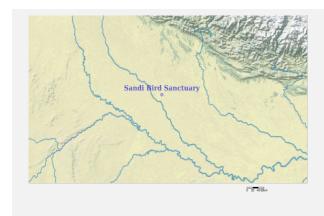


Ramsar Information Sheet

India Sandi Bird Sanctuary



Designation date 26 September 2019

Site number 2409

Coordinates 27°18'49"N 79°58'19"E

Area 308,54 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

Sandi Bird Sanctuary is a freshwater swamp that truly represents the ecosystems characteristic of Indo-Gangetic Plains. Spreading across an area of 308.54 Ha that includes 52 slightly deep to very deep-water zone areas in the sanctuary, the wetland provides varied habitats for several species of flora and fauna. The sanctuary is particularly rich in aquatic plants and is home to a resident flock of around 200 sarus cranes. The wetland sustains a number of species including over 150 species of resident and migratory birds, around 13 species of fish, 3 species of amphibians, 15 species of reptiles, 4 species of mollusks, a number of species of butterflies and higher vertebrates such as the blue bull (Boselaphus tragocamelus). It also receives thousands of waterfowl in winter, primarily brahminy duck (Tadorna ferruginea), red-crested pochard (Rhodonessa rufina), northern pintail (Anas acuta), northern shoveler (A. clypeata) and cotton teal or pygmy-goose (Nettapus coromandelianus). Other resident water birds include bronze-winged jacana (Metopidius indicus), pheasant-tailed jacana (Hydrophasianus chirurgus), Asian openbill (Anastomus oscitans), painted stork (Mycteria leucocephala) and black-necked stork (Ephippiorhynchus asiaticus). This Sanctuary has been designated as an international bird area under A4i criteria.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Compiler 1

Compiler 2

Name	Abu Arshad Khan
Institution/agency	UP Forest and Wildlife Department
Postal address	Aranya Sadan, Shisham Bagh, Sector-19, Indira Nagar, Lucknow-226016
E-mail	cfendpro@gmail.com
Phone	+91 0522-2716322
Fax	+91 0522-2716322
Name	Asad R. Rahmani
Institution/agency	Scientific Adviser, The Corbett Foundation, and Hem Chand Mahindra Foundation. Board Member of Wetlands International South Asia, New Delhi, and former Director, Bombay Natural History Society.
Postal address	701, Solitaire II, Eldeco Eden Apartments, Kursi Road, Tedhipullia, Lucknow 226 024, Uttar Pradesh,

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

From year 2013

To year 2018

India.

Phone +91 9820516394

E-mail rahmani1.asad@gmail.com

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)

Sandi Bird Sanctuary

Unofficial name (optional)

Dahr Lake

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image

<1 file(s) uploaded>

Former maps 0

Boundaries description

North:

- 1- Village Koilai Human settlements
- 2- Village Adampur Agriculture Land
- 3- Village Bhudiya Chamraudha Agriculture Land

South:

1- Village Mirzapur Agriculture Land and Human settlements

Fast:

- 1- Village Ladaitapur Agriculture Land
- 2- Village Saidapur Agriculture Land

West:

- 1- Village Talepur Agriculture Land and Human settlements
- 2- Village Aliyapur Agriculture Land and Human settlements
- 3- Village Bhaurajpur Agriculture Land

The site overlaps with boundaries of Sandi bird Sanctuary and IBA.

2.2.2 - General location

a) In which large administrative region does The Sanctuary is located in the Bilgram tehsil of Hardoi district in state of Uttar Pradesh, India. It is just 1 the site lie? Km from the Sandi town, 19 Km from city Hardoi and 129 Km from Lucknow, the state capital.

b) What is the nearest town or population

centre? Sandi Kasba

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 \odot

b) Is the site adjacent to another designated Ramsar Site on the Yes O No (9) territory of another Contracting Party?

2.2.4 - Area of the Site

Official area, in hectares (ha): 308.54

Area, in hectares (ha) as calculated from 301.469 GIS boundaries

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Freshwater Ecoregions of the World (FEOW)	Ganges Delta and Plains

Other biogeographic regionalisation scheme

The wetland falls within Indo-Gangetic plains.

3 - Why is the Site important?

3.1 - Ramsar Criteria and their justification

<no data available>

- ☑ Criterion 2 : Rare species and threatened ecological communities
- ☑ Criterion 3 : Biological diversity

The wetland sustains a number of species including over 150 species of resident and migratory birds, around 13 species of fish, 3 species of amphibians, 3 species of annelids, 15 species of reptiles, 4 species of mollusks, a number of species of butterflies and higher vertebrates such as the blue bull (Boselaphus tragocamelus).

- ☑ Criterion 4 : Support during critical life cycle stage or in adverse conditions
- ☑ Criterion 5 : >20.000 waterbirds

Overall waterbird numbers 41,678

Start year 2013

Source of data: Departmental census

- ☑ Criterion 6 : >1% waterbird population
- ☑ Criterion 7 : Significant and representative fish

16 indigenous species of fish has been recorded in the water bodies of the Sanctuary. Some of them are: Labeo rohita, Catla catla, Cirrhinus mrigala, Chela sp., Channa marulius, Clarias sp.. There has been no detailed study regarding the habitat dynamic and life stages of fish supported by the water bodies in the Sanctuary.

