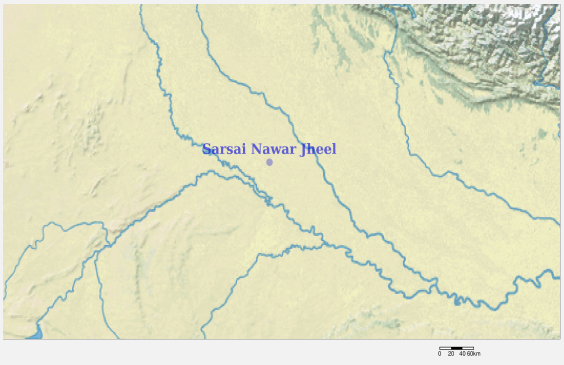
Ramsar Information Sheet

Published on 1 February 2020

India

Sarsai Nawar Jheel



Designation date	19 September 2019
Site number	2411
Coordinates	26°58'08"N 79°15'02"E
Area	161,27 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

Sarsai Nawar comprises of permanent marsh wetland, located in Indo-Gangetic floodplain landscape of Etawah district. Covering an area of 161.27 hectares, this shallow marsh is surrounded by agricultural fields and is mostly fed by precipitation run-off. The wetland derives its name from sarus crane (Grus antigone) and is considered to be the roosting area of the largest flock of sarus crane in the region, consisting of nearly 400 individuals. Three resident species of storks, namely painted stork (Mycteria leucocephala), Asian woolly-necked stork (Ciconia episcopus) and black-necked stork (Ephippiorhynchus asiaticus) feed in the wetland round the year. The wetland is an important wintering site for a number of migratory bird species of Central Asian flyway notably northern pintail (Anas acuta), Eurasian wigeon (Anas penelope), bar-headed goose (Anser indicus) and greylag goose (Anser anser). The wetland also supports a considerable population of flap-shell turtle (Lissemys punctate) and many families of the common mongoose (Herpestes javanicus). Nut sedge (Cyperus rotundus) forms the dominant vegetation of the wetland, which also provides habitat to many grasses and water lilies. The catchment is intensely cultivated. Hajari Mahadev temple located inside the wetland is highly revered in the region.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Compiler 1

Name	Range Officer Bharthana
Institution/agency	UP Forest and Wildlife Department
Postal address	Office of the Divisional Director Social Forest Division, Etawah Uttar Pradesh
E-mail	dfo.etawah@gmail.com
Phone	+919456669011

Compiler 2

Name	Authorized Officer, UPSWA
Institution/agency	Uttar Pradesh State Wetlands Authority
Postal address	Uttar Pradesh State Wetlands Authority UP Forest Department Head Quarters 17, Rana Pratap Marg Lucknow Uttar Pradesh
E-mail	upstatewetlandauthority2018@gmail.com
Phone	+919454323308
Fax	+915222205207

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

From year	2015
To year	2018

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Sarsai Nawar Jheel

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 wetland is surrounded by settlements on all sides. To the north are Town Kishni and Village Murcha. Village Chamarpur Rudrapur and Village Kuita form the southern side. The settlements of Village Kadampur, Andandpur and Usrahar are located on the eastern boundary whereas, Trirkhi Trilokpur and Bhadarpura for the southern end.

The boundary coincides with that of Sarsai Nawar Bird Sanctuary.

2.2.2 - General location

a) In which large administrative region does the site lie?	Takha tehsil, Etawah District, Uttar Pradesh
b) What is the nearest town or population centre?	Kishni (Mainpuri)

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): 161.27

Area, in hectares (ha) as calculated from GIS boundaries: 161.581

2.2.5 - Biogeography

Biogeographic regions

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

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

Justification	The wetland is a habitat for a number of waterbirds, fish and turtle species. The site has been identified as an Important Bird Area on the basis of congregation of Sarus and other waterbirds.

☑ Criterion 5 : >20,000 waterbirds

Overall waterbird numbers	75000
Start year	2015
Source of data:	Asian Waterbird Census

☑ Criterion 7 : Significant and representative fish

Justification	The wetland is a breeding and spawning ground for several riverine fish species, including rohu (Labeo rohita), catla (Catla catla), Mystus sp. and other species. Floodplain wetlands like Sarsai Nawar play an important role in maintaining fish diversity within the River Ganga and her tributaries.

