

Ramsar Information Sheet

Published on 31 January 2024

India

Ankasamudra Bird Conservation Reserve



Designation date 10 March 2023 Site number 2535 Coordinates 15°07'40"N 76°14'01"E Area 98,76 ha

https://rsis.ramsar.org/ris/2535 Created by RSIS V.1.6 on - 31 January 2024

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

Ankasamudra Bird Conservation Reserve (ABCR) is located in Hagaribommanahalli Taluk of Vijayanagara District, Karnataka, India. It is located about 40 Km from Hampi, the famous UNESCO World Heritage Site. The Site is a manmade Village Irrigation Tank (reservoir) built centuries back and is spread over an area of about 98.76ha (244.04 acre) and is found close to the Ankasamudra village. Several thousands of gum arabic trees (Vachellia (Acacia) nilotica), locally known as Karijali, are found growing from the lakebed. The trees provide nesting and roosting habitat for a large number of large colonial waterbirds.

The Site is a unique man-made waterbody found typically in the parched inland Deccan Plateau of India. It is an ecologically important manmade wetland, rich in biodiversity, comprising of about 210 species of plants, 8 species of mammals, 25 species of reptiles, 240 species of birds, 41 species of fishes, 3 species of frogs, 27 species of butterflies and 32 species of odonata. It is an important breeding site for about 29 species of waterbirds of which, 19 species are large colonially nesting waterbirds that breed on a large number of Acacia trees. The Site fulfils the Ramasar Criteria 2, 3, 4, 5 and 6.

The Site supports several threatened taxa which includes 1 Endangered bird species, 3 Endangered fish species, 1 Vulnerable plant species, 1 Vulnerable reptile species, 5 Vulnerable bird species, 4 Vulnerable fish species, Besides, it also supports about 81 species of medicinal plants. Over 30000 waterbirds birds nest and roost at the Site and the Site supports more than 1% of the biogeographic population of Painted Stork (Mycteria leucocephala) and Black-headed Ibis (Threskiornis melanocephalus).

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Responsible compiler

Institution/agency Retired Academic - University of Agricultural Sciences, Bengaluru

Postal address Flat No. L-704, Purva Venezia, Major Sandeep Unnikrishnan Road, New Town Yelahanka, Bengaluru 560 064, Karnataka, INDIA.

National Ramsar Administrative Authority

 Institution/agency
 Ministry of Environment, Forest & Climate Change

 Postal address
 Office of the Secretary, Ministry of Environment, Forest and Climate Change, Government of India, Indira Paryavaran Bhavan, Jorbagh Road, New Delhi - 110 003

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

From year	2018
To year	2022

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish) Ankasamudra Bird Conservation Reserve

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image

<1 file(s) uploaded>

Former maps 0

Boundaries description

The Site lies between north latitude 15°07'-15°08' and east longitude 76°13'-76°14' in Vijayanagara District of Karnataka State, India. The total area of the Ankasamudra Bird Conservation Reserve is 98.76ha (244.04ac).

The Site's area comprises of the entire tank-bed, in Sy.No. 203 of Ankasamudra Village within the Bachigondanahalli Grama Panchayat limits of Hagaribommanahalli Taluk of Vijayanagara District, Karnataka, India. The Site is located to the east of Ankasamudra village. The boundary limits have been fixed as per the official Government Gazette Notification related to the declaration of the Site as a Conservation Reserve.

2.2.2 - General location

a) In which large administrative region does the site lie? The Site is found in the Vijayanagara District, Karnataka State, India b) What is the nearest town or population Hagaribommanahalli, located about 8 Km south of the Site.

2.2.3 - For wetlands on national boundaries only

a) Does the wetland extend onto the territory of one or more other countries? Yes O No (b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party? Yes O No (

centre?