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	Common name	Species qualifies under criterion	Species contributes under criterion	Oize	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
Birds												
CHORDATA/ AVES	Anas acuta	Northern Pintail		2 000]			LC				wetland is a wintering site for the species
CHORDATA/ AVES	Anas clypeata	Northern Shoveler]			LC				wetland is a wintering site for the species
CHORDATA/ AVES	Anas crecca	Green-winged Teal; Eurasian Teal			6500	2018	1.63	LC				wetland is a wintering site for the species
CHORDATA/ AVES	Anastomus oscitans	Asian Openbill]			LC				Uses wetland as a habitat
CHORDATA/ AVES	Aquila clanga	Greater Spotted Eagle		0000]			W				
CHORDATA/ AVES	Aythya nyroca	Ferruginous Duck			7000	2018	7	NT		/		Wetland is a wintering site for the species
CHORDATA/ AVES	Ephippiorhynchus asiaticus	Black-necked Stork]			NT				Uses wetland as a habitat
CHORDATA/ AVES	Grus antigone	Sarus Crane		0000]			W				
CHORDATA/ AVES	Hydrophasianus chirurgus	Pheasant-tailed Jacana]			LC				Uses wetland as a habitat
CHORDATA/ AVES	Metopidius indicus	Bronze-winged Jacana]			LC				Uses wetland as a habitat
CHORDATA/ AVES	Mycteria leucocephala	Painted Stork)			NT				uses wetland as a habitat
CHORDATA/ AVES	Nettapus coromandelianus	Cotton Pygmy Goose]			LC				wetland is a wintering site for the species
CHORDATA/ AVES	Netta rufina	Red-crested Pochard			4000	2018	4	LC				Wetland is a wintering site for the species
CHORDATA/ AVES	Tadorna ferruginea	Ruddy Shelduck		2 000]			LC				Wetland is a wintering site for the species
Fish, Mollusc	and Crustacea											
CHORDATA/ ACTINOPTERYGI	Channa marulius)			LC				Native to South Asia, species contributes to biodiversity of the site
CHORDATA/ ACTINOPTERYGI	Chela cachius		0000	2020)			LC				Native to South Asia, the species contributes to biodiversity of the site.
CHORDATA/ ACTINOPTERYGI	Cirrhinus mrigala		0000)			LC				Carp species endemic to Indo-Gangetic riverine system, it contributes to biodiversity of the site
CHORDATA/ ACTINOPTERYGI	Clarias batrachus	Philippine catfish	0000)			LC				Species inhabit inland waters, contributes to biodiversity of the site
CHORDATA/ ACTINOPTERYGI	Gibelion catla	Catla catla	0000)			LC				Species is endemic to riverine system of south Asia and is also used in polyculture. It contributes to biodiversity of the site.
CHORDATA/ ACTINOPTERYGI	Labeo rohita		0000)			LC				Indo-Gangetic riverine species that is also used in carp polyculture systems. It contributes to biodiversity of the site.

¹⁾ Percentage of the total biogeographic population at the site

RIS for Site no. 2409, Sandi Bird Sanctuary, India

<no data available>

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

4.1 - Ecological character

Sandi Bird Sanctuary is a freshwater swamp, situated in Bilgram tehsil of Hardoi district of Uttar Pradesh, which truly represents the ecosystems characteristic of Indo-Gangetic Plains. Spreading across an area of 308.54 ha, the sanctuary includes 52 slightly deep to very deep-water zone areas. The wetland provides varied habitats for several species of flora and fauna. The main source of water for the wetland are monsoon rains flowing through natural watercourses. It provides a conducive habitat for a number of resident and migratory water birds. The sanctuary is particularly rich in aquatic plants such as duckweed, water chestnut, different species of pondweed etc. Thick stands of cattails on the fringes provide good breeding habitat for resident water birds. This wetland is home to a resident flock of around 200 sarus cranes. It also receives thousands of waterfowl in winter, primarily Brahminy duck (Tadoma ferruginea), red-crested pochard (Netta rufina), northern pintail (Anas acuta), northern shoveler (Anas clypeata) and cotton teal or pygmy-goose (Nettapus coromandelianus). Other resident water birds include bronze-winged jacana (Metopidius indicus), pheasant-tailed jacana (Hydophasianus chirurgus), Asian openbill (Anastomus oscitans), painted stork (Mycteria leucocephala) and black-necked stork Ephippiorhynchus asiaticus. This Sanctuary has been designated as an IBA and qualifies under its criteria A4i, with presence of =1% biogeographic population of waterfowl. The sanctuary also acts as a barrier to floods for nearby villages and agricultural fields.

