available>

v. site management plan

vi. other published literature

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site



Landscape of Suchindram Tank (*Tarril Nadu State Wetland Authority*, 17-01-2022)



Indian Cormorant (Tamil Nadu State Wetland Authority, 17-01-2022)





Panoramic view of the wetland complex (*Tamil Nadu State Wetland Authority*, 17-01-2022)



Spot-billed Duck (Tamil Nadu State Wetland Authority, 17-01-2022)

6.1.4 - Designation letter and related data

Designation letter

Date of Designation 2022-04-08