2.2.4 - Area of the Site

Official area, in hectares (ha): 98.76

Area, in hectares (ha) as calculated from GIS boundaries 97.26

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region	
Freshwater Ecoregions of the World (FEOW)	Southern Deccan Plateau	

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 Site supports the following IUCN Red List species: Endangered: Bird: Steppe Eagle (Aquila nipalensis); Fish: Botia striata, Dawkinsia arulius and Schismatorhynchos nukta
Optional text box to provide further information	Vulnerable: Plant: Santalum album; Birds: Common Pochard (Aythya ferina), River Tern (Sterna aurantia), Lesser Adjutant (Leptoptilos javanicus) Indian Spotted Eagle (Aquila hastata), Greater Spotted Eagle (Clanga clanga); Fish: Hyporhamphus xanthopterus, Cyprinus carnaticus/carpio, Hypselobarbus kolus and Wallago attu.
	Near Threatened: Birds: Black-tailed Godwit (Limosa limosa), Painted Stork (Mycteria leucocephala), Oriental Darter (Anhinga melanogaster), Spot-billed Pelican (Pelecanus philippensis), Black-headed Ibis (Threskiornis melanocephalus), Pallid Harrier (Circus macrourus), Red-necked Falcon (Falco chicquera).
	Endemic Fishes: Pseudetroplus maculatus, Botia striata, Dawkinsia arulius, Hypselobarbus kolus, Schismatorhynchos nukta, Proeutropiichthys takree, Hemibagrus maydelli, Rita gogra and Rita kuturnee.
Criterion 3 : Biological diversity	
Justification	Ankasamudra Bird Conservation Reserve (ABCS) supports populations of plant and animal species important for maintaining the biological diversity in the region, which includes some endemic species. The Site is a unique man-made waterbody found typically in the parched inland Deccan Plateau of India. It is an ecologically important manmade wetland, rich in biodiversity, comprising of about 210 species of plants, 8 species of mammals, 27 species of reptiles, 240 species of birds, 41 species of fishes, 3 species of frogs, 43 species of butterflies and 32 species of odonata. The Site is an important breeding site for about 29 species of waterbirds of which, 19 species are large colonially nesting waterbirds that breed on a large number of Acacia trees growing from the lakebed of ABCR. The complete list of plants and animals found in the Site is annexed with this report as an Appendix 1.

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

Ankasamudra Bird Conservation Reserve (ABCS) is an important breeding site for over 50 species birds and other fauna. Of these 29 species are waterbirds, the following are the large colonial birds species found to nest in the Site: Asian Openbill (Anastomus oscitans). Painted Stork (Mycteria leucocephala). Oriental Darter (Anhinga melanogaster), Little Cormorant (Microcarbo niger), Great Cormorant (Phalacrocorax carbo). Indian Cormorant (Phalacrocorax fuscicollis). Spot-billed Pelican (Pelecanus philippensis), Grey Heron (Ardea cinerea), Great Egret (Ardea alba), Intermediate Egret (Egretta intermedia), Little Egret (Egretta garzetta), Cattle Egret (Bubulcus ibis), Indian Pond-Heron (Ardeola Optional text box to provide further gravii), Black-crowned Night-Heron (Nycticorax nycticorax), Black-headed lbis (Threskiornis information melanocephalus), Eurasian Spoonbill (Platalea leucorodia).

For the breeding of such a large number of large colonial nesting waterbirds, adequate nesting substrates and safe nesting areas that are in proximity to foraging areas are importance (Subramanya 1996). Ankasamudra Bird Conservation Reserve meets all these requirements during the breeding season, a critical stage of the life-cycle of these species. Besides, it serves as a roosting Site during non-breeding season as well. Thus, the Site is importance in conserving a large congregation of large waterbirds both during breeding and non-breeding seasons.

✓ Criterion 5 : >20.000 waterbirds

Overall waterbird numbers	34118
Start year	2021
End year	2021
Source of data:	Field survey by Birders, eBird 2022
Optional text box to provide further information	The area supports a considerable population large Colonial Nesting Waterbirds, which include in excess of 20000 – 30000 birds Source: eBird Checklists >30000 birds: https://ebird.org/checklist/S100257781; Feb 25, 2021 >30000 birds: https://ebird.org/checklist/S124053332; Feb 26, 2021 > 20000 birds: https://ebird.org/checklist/S124054899; Feb 28, 2021 The area supports a considerable population large Colonial Nesting Waterbirds, which include Asian openbill (Anastomus oscitans), painted stork (Mycteria leucocephala), Oriental darter (Anhinga melanogaster), little cormorant (Microcarbo niger), great cormorant (Phalacrocorax carbo), Indian cormorant (Phalacrocorax fuscicollis), spot-billed pelican (Pelecanus philippensis), grey heron (Ardea cinerea), intermediate egret (Egretta intermedia), little egret (Egretta garzetta), cattle egret (Bubulcus ibis), Indian pond-heron (Ardeola grayii), black-crowned night-heron (Nycticorax nycticorax), black-headed ibis (Threskiornis melanocephalus) and Eurasian spoonbill (Platalea leucorodia). The area also serves as an important roosting area for large numbers of the species listed above.