☑ Criterion 8 : Fish spawning grounds, etc.

Justification	The wetland provide spawning grounds to a number of fish species like Cirrhinus mrigala, Gibelion catla, Heteropneustes fossilis and Sperata seenghala.

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				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								
Birds																		
CHORDATA/ AVES	*Anas acuta*	Northern Pintail	☐	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐		Winter migrant.
CHORDATA/ AVES	*Anas penelope*	Eurasian Wigeon	☐	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐		Winter migrant.
CHORDATA/ AVES	*Anser anser*	Greylag Goose	☐	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐		Winter migrant.
CHORDATA/ AVES	*Anser indicus*	Bar-headed Goose	☐	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐		Winter migrant.
CHORDATA/ AVES	*Aquila clanga*	Greater Spotted Eagle	☑	☐	☐	☐	☐	☐	☐	☐				VU	☐	☐		Uses wetland as a habitat.
CHORDATA/ AVES	*Ciconia episcopus*	Woolly-necked Stork	☑	☐	☐	☐	☐	☐	☐	☐				VU	☐	☐		Uses the wetland as habitat.
CHORDATA/ AVES	*Ephippiorhynchus asiaticus*	Black-necked Stork	☐	☐	☐	☐	☑	☐	☐	☐				NT	☐	☐		Uses the wetland as habitat.
CHORDATA/ AVES	*Grus antigone*	Sarus Crane	☑	☐	☐	☐	☐	☐	☐	☐				VU	☐	☐		Uses wetland as a habitat.
CHORDATA/ AVES	*Gyps bengalensis*	White-rumped Vulture	☑	☐	☐	☐	☑	☐	☐	☐				CR	☐	☑		Uses the wetland as habitat.
CHORDATA/ AVES	*Haliaeetus leucoryphus*	Pallas's Fish Eagle	☑	☐	☐	☐	☐	☐	☐	☐				EN	☐	☑		Wetland is wintering site for the species.
CHORDATA/ AVES	*Mycteria leucocephala*	Painted Stork	☐	☐	☐	☐	☑	☐	☐	☐				NT	☐	☐		Uses the wetland as habitat.
Fish, Mollusc and Crustacea																		
CHORDATA/ ACTINOPTERYGII	*Cirrhinus mrigala*		☐	☐	☐	☐	☐	☐	☐	☑				LC	☐	☐		Spawns in the wetland.
CHORDATA/ ACTINOPTERYGII	*Gibelion catla*	Catla catla	☐	☐	☐	☐	☐	☐	☐	☑				LC	☐	☐		Spawns in the wetland.
CHORDATA/ ACTINOPTERYGII	*Heteropneustes fossilis*		☐	☐	☐	☐	☐	☐	☐	☑				LC	☐	☐		Spawns in the wetland.
CHORDATA/ ACTINOPTERYGII	*Sperata seenghala*		☐	☐	☐	☐	☐	☐	☐	☑				LC	☐	☐		Spawns in the wetland.

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

Sarsai Nawar is a natural depression that fills up during the monsoon. The wetland is the roosting area of the largest flock of sarus crane (Grus antigone) in the region, consisting of nearly 400 individuals. In addition to sarus, a vast number of waders, ducks, and geese visit the lake in winter. Three resident species of storks, namely the painted stork (Mycteria leucocephala), Asian woolly necked stork (Ciconia episcopus), and black-necked stork (Ephippiorhynchus asiaticus) feed in the lake throughout the year. The wetland is unusual in that the principal vegetation is common nut sedge (Cyperus rotundus), and there is no emergent vegetation. A very old Shiva temple adjoins the wetland and is visited by thousands of pilgrims each year, particularly during the Shivaratri festival in the first week of March.

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

Inland wetlands

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	161	

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
Ailanthus excelsa	Indian tree of heaven	
Azadirachta indica	Indian Lilac	
Carissa carandas	Christ's thorn	
Citrus aurantiifolia	Lime	
Cyperus rotundus	Nut grass	
Holoptelea integrifolia	Indian Elm	
Neolamarckia cadamba	Cadam	
Pongamia pinnata	Hongay oil tree	
Syzygium cumini	Black plum	
Terminalia arjuna	Arjun	

Invasive alien plant species

Scientific name	Common name	Impacts	
Eichhornia crassipes	Water hyacinth	Potentially	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
CHORDATA/MAMMALIA	*Herpestes javanicus*	Small Asian Mongoose				

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
C: Moist Mid-Latitude climate with mild winters	Cwa: Humid subtropical (Mild with dry winter, hot summer)

The climate is sub-humid and it is characterised by a pleasant cold season and a hot dry summer .The temperature here averages 25.8 °C. The average annual rainfall is 791.6 mm. About 90% of rainfall takes place from June to September.

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres) 60

a) Maximum elevation above sea level (in metres) 65

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.

Yamuna 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 ◉

4.4.4 - Water regime

Water permanence

Presence?	
Usually permanent water present	No change

Source of water that maintains character of the site

Presence?	Predominant water source	
Water inputs from rainfall	☑	No change

Water destination

Presence?	
Feeds groundwater	No change

Stability of water regime

Presence?	
Water levels fluctuating (including tidal)	No change

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 ☐

4.4.8 - Dissolved or suspended nutrients in water

Eutrophic ☐
Mesotrophic ☐
Oligotrophic ☐
Dystrophic ☐
Unknown ☑

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 site itself: i) broadly similar ○ ii) significantly different ◉

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 ☐

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

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	High

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Spiritual and inspirational	Spiritual and religious values	High
Scientific and educational	Educational activities and opportunities	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

Within the site: 5000

Outside the site: 10000

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

4.5.2 - Social and cultural values

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

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 ☑

Description if applicable

The farming practices in the wetland play an important role in sustenance of waterbird habitats, particularly that of Sarus crane.

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	☑	☐

Private ownership

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

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

A large part of the wetland area is owned by the Gram Panchayat. Private land within the Ramsar Site is used for farming.

5.1.2 - Management authority

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

Range Forest Officer, Sarsai nawar Wetland, Bharthana, Etawah.
Divisional Director, Social Forestry Division Etawah.
Chief Conservator of Forest, Kanpur circle, Kanpur.
Chief Conservator of Forest, Endangered Project, Lucknow.
Uttar Pradesh State Wetlands Authority

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

Satyapal, Divisional Director (Social Forestry)

Postal address:

Office of the Divisional Director (Social Forestry Division)
Forest Park
Near Awas Vikas
Etawah-206001.

E-mail address:

dfo.etawah@gmail.com

5.2 - Ecological character threats and responses (Management)

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

Human settlements (non agricultural)

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Unspecified development	unknown impact	unknown impact	☐	☑

Water regulation

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Drainage	Low impact	Medium impact	☑	☑

Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Annual and perennial non-timber crops	Low impact	Medium 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	Low impact	Medium impact	☑	☐

Climate change and severe weather

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

5.2.2 - Legal conservation status

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Sarsai Nawar Lake		whole

5.2.3 - IUCN protected areas categories (2008)

Ia Strict Nature Reserve ☐

Ib 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 ☑

5.2.4 - Key conservation measures

Legal protection

Measures	Status
Legal protection	Implemented

Habitat

Measures	Status
Habitat manipulation/enhancement	Partially implemented

Species

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

Human Activities

Measures	Status
Communication, education, and participation and awareness activities	Partially 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 ◉

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? Yes, there is a plan

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Birds	Implemented
Water quality	Implemented

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

BirdLife International (2019) "Important Bird Areas factsheet: Sarsai Nawar Lake". [online] Available at: http://datazone.birdlife.org/site/factsheet/sarsai-nawar-lake-iba-india [Accessed 15/01/2020].
Singh, P. (2006). "Perspectives in Plant Ecology and Environmental biology". Jodhpur: Scientific Publishers.
Gopi Sundar, K.S. (2006). "Flock Size, Density and Habitat Selection of Four Large Waterbirds Species in an Agricultural Landscape in Uttar Pradesh, India: Implications for Management," Waterbirds, 29(3), 365-374.

6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)
<no file available>

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:

A panoramic view of Sarsai Nawar (*Vishal Pratap Singh, 29-08-2019*)

The wide span of Sarsai Nawar (*Vishal Pratap Singh, 29-08-2019*)

Aquatic vegetation at Sarsai Nawar bird Sanctuary (*UP State Wetland authority, 23-12-2019*)

6.1.4 - Designation letter and related data

Designation letter
<1 file(s) uploaded>

Date of Designation	2019-09-19