



Ramsar Information Sheet

Published on 31 October 2022

India Tampara Lake



Designation date	12 October 2021
Site number	2489
Coordinates	19°21'02"N 85°00'04"E
Area	300,00 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

Tampara Lake (lying between 84° 58' 23" to 85° 1' 32" East longitudes and 19° 19' 33" to 19° 21' 58" North latitudes) is among the most prominent freshwater lakes in the State of Odisha situated near Chatrapur town in Ganjam district. The wetland lies within the Rushikulya river basin. In the year 1766 English East India Company took possession of Ganjam district from the French during which explosives were used near Rushikulya leading to a depression near the river. The depression on the ground gradually filled with rainwater from catchment flow and was called "Tamp" by the British and subsequently termed "Tampara" by the locals. A narrow channel connecting Rushikulya river to Tampara lake was dredged later on for the transportation of goods which eventually helped to provide flood water of Rushikulya river to the wetland. Tampara lake spreads across 300 ha with a length of 5.8 km and a width of 6.7 m. The wetland supports at least 60 species of birds, 46 species of fishes, at least 48 species of phytoplanktons, and more than seven species of terrestrial plants and macrophytes. The wetland is an important habitat for vulnerable species such as *Cyprinus carpio*, common pochard (*Aythya ferina*), and river tern (*Sterna aurantia*). With an estimated average fish yield of 12 tonnes per year, the wetland is an important source of livelihood for the local communities. Along with fishes the wetland also provides provisioning services like water for agriculture, and domestic use and is a well-known tourism and recreation site.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Responsible compiler

Institution/agency

Postal address

National Ramsar Administrative Authority

Institution/agency

Postal address

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

From year

To year

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)

Unofficial name (optional)

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image

<2 file(s) uploaded>

Former maps

Boundaries description

Tampara lake is located near Chatrapur town in Ganjam district of Odisha and is situated within Rushikulya river basin (South-east of Rushikulya River and east of National Highways-16). The wetland runs parallel to the coastline, lying about a kilometer away and separated by a sand dune and build-up areas. The north eastern boundary is marked by a channel connecting Rishikulia estuary. The southwest extreme is marked by Arjyapalli village. The boundaries of the Ramsar Site correspond to the peak inundation area and the fringe hydrophytic vegetation bordering several parts of the shoreline. The map in the RIS is prepared on UTM projection, Datum: WGS84, Northern Hemisphere Zone 45.

2.2.2 - General location

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

b) What is the nearest town or population centre?

2.2.3 - For wetlands on national boundaries only

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

b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party? Yes No

2.2.4 - Area of the Site

Official area, in hectares (ha):

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

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Freshwater Ecoregions of the World (FEOW)	Ganges Delta & Plain

Other biogeographic regionalisation scheme

The wetlands have hills of the Eastern Ghats to the North and west while it has the coasts to the east. Therefore, it shares unique and common characteristics with both biogeographic regions that are the Coasts and the Deccan Peninsula.

3 - Why is the Site important?

3.1 - Ramsar Criteria and their justification

<no data available>

Criterion 2 : Rare species and threatened ecological communities

Optional text box to provide further information

The wetland supports several IUCN red listed threatened species. The notable vulnerable species are common pochard (*Aythya ferina*), river tern (*Sterna aurantia*) and Amur carp (*Cyprinus carpio*).

Criterion 3 : Biological diversity

Justification

Tampara Lake sustains spectacular congregation of waterbirds and waders within the Eastern Coast. This wetland supports significant populations of species like black-headed ibis (*Threskiornis melanocephalus*), common pochard (*Aythya ferina*), painted stork (*Mycteria leucocephala*), red-crested pochard (*Netta rufina*), white-bellied sea eagle (*Haliaeetus leucogaster*), river tern (*Sterna aurantia*) and ruddy shelduck (*Tadorna ferruginea*), which is representative and significantly helps in maintaining the biodiversity of the region owing to the large variety of ecological functions performed by the above-mentioned diverse range of species. (Reference: Mohanta, R., Behera, S. K., Mishra, S. S., Sethy, J., Swain, K. K., & Sahu, A. K. (2017). Status, distribution, habitat type of threatened bird diversity, potential eco-tourism site and conservation strategy for wetland in Tamapara Lake Southern Odisha. India. Spring, 6(7), 14-21).