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

	lands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
Fresh water > Marshes on inorganic soils >> Tp: Permanent freshwater marshes/ pools		1	308.4	Representative

4.3 - Biological components

4.3.1 - Plant species

Invasive alien plant species

Scientific name	Common name	Impacts	
Eichhornia crassipes		Actually (minor impacts)	No change

4.3.2 - Animal species

Other noteworthy animal species

Phylum	Scientific name	Common name	Pop. size	Period of pop. est.	%occurrence	Position in range /endemism/other
CHORDATAMAMMALIA	Boselaphus tragocamelus	nilgai;blue bull				Largest Asian antelope, endemic to the Indian subcontinent.

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 average annual rainfall in the area is around 685 mm and temperature varies from 4°C to 40°C.

4.4.2 - Geomorphic setting

-> 1.6	
a) Mnimum elevation above sea level (in metres)	111
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 \square

Not in river basin

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.

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 O ii) significantly different O site itself:

Oligotrophic

Dystrophic

Unknown

Surrounding area has greater urbanisation or development \Box
Surrounding area has higher human population density $lacksquare$
Surrounding area has more intensive agricultural use $\ensuremath{\overline{\psi}}$
Surrounding area has significantly different land cover or habitat types $\hfill\Box$

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance	
Fresh water	Water for irrigated agriculture	Low	
Wetland non-food products	Livestock fodder	Medium	

Regulating Services

regulating Services				
Ecosystem service	Examples	Importance/Extent/Significance		
Maintenance of hydrological	Groundwater recharge and	Medium		
regimes	discharge	IVEGIGITI		

Cultural Services

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

Within the site:	3000
Outside the site:	1000

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

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

<no data available>

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	2	

Private ownership

Category	Within the Ramsar Site	In the surrounding area
Other types of private/individual owner(s)		2

5.1.2 - Management authority

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

- 1- Range Forest Officer, Sandi Bird Sanctuary, Hardoi, Uttar Pradesh, India.
- 2- Wildlife Warden, Endangered Project, Uttar Pradesh, Lucknow, Uttar Pradesh, India.
- managing the site: 3- Conservator of Forests, Endangered Project, Uttar Pradesh, Lucknow, Uttar Pradesh, India.

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

Mordhwaj Shukla, Range Forest Officer. Abu Arshad Khan, Wildlife Warden. Neeraj Kumar, Conservator of Forests.

Postal address:

Conservator of Forests, Endangered Project, Uttar Pradesh, Aranya Sadan, Shisham Bagh, Sector-19, Indira Nagar, Lucknow, Pin-226016

E-mail address: cfendpro@gmail.com

5.2 - Ecological character threats and responses (Management)

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

Water regulation

affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Water abstraction	Low 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		\checkmark	

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		✓	

Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Vegetation clearance/ land conversion	Medium impact		\checkmark	

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	Low impact		/	

Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Droughts	Medium impact		€	

5.2.2 - Legal conservation status

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Sanctuary	Sandi wildlife sanctuary		whole

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Sandi wildlife sanctuary		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
Natural Monument: protected area managed mainly for conservation of specific natural features
/ Habitat/Species Management Area: protected area managed mainly for conservation through management intervention
Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation
Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems

5.2.4 - Key conservation measures

Species

openio		
Measures	Status	
Threatened/rare spe management progra	Implemented	
Control of invasive a	alien Implemented	

Human Activities

Turrian Activities		
Measures	Status	
Communication, education, and participation and awareness activities	Implemented	
Research	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? Yes ◎ No O

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? Yes, there is a plan

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Water quality	Implemented
Birds	Implemented

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

- 1. Rahmani, A.R., Islam, M.Z. and Kasambe, R.M. (2016) Important Bird and Biodiversity Areas in India: Priority Sites for Conservation (Revised and updated). Bombay Natural History Society, Indian Bird Conservation Network, Royal Society for the Protection of Birds and BirdLife International (U.K.). Pp. 1992 + xii.
- 2. Islam, M.Z. and Rahmani, A.R. (2008) Existing and Potential Ramsar Sites in India. Indian Bird Conservation Network, Bombay Natural History Society, BirdLife International, and Royal Society for the Protection of Birds. Oxford University Press, New Delhi. Pp 592.
- 3. Rahmani, A. R., Islam, M.Z., Singh, V.P., Chaudhari, S. (2011) Important Bird Areas of Uttar Pradesh. Katerniaghat.
- 4. Kumar Adesh, Kanaujia Amita, Kushwaha Sonika and Kumar Akhilesh (2015) A biodiversity hub Sandi Bird Sanctuary, Hardoi, Uttar Pradesh, India

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)

<no file available>

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

<no file available>

iv. relevant Article 3.2 reports

<no file available>

v. site management plan

<1 file(s) uploaded>

vi. other published literature

<no file available>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



Congregation of Painted stork at Sandi Bird Sanctuary (*Abu Arshad Khan, 11-09-2019*)



Panoramic view of Sandi Bird Sanctuary (Ashutosh



Congregation of Mgratory Blrds at Sandi Bird Sanctuary (*Abu Arshad Khan, 13-11-2019*)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 2019-09-26