Criterion 6 : >1% waterbird population

	The Site regularly support more than 1% threshold population of 5 water bird species. Based on the
	available census data from Field survey by Birders, eBird 2022, the Site supported 12585 individuals of
Optional text box to provide further	Anastomus oscitans representing 4.19% of the biogeographic population; 3470 individuals of
information	Threskiornis melanocephalus representing 13.88% of the biogeographic population, 3000 individuals of
	Phalacrocorax fuscicollis representing 10% of the biogeographic population, 982 individuals of Mycteria
	leucocephala representing 4.1% of the biogeographic population, and 100 individuals of Pelecanus
	philippensis representing 1% of the biogeographic population.

Phylum	Scientific name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
Plantae								
TRACHEOPHYTA/ MAGNOLIOPSIDA	Santalum album	×.			VU			
TRACHEOPHYTA/ MAGNOLIOPSIDA	Vachellia nilotica		V		LC			This tree provides habitat for nesting, breeding and roosting of large colonial bird species in this Site

The Santalum album, Indian Sandlewood tree with an IUCN threat status of Vulnerable is found growing at the proposed Site. The Site provides a healthy habitat for growth and propagation of the species.

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

Phylum	Scientific name	Spec quali und crite 2 4	cies ifies der rion 6 9	co co 3	Species ontributes under criterion 5 7 8	Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
Others	Others												
CHORDATA/ REPTILIA	Lissemys punctata	\square							VU				
Fish, Mollusc a	Fish, Mollusc and Crustacea												
CHORDATA/ ACTINOPTERYGII	Botia striata]					EN				Endemic threatened species. Contributes to maintaining the biodiversity of the biogeographic realm
CHORDATA / ACTINOPTERYGII	Cyprinus carpio	ØD							VU				
CHORDATA/ ACTINOPTERYGII	Dawkinsia arulius	ØO		Ø					EN				Endemic threatened species. Contributes to maintaining the biodiversity of the biogeographic realm
CHORDATA/ ACTINOPTERYGII	Etroplus maculatus]									Cri 3: Endemic species
CHORDATA/ ACTINOPTERYGII	Hemibagrus maydelli]					LC				Cri 3: Endemic species
CHORDATA / ACTINOPTERYGII	Hyporhamphus xanthopterus	20							VU				
CHORDATA/ ACTINOPTERYGII	Hypselobarbus kolus	20]					VU				Endemic threatened species. Contributes to maintaining the biodiversity of the biogeographic realm
CHORDATA / ACTINOPTERYGII	Proeutropiichthys taakree								LC				Cri 3: Endemic species
CHORDATA/ ACTINOPTERYGII	Rita gogra]					LC				Cri 3: Endemic species
CHORDATA / ACTINOPTERYGII	Rita kuturnee] 🗹					LC				Cri 3: Endemic species
CHORDATA/ ACTINOPTERYGII	Schismatorhynchos nukta	ØD]					EN				Endemic threatened species. Contributes to maintaining the biodiversity of the biogeographic realm
CHORDATA/ ACTINOPTERYGII	Wallago attu	20							VU				
Birds													
CHORDATA/ AVES	Anastomus oscitans		Ø		eoo	12585	2021	4.19	LC				Crit. 6: S, SE Asia, 1% threshold = 3000 Crit. 4: The Site is an important roosting and breeding area for the species [https://ebird.org/checklist/S124053332]