Criterion 7 : Significant and representative fish

Justification

The wetland supports many species of fishes. The notable fish species include *Amblypharyngodon mola*, *Cirrhinus mrigala*, *Cyprinus carpio*, *Labeo bata*, *Labeo calbasu*, *Labeo rohita*, *Megalops cyprinoides*, *Notopterus notopterus*, *Osteobrama vigorsii*, and *Salmostoma bacaila*. Interaction of the fish species can be considered representative of the wetland ecosystem benefits at two levels. Firstly, it establishes an interaction of fish species with piscivorous waterbirds benefitting the food chains which involve fish-eating waterbirds. Secondly, fishes are beneficial to local fringe communities for economic and livelihood gains. The majority of these species spend their entire life cycle within the wetland. (Reference: Marndi, R. K., Satapathy, D., Misra, S. K., & Kund, G. C. (2015). Fish diversity of Tampara Lake, Ganjam, Odisha. *Journal of Applied Zoological Researches*, 26(2), 203-208).

Criterion 8 : Fish spawning grounds, etc.

Justification

The wetland serves as a major source of food and a significant spawning ground for species species like *Salmostoma bacaila*, *Osteobrama vigorsii*, and *Labeo bata*. (Reference: Marndi, R. K., Satapathy, D., Misra, S. K., & Kund, G. C. (2015). Fish diversity of Tampara Lake, Ganjam, Odisha. *Journal of Applied Zoological Researches*, 26(2), 203-208).

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

<no data available>

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

Phylum	Scientific name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
		2	4	6	9	3	5	7	8								
Fish, Mollusc and Crustacea																	
CHORDATA/ ACTINOPTERYGII	<i>Amblypharyngodon mola</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		The wetland serves as a source of food.
CHORDATA/ ACTINOPTERYGII	<i>Cirrhinus mrigala</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		The wetland serves as a source of food.
CHORDATA/ ACTINOPTERYGII	<i>Cyprinus carpio</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>				VU	<input type="checkbox"/>	<input type="checkbox"/>		The wetland serves as a significant spawning ground for this species. VU IUCN status and has a wide niche across the landscape.
CHORDATA/ ACTINOPTERYGII	<i>Labeo bata</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			LC	<input type="checkbox"/>	<input type="checkbox"/>		The wetland serves as a source of food. Largely distributed across the site, spread across the entire landscape and thus characterizing it's biodiversity.
CHORDATA/ ACTINOPTERYGII	<i>Labeo calbasu</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			LC	<input type="checkbox"/>	<input type="checkbox"/>		The wetland serves as a source of food. Largely distributed across the site, spread across the entire landscape and thus characterizing it's biodiversity.
CHORDATA/ ACTINOPTERYGII	<i>Labeo rohita</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			LC	<input type="checkbox"/>	<input type="checkbox"/>		The wetland serves as a source of food. Largely distributed across the site, spread across the entire landscape and thus characterizing it's biodiversity.
CHORDATA/ ACTINOPTERYGII	<i>Megalops cyprinoides</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			DD	<input type="checkbox"/>	<input type="checkbox"/>		The wetland serves as a source of food. Largely distributed across the site, spread across the entire landscape and thus characterizing it's biodiversity.
CHORDATA/ ACTINOPTERYGII	<i>Notopterus notopterus</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			LC	<input type="checkbox"/>	<input type="checkbox"/>		The wetland serves as a source of food. Largely distributed across the site, spread across the entire landscape and thus characterizing it's biodiversity.
CHORDATA/ ACTINOPTERYGII	<i>Osteobrama vigorsii</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			LC	<input type="checkbox"/>	<input type="checkbox"/>		The wetland serves as a source of food. Largely distributed across the site, spread across the entire landscape and thus characterizing it's biodiversity.
CHORDATA/ ACTINOPTERYGII	<i>Salmostoma bacaila</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			LC	<input type="checkbox"/>	<input type="checkbox"/>		The wetland serves as a source of food. Largely distributed across the site, spread across the entire landscape and thus characterizing it's biodiversity.
Birds																	
CHORDATA/ AVES	<i>Aythya ferina</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU	<input type="checkbox"/>	<input type="checkbox"/>		Globally Vulnerable species and rare for the wetland. Largely distributed across the site, spread across the entire landscape and thus characterizing it's biodiversity.
CHORDATA/ AVES	<i>Haliaeetus leucogaster</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		Largely distributed across the site, spread across the entire landscape and thus characterizing it's biodiversity.
CHORDATA/ AVES	<i>Mycteria leucocephala</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT	<input type="checkbox"/>	<input type="checkbox"/>		Globally Near Threatened species. Largely distributed across the site, spread across the entire landscape and thus characterizing it's biodiversity.
CHORDATA/ AVES	<i>Netta rufina</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		Largely distributed across the site, spread across the entire landscape and thus characterizing it's biodiversity.
CHORDATA/ AVES	<i>Sterna aurantia</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU	<input type="checkbox"/>	<input type="checkbox"/>		Globally Vulnerable species and rare for the wetland Largely distributed across the site, spread across the entire landscape and thus characterizing it's biodiversity.

Phylum	Scientific name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
		2	4	6	9	3	5	7	8								
CHORDATA/ AVES	<i>Tadorna ferruginea</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		Largely distributed across the site, spread across the entire landscape and thus characterizing it's biodiversity.
CHORDATA/ AVES	<i>Threskiornis melanocephalus</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT	<input type="checkbox"/>	<input type="checkbox"/>		Extra-limital migrant but largely distributed across the site, spread across the entire landscape and thus characterizing it's biodiversity.

1) Percentage of the total biogeographic population at the site

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

Tampara lake situated near Chatrapur town in Ganjam district of Odisha is among the most prominent freshwater lakes of Odisha with an area of around 300 ha. The wetland is generally filled with catchment run-off and monsoon precipitation and the water levels fluctuate during different seasons. Tampara lake was reported to have gone nearly dry with merely 2-3 feet of water in the middle during summer months between 1963-1999. The wetland harbors a rich assemblage of floral and faunal diversity supporting more than seven species of terrestrial plants and macrophytes, at least 60 species of birds and 46 species of fishes. Predominantly two types of vegetation dominate Tampara lake- terrestrial type in the peripheral area and aquatic type within the wetland. Some of the notable birds species include black headed ibis (*Threskiornis melanocephalus*), common pochard (*Aythya ferina*), painted stork (*Mycteria leucocephala*), red crested pochard (*Netta rufina*), white bellied sea eagle (*Haliaeetus leucogaster*), river tern (*Sterna aurantia*) and ruddy shelduck (*Tadorna ferruginea*). The wetland also supports a rich diversity of fish population and hence is an important source of livelihood for the local communities. Notable species of fishes include *Cyprinus carpio*, *Cirrhinus mrigala*, *Labeo bata* and *Megalops cyprinoides*. The average fish yield has been estimated at 12 tonnes per year with a productivity of 54.54 kg/ha/yr. It is one of the major wetlands of southern Odisha, which provides water for agriculture, and domestic use to the local population in addition to being a significant tourist attraction.

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

Marine or coastal wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
K: Coastal freshwater lagoons	Tampera	1	300	

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Phylum	Scientific name	Position in range / endemism / other
TRACHEOPHYTALILIOPSIDA	<i>Pandanus odorifer</i>	

Invasive alien plant species

Phylum	Scientific name	Impacts
TRACHEOPHYTALILIOPSIDA	<i>Hydrilla verticillata</i>	Potential

Optional text box to provide further information

A total of 48 species of phytoplankton were encountered of which 2 species belonged to diatoms, 1 species to dinoflagellates, 14 species to blue-green algae, 21 species to green algae, 9 species to euglenoids, and 1 to silicoflagellates. In terms of population density under different groups, a pattern such as Blue-green algae> Green algae> Euglenoids> Dinoflagellates> Diatom> Silicoflagellates were noticed for the whole lake. According to the no. of species under different groups the pattern was: Green algae>Blue green algae>Euglenoids>Diatom>Dinoflagellates & Silicoflagellates.

The total phytoplankton population varied from 286000 - 480000 cells/l with maximum density registered. Among all the groups, Blue-green algae dominated the phytoplankton community and contributed 63- 91% of the total phytoplankton density. Green algae remained the second dominant group in all the stations. Total phytoplankton diversity in terms of no. of species varied from 13 to 27.

Among the Blue-green algae *Merismopedia glauca*, *Microcystis aeruginosa*, *Microcystis flos-aquae* and *Phormidium tenue* were common in all stations but with different compositions. Green algae which constituted the second largest group in terms of population density were represented by 21 species out of which only three species viz. *Haematococcus* sp., *Monoraphidium convolutum*, and *Staurastrum* sp. were common in all the stations

4.3.2 - Animal species

<no data available>

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)

The wetland experiences tropical humid climate and receives an average annual rainfall of 1306.3 mm.

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)

a) Maximum elevation above sea level (in metres)

- Entire river basin
- Upper part of river basin
- Middle part of river basin
- Lower part of river basin
- More than one river basin
- 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.

Rusikulya River Basin

4.4.3 - Soil

- Mineral
- Organic
- No available information

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

Please provide further information on the soil (optional)

Tampara lake is surrounded by linear hill ranges to the north, west, and south. The wetland opens to Rusikulya estuary and also Haripur Creek at Gopalpur. The soil type, which predominates in this area is deltaic alluvial soil. A part of the Rusikulya catchment forms the drainage basin of Tampara lake and the surrounding shallow depressions which ultimately drains rainwater into Tampara lake.

4.4.4 - Water regime

Water permanence

Presence?	
Usually seasonal, ephemeral or intermittent water present	No change

Source of water that maintains character of the site

Presence?	Predominant water source	
Water inputs from precipitation	<input checked="" type="checkbox"/>	No change

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 lake appears weed-free with clear water except for the fringe areas. The lake is generally filled with catchment run-off and monsoon precipitation. Overflow takes place through a single outlet near Agasthi Nuagaon.