Phylum	Scientific name	Species qualifies under criterion 2 4 6 9	Species contributes under criterion	Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
CHORDATA/ AVES	Anhinga melanogaster						NT				Cri 4: Breeds at the Site
CHORDATA/ AVES	Aquila clanga	ØOOO		2	2021		VU				
CHORDATA/ AVES	Aquila hastata						VU				
CHORDATA/ AVES	Aquila nipalensis			1	2021		EN		V		
CHORDATA/ AVES	Ardea alba						LC				Crit. 4: Breeds at the Site
CHORDATA / AVES	Ardea cinerea						LC				Crit. 4: Breeds at the Site
CHORDATA/ AVES	Ardeola grayii						LC				Crit. 4: Breeds at the Site
CHORDATA/ AVES	Aythya ferina	2000					VU				
CHORDATA/ AVES	Bubulcus ibis			415	2021		LC				Crit. 4: Breeds at the Site
CHORDATA/ AVES	Egretta garzetta						LC				Crit. 4: Breeds at the Site
CHORDATA/ AVES	Egretta intermedia										Crit. 4: Breeds at the Site
CHORDATA/ AVES	Leptoptilos javanicus	2000					VU				
CHORDATA / AVES	Microcarbo niger			1500	2021		LC				Crit. 4: Breeds at the Site
CHORDATA / AVES	Mycteria Ieucocephala			982	2021	4.1	NT				Crit. 6: S Asia, 1% threshold = 150 Crit. 4: Breeds at the Site
CHORDATA / AVES	Nycticorax nycticorax			200	2021		LC				Crit. 4: Breeds at the Site
CHORDATA/ AVES	Pelecanus philippensis			100	2021	1	NT				Crit. 6: S Asia, 1% threshold = 100 Crit. 4: Breeds at the Site.
CHORDATA/ AVES	Phalacrocorax carbo			250	2021		LC				Crit. 4: Breeds at the Site
CHORDATA/ AVES	Phalacrocorax fuscicollis			3000	2021	10	LC				Crit. 4: Breeds at the Site Crit. 6: S and SE Asia, 1% threshold = 300
CHORDATA/ AVES	Platalea leucorodia						LC				Crit. 4: Roosts and breeds at the Site
CHORDATA/ AVES	Plegadis falcinellus			11450	2021	20.18	LC				Crit. 4: The Site is an important roosting and breeding site for the species
CHORDATA/ AVES	Sarkidiornis melanotos			113	2021		LC				Crit. 4: Breeds at the Site
CHORDATA/ AVES	Sterna aurantia	ØOOO		50	2021		VU				
CHORDATA / AVES	Threskiornis melanocephalus			3470	2021	13.88	NT				Crit. 6: S Asia, 1% threshold = 250 Crit. 4: Breeds at the Site

1) Percentage of the total biogeographic population at the site

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

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
Large colonial nesting waterbirds		Large nesting and roosting congregation of waterbirds like painted stork, Oriental darter, spot-billed pelican, black-headed lbis, pallid harrier and red-necked falcon.	

Optional text box to provide further information

The Site is critically important for the conservation of local populations of several large colonial nesting waterbirds like painted stork (Mycteria leucocephala), Oriental darter (Anhinga melanogaster), spot-billed pelican (Pelecanus philippensis), black-headed ibis (Threskiornis melanocephalus), pallid harrier (Circus macrourus), red-necked falcon (Falco chicquera) in the region.

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

4.1 - Ecological character

The Site is located in the east of the Western Ghats region and in the middle part of Tungabhadra river basin. It is a manmade water storage reservoir created several centuries back mainly to impound monsoon run-off. It is a typical example of similar man-made wetlands in the inland Southern Deccan plateau. The Site receives water mainly from surface runoff and the water regime is seasonal and becomes dry by the middle of summer. The Site provides several ecosystem services. Water stored during monsoon recharges groundwater and thus supports agriculture in the surrounding areas. Many medicinal plants can be found here. The Site comprises over five thousands Vachellia nilotica trees that support a number of threatened bird species and acts protects against soil erosion. It is visited by over 20,000 people annually for recreation, nature-based tourism and scientific and educational activities.. It is an ecologically important manmade wetland, rich in biodiversity, comprising of about 210 species of plants, 8 species of mammals, 25 species of reptiles, 240 species of birds, 41 species of fishes, 3 species of frogs, 27 species of butterflies and 32 species find safe refuge in this Site. These waterbirds also forage in the nearby backwaters of a large reservoir on River Tungabhadra. The Site also supports a large number of Palearctic and Himalayan migratory birds. There is an excessive growth of invasive alligator weed (Alternanthera philoxeroides) around the shallow margins of the wetland. The spread of alligator weed and another invasive plant, Prossopis juliflora, are unfavourable to waterbirds. Invasive African catfish (Clarias gariepinus), affects other fish and waterbirds due to its predatory behaviour.

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

Wetland types (code and name) Local name Ranking of extent (1: greatest - 4: least) Area (ha) of wetland type 6: Water storage Ankasamudra Kere 98.76	Human-made wetlands									
6: Water storage Ankasamudra Kere 98.76	Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type						
areas/Reservoirs	6: Water storage areas/Reservoirs	Ankasamudra Kere	1	98.76						

(ECD) Habitat connectivity

The Site serves as an important nesting and roosting area for a large population of waterbirds that forage in the nearby backwaters of Thungabhadra Reservoir located within 3-10Km away.

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species		
Phylum	Scientific name	Position in range / endemism / other
TRACHEOPHYTA/MAGNOLIOPSIDA	Azadirachta indica	Medicinal plant & food plant for certain birds.
TRACHEOPHYTA/POLYPODIOPSIDA	Azolla pinnata	Food plant for ducks
TRACHEOPHYTA/LILIOPSIDA	Cyperus corymbosus	Provides shelter for certain waterbirds
TRACHEOPHYTA/MAGNOLIOPSIDA	Nelumbo nucifera	used by certain waterbirds
TRACHEOPHYTA/MAGNOLIOPSIDA	Syzygium cumini	Food plant for certain birds
TRACHEOPHYTA/MAGNOLIOPSIDA	Terminalia arjuna	Roosting and nesting substrates for waterbirds
TRACHEOPHYTA/LILIOPSIDA	Typha domingensis	For roosting nesting of rails and warblers
TRACHEOPHYTA/MAGNOLIOPSIDA	Ziziphus oenoplia	Food plant for certain birds

Invasive alien plant species Scientific name Impacts Phylum Actual (minor impacts) TRACHEOPHYTA/MAGNOLIOPSIDA Alternanthera ficoidea Actual (minor impacts) Alternanthera **TRACHEOPHYTA/MAGNOLIOPSIDA** paronychioides Actual (minor impacts) TRACHEOPHYTA/MAGNOLIOPSIDA Alternanthera philoxeroides Actual (minor impacts) TRACHEOPHYTA/MAGNOLIOPSIDA Alternanthera pungens Actual (major impacts) TRACHEOPHYTA/MAGNOLIOPSIDA Chromolaena odorata Actual (minor impacts) **TRACHEOPHYTA/MAGNOLIOPSIDA** Erigeron canadensis Actual (major impacts) TRACHEOPHYTA/MAGNOLIOPSIDA Parthenium hysterophorus

Optional text box to provide further information

The Site supports about 81 species of medicilan plants species: Cyperus rotundus, Cynodon dactylo, Cocculus hirsutus, Tinospora cordifolia, Nelumbo nucifera, Santalum album, Trianthema portulacastrum, Achyranthes aspera, Aerva lanata, Altermanthera sessilis, Boerhavia diffusa, Plumbago zeylanica, Portulaca oleracea, Alangium salvifolium

Eclipta alba, Vernonia cinerea, Carissa spinarum, Ichnocarpus frutescens, Pergularia daemia, Calotropis gigantea, Calotropis procera, Oxystelma secamone, Enicostemma axillare, Canthium parviflorum, Andrographis echioides, Hyptis suaveolens, Leucas lavandulifolia, Ocimum tenuiflorum, Bacopa monnieri, Vitex negundo, Evolvulus alsinoides, Ipomea hederifolia, Ipomoea obscura, Merremia tridentata, Rivea hypocrateriformis, Datura metel, Physalis minima, Solanum americanum, Withania somnifera, Tribulus terrestris, Acalypha indica, Euphorbia hirta, Ricinus communis, Phyllanthus amarus, Phyllanthus maderaspatensis, Phyllanthus reticulatus, Hybanthus ennespermus, Caesalpinia bonduc, Cassia fistula, Senna auriculata, Senna occidentalis, Senna tora, Canavalia gladiata, Clitoria ternatea, Desmodium triflorum, Indigofera tinctoria, Sesbania grandiflora, Tephrosia purpurea, Teramnus labialis, Acacia nilotica, Albizia amara, Coccinia grandis, Diplocyclos palmatus, Momordica charantia, Ficus benghalensis, Ficus racemosa, Streblus asper, Ziziphus mauritiana, Holptelea intergrifolia, Terminalia arjuna, Azadirachta indica, Cardiospermum halicacabum, Abutilon indicum, Hibiscus micranthus, Pavonia zeylanica, Sida acuta, Sida cordata, Waltheria indica, Cleome viscosa, Azima tetracantha, Cleome gynandra. The details are presented in the Additional Material Section.

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	Circus macrourus				Near Threatened
CHORDATA/REPTILIA	Eryx conicus				Near Threatened
CHORDATA/REPTILIA	Eryx johnii				Near Threatened
CHORDATA/AVES	Falco chicquera chicquera				Near Threatened
CHORDATA/AVES	Limosa limosa	200	16-02-2020		Near Threatened
CHORDATAACTINOPTERYGII	Macrognathus pancalus				Near Threatened
CHORDATA/ACTINOPTERYGII	Ompok bimaculatus				Near Threatened
CHORDATA/REPTILIA	Varanus bengalensis				Near Threatened

Invasive alien animal species

Phylum	Scientific name	Impacts
CHORDATA/ACTINOPTERYGII	Clarias gariepinus	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)

Ankasamudra has moderate climate with three seasons namely, monsoon, winter and summer. The temperature varies from 20° C to 40° C

4.4.2 - Geomorphic setting	
a) Minimum elevation above sea level (in metres) 502	
a) Maximum elevation above sea level (in metres) 517	
Entire river basin	
Upper part of river basin	
Middle part of river basin 🗹	
Lower part of river basin	
More than one river basin \Box	
Not in river basin	
Coastal 🗖	

Please name the river basin or basins. If the site lies in a sub-basin, please also name the larger river basin. For a coastal/marine site, please name the sea or ocean

Thungabhadar River basin

Mineral 🗌

- Organic 🗖
- No available information

Are soil types subject to change as a result of changing hydrological Yes O No O conditions (e.g., increased salinity or acidification)?

Please provide further information on the soil (optional)

Deep red sandy loam

4.4.4 - Water regime

No change		
Source of water that maintains character of the site		
Predominant water source		
	No change	
	No change s character of the site Predominant water source	

Water destination

Presence?	
Feeds groundwater	No change

Stability of water regime

Presence?	
Water levels fluctuating (including tidal)	No change

Please add any comments on the water regime and its determinants (if relevant). Use this box to explain sites with complex hydrology.

The main source of water is through surface runoff during monsoon. The lake has a seasonal cycle of getting impounded during monsoon and the lakebed goes dry by the middle of summer season.		
^(ECD) Connectivity of surface waters and of groundwater	The backwaters of Thungabhadar reservoir is within 3Km away and the ground water in the area gets augumented by increased flow of Thungabhadar river waters during monsoon.	
(ECD) Stratification and mixing regime	The Ankasamudra wetland is a shallow basin of water without noticeble stratification, as the water is less than 2m at its deepest point.	

4.4.5 - Sediment regime

Significant erosion of sediments occurs on the site \Box		
Significant accretion or deposition of sediments occurs on the site		
Significant transportation of sediments occurs on or through the site		
Sediment regime is highly variable, either seasonally or inter-annually \Box		
Sediment regime unknown 🗹		
(ECD) Water turbidity and colour Clear		

^(ECD) Water turbidity and colour	Clear
(ECD) Light - reaching wetland	Not assessed
(ECD) Water temperature	Not assessed, but quite possibly 15-30 degree Celsius

4.4.6 - Water pH

Se

- Acid (pH<5.5)
- Circumneutral (pH: 5.5-7.4)
 - Alkaline (pH>7.4) 🗹
 - Unknown 🗖

- 4.4.7 Water salinity
- Fresh (<0.5 g/l) 🗹
- Mixohaline (brackish)/Mixosaline (0.5-30 g/l)
 - Euhaline/Eusaline (30-40 g/l) 🗖
 - Hyperhaline/Hypersaline (>40 g/l)
 - Unknown 🗖
- (ECD) Dissolved gases in water

Not assessed

4.4.8 - Dissolved or suspended nutrients in water

	Eutrophic
	Mesotrophic
	Oligotrophic 🗖
	Dystrophic
	Unknown 🜌
(ECD) Dissolved organic carbon	Not investigated
^(ECD) Redox potential of water and sediments	Not investigated
(ECD) Water conductivity	Not investigated

4.4.9 - Features of the surrounding area which may affect the Site

Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar Site differ from the i) broadly similar ⁽²⁾ ii) significantly different O site itself:

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning	Services
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Ecosystem service	Examples	Importance/Extent/Significance
Fresh water	Water for irrigated agriculture	High

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	High
Erosion protection	Soil, sediment and nutrient retention	High
Pollution control and detoxification	Water purification/waste treatment or dilution	High

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Nature observation and nature-based tourism	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	Medium

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

Optional text box to provide further information

The waters of the Lake is not being used for irrigation directly. However, the impounded water in the lake has improved groundwater recharge and has revived irrigation borewells in the surrounding area.

Other ecosystem service(s) not included above:

The proposed site besides supporting biodiversity at the site, forms an important refuge for a large population of colonial nesting waterbirds in the surrounding region.

Within the site: Not assessed

Outside the site: Not assessed

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site? 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

The wetland is a fine example of inland man-made wetlands that are found across inland Deccan Plateau of India. The wetland was once managed by local village Grama Panchayat for its wise-use and thus represents a traditional water harvesting and storage system that was in practice since centuries back. Creation of such wetlands/waterbodies was crucial for the spread of human population across the dry, parched inland Deccan Plateau. The water that was thus stored was utilized for both domestic usage and irrigated agriculture and the wetland provided various ecosystem services in the process.

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

Description if applicable

The wetland has been built centuries back by local people for harvesting and storing monsoon surface run-off in an otherwise dry, parched inland Deccan Plateau of India. Thus, the traditional governess of the wetland has preserved the structure, ecology and character of the wetland over centuries.

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

Description if applicable

The Wetland which is part of the proposed site can be visualized as a shallow basin of varying water depths with the deepest zone close to the main bund or embankment, which makes it very heterogeneous. The site has a seasonal cycle of getting impounded during monsoon and going dry by the middle of summer season due to the usage of water for irrigated agriculture and this seasonal cycle has made the wetland to be highly dynamic. Thus, the seasonally dynamic and heterogeneous nature of the wetland has made it a very productive habitat for sustaining varied biodiversity.

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

4.6 - Ecological processes

(ECD) Primary production	Not assessed
(ECD) Nutrient cycling	Not assessed
(ECD) Carbon cycling	Not assessed
(ECD) Animal reproductive productivity	Not assessed
(ECD) Vegetational productivity, pollination, regeneration processes, succession, role of fire, etc.	Not assessed
^(ECD) Notable aspects concerning animal and plant dispersal	Not assessed
(ECD) Notable aspects concerning migration	The site supports 41 species of Palearctic and Himalayan migrant birds that are totally and partially dependent on the wetland.
(ECD) Pressures and trends concerning any of the above, and/or concerning ecosystem integrity	Character and wise-use of the wetland by community living in the immediate vicinity will not be altered in future, as the ownership of the wetland rests with the State government.

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

5.1 - Land tenure and responsibilities (Managers)

5.1.1 - Land tenure/ownership

Public ownership						
Category	Within the Ramsar Site	In the surrounding area				
Provincial/region/state government	×					
Private ownership						
Category	Within the Ramsar Site	In the surrounding area				
Other types of private/individual owner(s)		V				
Other						
Category	Within the Ramsar Site	In the surrounding area				

Category	Within the Ramsar Site	In the surrounding area
No information available		×

Provide further information on the land tenure / ownership regime (optional):

The Site was declared as "Ankasamudra Bird Conservation Reserve" wide Gazette Notification No. FEE 04 FWL 2017 dated 31.01.2017 by the Karnataka State Government. Presently, the ownership of the wetland rests with the Derpartment of Minor Irrigation, Karnataka State. The conservation reserve is being managed by the Karnataka Forest Department, while its wise-use by local community continues. The Reserve is used by people for aesthetic, recreational, educational and scientific purposes. The site attracts over 20000 people during the year. The number of visitors is expected to increase as the site becomes more popular.

5.1.2 - Management authority

	Office of the Deputy Conservator of Forests Vijayanagara Division Karnataka State Forest Department Vijayanagara District 583 201
	Karnataka State, INDIA.
Please list the local office / offices of any agency or organization responsible for	And
managing the site:	Office of the Principal Chief Conservator of Forests (Wild Life) Kamataka Forest Department
	2nd Floor, Aranya Bhavan 18th araga Mallaghuaram
	Bengaluru-560003 Karnataka State, INDIA.
Provide the name and/or title of the person or people with responsibility for the wetland:	Deputy Conservator of Forests, Karnataka Forest Department, Vijayanagara Division, Vijayanagara District, Karnataka State, INDIA. & Principal Chief Conservator of Forests (Wild Life), 2nd Floor, Aranya Bhavan, 18th cross, Malleshwaram, Bengaluru-560003.
	1. Deputy Conservator of Forests
	Railway Station Road
	Hospet 583 201 Vijavanagara District
	Karnataka State, INDIA. Email: dcfvijayanagara@gmail.com
Postal address:	2. Principal Chief Conservator of Forests (Wild Life)
	2nd Floor, Aranya Bhavan
	Bengaluru-560003
	Karnataka State, INDIA. Email: pccfwl@gmail.com
E-mail address:	dcfvijayanagara@gmail.com

5.2 - Ecological character threats and responses (Management)

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

numan semements (non agricultural)					
	Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
	Tourism and recreation areas	Low impact	Low impact		×

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

Agriculture and aquaculture						
Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area		
Marine and freshwater aquaculture	Low impact	Low impact		×		

Transportation and service corridors

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Roads and railroads	Low impact	Low impact		×

Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Recreational and tourism activities	Low impact	Low impact	×	

Invasive and other problematic species and genes

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Invasive non-native/alien species	Medium impact		×	

Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Storms and flooding	High impact		×	

Please describe any other threats (optional):

The Site does not suffer from any serious threats. Invasive species, specially the introduced African Catfish can pose as a threat within the Site. Ankasamudra is a seasonal wetland that gets impounded during monsoon and go dry by the middle of summer. This natural cycle is very important for ecosystem functioning. Thus, excessive flooding may make the wetland perennial and may alter the ecosystem processes.

5.2.2 - Legal conservation status

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Conservation Reserve	Ankasamudra Bird Conservation Reserve	https://aranya.gov.in/aranyacms/ (S(gateo5y5mlznpvbz0frehrph)/En glish/ConservationReserves.aspx# explore	whole

5.2.3 - IUCN protected areas categories (2008)

- la Strict Nature Reserve
- Ib 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

5.2.4 - Key conservation measures

Habitat

Measures	Status
Hydrology management/restoration	Proposed
Re-vegetation	Proposed

Human Activities

Measures	Status
Communication, education, and participation and awareness activities	Proposed
Research	Proposed

Other:

Maintainence of natural seasonal cycle of monsoon flooding and summer drying of the wetland has been proposed and planting of select tree species that are utilized for nesting and roosting of largecolonial nesting waterbirds is being proposed, to replace dead and decaying trees within the wetland.

5.2.5 - Management planning

Is there a site-specific management plan for the site? In preparation

Has a management effectiveness assessment been undertaken for the site? Yes O No ()

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?

Please indicate if a Ramsar centre, other educational or visitor facility, or an educational or visitor programme is associated with the site:

The local Forest Department has created a walk path around the reserve and has constructed a watch tower over-looking the wetland and a `Pergola', a shaded vistor resting area has been built.

URL of site-related webpage (if relevant): Not available

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? No, but a plan is being prepared

Further information

Proposed Activities:

- 1. Protecting area against biotic degradation
- 2. Improving the habitat for birds and other fauna
- 3. Conserving, protecting and increasing the biodiversity.
- 4. Providing outreach material to visitors
- 5. Improving visitor amnities.

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Birds	Proposed

Regular monitoring of birds at the Site is being proposed as a part of long-term management plan.

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Samad Kottur 2016. Ankasamudra Lake: an upcoming bird sanctuary. https://jlrexplore.com/explore/unexplored-areas/ankasamudra-lake. Accessed December 30, 2022.

Karnataka Gazette Notification No. FEE 04 FWL 2017 dated 3.01.2017: declaring Ankasamudra Bird Conservation Reserve. Roy, T.K. 2020. Summary Report: Winter Field Survey 2020. Report submitted to Bellary Territorial Forest Division, Karnataka. Divyashri Mudakavi, Feb 26 2021, 20:13. Ankasamudra Lake: A lake comes alive. https://www.deccanherald.com/spectrum/spectrum-topstories/ankasamudra-lake-a-lake-comes-alive-95572 5.html. Accessed on 20.12.2022.

6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3) <2 file(s) uploaded

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:



Glossy Ibises flying out of

mudra (Subramanya, 25-02-2021



A large flock of Glossy Ibis arriving to roost at Ankasamudra (S. Subramanya, 26-02-2021)

Another view of

Ankasamudra Bird Conservation Reserve (S.

Waterbirds roosting at

Ankasamudra 2 (S. Subramanya, 01-11-2019)

nva 25-02-2021

)



6.1.4 - Designation letter and related data

Designation letter

Date of Designation 2023-03-10