4.4.5 - Sediment regime

- Significant erosion of sediments occurs on the site
- 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
- Sediment regime unknown

4.4.6 - Water pH

- 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

Please provide further information on salinity (optional):

Salinity measured in Tampara lake is 0.2 ppt

4.4.8 - Dissolved or suspended nutrients in water

Eutrophic

Mesotrophic

Oligotrophic

Dystrophic

Unknown

Please provide further information on dissolved or suspended nutrients (optional):

Nitrate levels in Tampara lake surface water vary from 1.5 to 6.7 µmol/l with an average of 4.35 µmol/l.

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 ii) significantly different site itself:

Surrounding area has greater urbanisation or development

Surrounding area has higher human population density

Surrounding area has more intensive agricultural use

Surrounding area has significantly different land cover or habitat types

Please describe other ways in which the surrounding area is different:

The areas surrounding Tampara lake are inhabited by fisher communities who predominantly depend on the wetland for their livelihoods. The major landuse pattern in the catchment of Tampara lake consists of agriculture, urban settlements and plantations along the seaside (Cashew and Casuarina).

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance
Fresh water	Drinking water for humans and/or livestock	Medium

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Storage and delivery of water as part of water supply systems for agriculture and industry	Medium

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Water sports and activities	High

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Nutrient cycling	Storage, recycling, processing and acquisition of nutrients	Low

Within the site: 20000

Outside the site: 50000

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

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

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

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

Public ownership

Category	Within the Ramsar Site	In the surrounding area
Provincial/region/state government	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Private ownership

Category	Within the Ramsar Site	In the surrounding area
Cooperative/collective (e.g., farmers cooperative)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site:

Divisional Forest Officer(DFO)
Office of the Divisional Forest Officer
Kamapalli Main Rd, Kamapalli, Brahmapur, Odisha 760004

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

Amlan Nayak, OSF(SB), Divisional Forest Officer(DFO), Berhampur, Odisha, India

Postal address:

Office of the Divisional Forest Officer
Kamapalli Main Rd, Kamapalli, Brahmapur, Odisha 760004

E-mail address:

dfobhmpr@yahoo.co.in

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	Medium impact		<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tourism and recreation areas	High impact		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Water regulation

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Water abstraction	High impact		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Fishing and harvesting aquatic resources	Low impact		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Recreational and tourism activities	High impact		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Invasive and other problematic species and genes

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Problematic native species	Medium impact		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Household sewage, urban waste water	High impact		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Agricultural and forestry effluents	High impact		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Droughts	High impact		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Storms and flooding	High impact		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

5.2.2 - Legal conservation status

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Plant Area	Tampara Lake		whole

5.2.3 - IUCN protected areas categories (2008)

- la Strict Nature Reserve
- lb Wilderness Area: protected area managed mainly for wilderness protection
- II 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

Measures	Status
Legal protection	Partially implemented

Habitat

Measures	Status
Catchment management initiatives/controls	Implemented

Species

Measures	Status
Reintroductions	Partially implemented

Human Activities

Measures	Status
Fisheries management/regulation	Implemented
Regulation/management of recreational activities	Implemented

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 No

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning processes with another Contracting Party? Yes No

5.2.6 - Planning for restoration

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

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Water quality	Proposed

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Marndi, R. K., Satapathy, D., Misra, S. K., & Kund, G. C. (2015). Fish diversity of Tampara Lake, Ganjam, Odisha. *Journal of Applied Zoological Researches*, 26(2), 203-208.

Mohanta, R., Behera, S. K., Mishra, S. S., Sethy, J., Swain, K. K., & Sahu, A. K. (2017). Status, distribution, habitat type of threatened bird diversity, potential eco-tourism site and conservation strategy for wetland in Tamapara Lake Southern Odisha. India. *Spring*, 6(7), 14-21.

6.1.2 - Additional reports and documents

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

<4 file(s) uploaded>

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

<no file available>

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

<1 file(s) uploaded>

iv. relevant Article 3.2 reports

<no file available>

v. site management plan

<no file available>

vi. other published literature

<no file available>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



Boating Facility at Tampara Lake (*R. N. Samal, 26-04-2017*)



Fishing Net & Boats at Tampara lake (*R. N. Samal, 26-04-2017*)



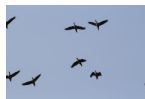
Wetland surface (*Wetlands International South Asia Photolab, 16-02-2018*)



Adjacent vegetation (*Wetlands International South Asia Photolab, 16-02-2018*)



Wetland surface (*Wetlands International South Asia Photolab, 16-02-2018*)



Birds above the wetland (*Wetlands International South Asia Photolab, 16-02-2018*)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation