



सत्यमेव जयते



Ramsar Sites of India

Factsheets



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About this publication

This document is a compilation of information on Ramsar Sites of India. The data presented in this document has been sourced from the Ramsar Information Sheets, Management Action Plans and other publications. The maps are for representation purpose only and not to scale.

मंत्री
पर्यावरण, वन एवं जलवायु परिवर्तन,
सूचना एवं प्रसारण और
भारी उद्योग एवं लोक उद्यम
भारत सरकार



MINISTER
ENVIRONMENT, FOREST & CLIMATE CHANGE,
INFORMATION & BROADCASTING AND
HEAVY INDUSTRIES & PUBLIC ENTERPRISES
GOVERNMENT OF INDIA

प्रकाश जावडेकर
Prakash Javadekar



MESSAGE

I am pleased to present the compilation of factsheets on the 'Ramsar Sites of India'. This compilation is intended to present information about the 37 Ramsar sites of the country in a concise and informative manner. I am happy to know that India has the maximum number of designated Ramsar sites in South Asia.

India is one of the few countries in the world to have a wetland inventory system wherein remote sensing techniques have been used to map the wetlands. A scientific approach to mapping and collecting data on the wetlands is essential to their preservation. The water storage and purification services of the wetlands also align with the Prime Minister's 'Nal se Jal' scheme under the 'Jal Hi Jivan Mission' which aims to provide adequate water supply to all households and to conserve water resources. With the rapidly deteriorating situation of water scarcity, it is imperative to preserve wetlands for posterity.

The compilation reflects the diversity of the Ramsar sites of the country, the values and ecosystem services being provided by them and also the threats being faced in their management. It is a step forward in streamlining the dispersed information on these wetlands and presenting them in an engaging format.

I congratulate the team of MoEF&CC that has put together this compilation. Let us commit ourselves to the continued preservation and sustainable management of not only the Ramsar sites but all the wetlands across the country.

Date:13.02.2020

(Prakash Javadekar)

॥ प्लास्टिक नहीं, कपड़ा सही ॥



सी.के.मिश्रा
C.K.Mishra



सत्यमेव जयते

सचिव
भारत सरकार
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
SECRETARY
GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE



FOREWORD

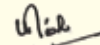
Wetland ecosystems are vital for sustenance and growth of all life forms. These complex ecosystems offer a wide range of services including freshwater supply, food, fibre and raw materials besides playing a role in flood control, water quality improvement, groundwater recharge, recreation and climate change mitigation. These productive ecosystems are thus, of immense ecological, socio-economic as well as cultural importance.

Despite these benefits, wetlands are the first target of human interference, remain the most threatened of all natural resources and are disappearing three times faster than forests. Around 50% of the Earth's wetlands are estimated to already have disappeared through conversion to industrial, agricultural and residential purposes.

To conserve these valuable ecosystems, India became a party to the Ramsar Convention on Wetlands of International Importance in 1982 and has till now designated 37 Ramsar sites of international importance covering an area of 1067939 hectares which are being managed as per the Ramsar mandate.

We are happy to release this compilation of factsheets on the Ramsar sites of the country. The factsheets provide a glimpse of the values and benefits of each site and the threats to their existence and management.

I congratulate the Wetlands Division of the MoEF&CC who with their CEPA partners Wetlands International South Asia (WISA) and WWF-India along with GIZ have come out with this comprehensive document.


[C. K. Mishra]

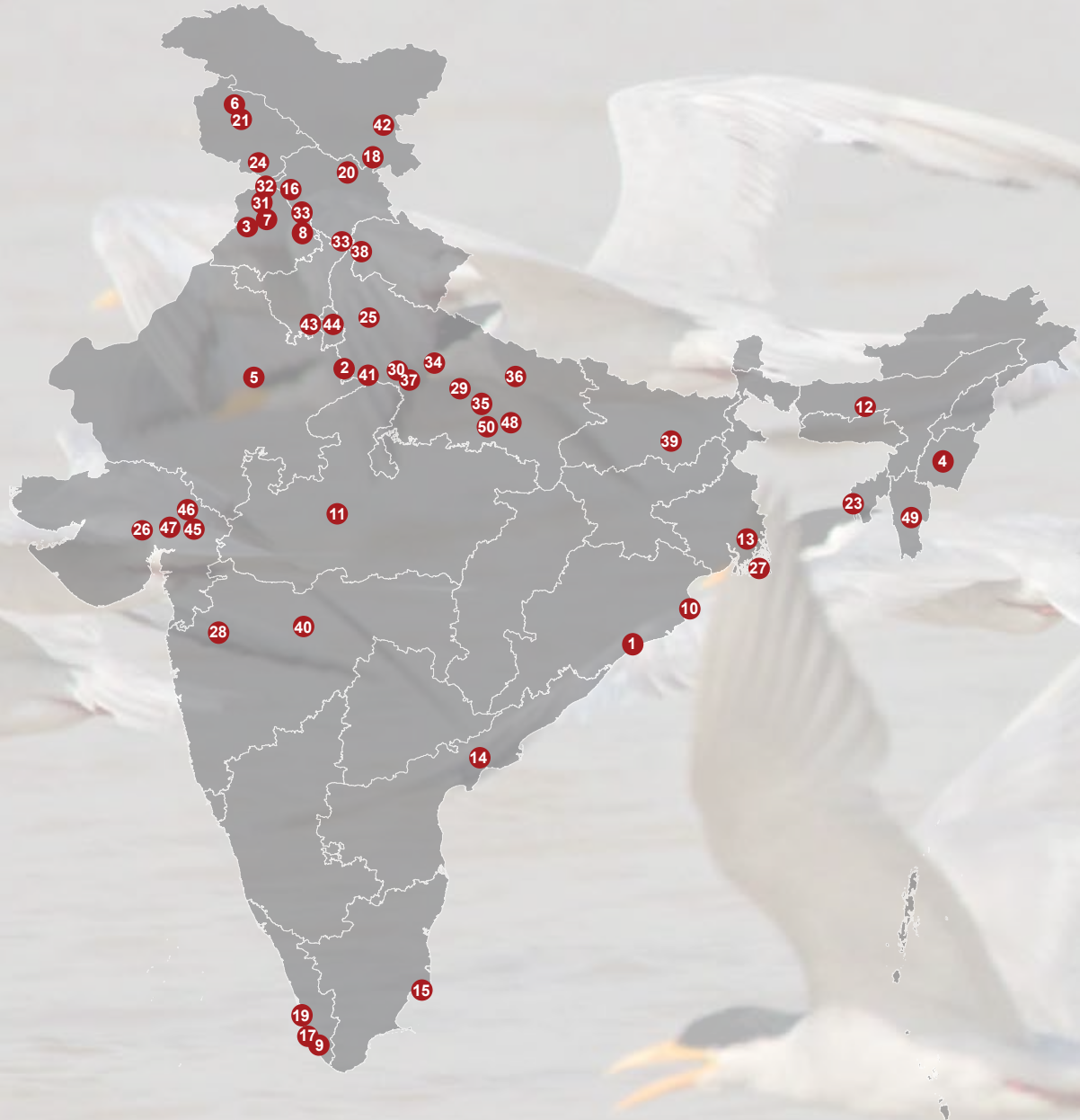
New Delhi,
13th February, 2020

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The Ramsar Sites Criteria

The nine criteria for identifying Wetlands of International Importance

Group A of the Criteria. Sites containing representative, rare or unique wetland types

Criterion 1: A wetland should be considered internationally important if it contains a representative, rare, or unique example of a natural or near-natural wetland type found within the appropriate biogeographic region.

Group B of the Criteria. Sites of international importance for conserving biological diversity

Criteria based on species and ecological communities

Criterion 2: A wetland should be considered internationally important if it supports vulnerable, endangered, or critically endangered species or threatened ecological communities.

Criterion 3: A wetland should be considered internationally important if it supports populations of plant and/or animal species important for maintaining the biological diversity of a particular biogeographic region.

Criterion 4: A wetland should be considered internationally important if it supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.

Specific criteria based on waterbirds

Criterion 5: A wetland should be considered internationally important if it regularly supports 20,000 or more waterbirds.

Criterion 6: A wetland should be considered internationally important if it regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.

Specific criteria based on fish

Criterion 7: A wetland should be considered internationally important if it supports a significant proportion of indigenous fish subspecies, species or families, life-history stages, species interactions and/or populations that are representative of wetland benefits and/or values and thereby contributes to global biological diversity.

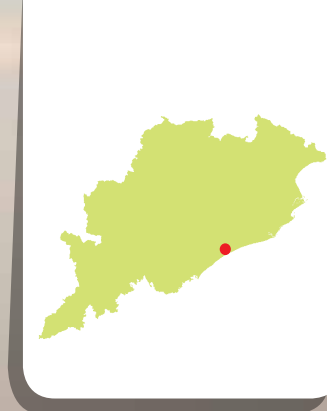
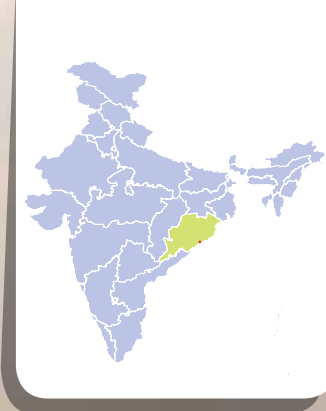
Criterion 8: A wetland should be considered internationally important if it is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend.

Specific criteria based on other taxa

Criterion 9: A wetland should be considered internationally important if it regularly supports 1% of the individuals in a population of one species or subspecies of wetland-dependent nonavian animal species.

Chilika Lake

Odisha



K.R. Chandrasekhar

Date of Designation

October 1, 1981

Location

Puri, Khurda and Ganjam Districts

Area

1,16,500 hectares

Designation Criteria

2

Protection Status

15.5 km² island Nalabana designated as Bird Sanctuary

Wetland Type

Natural lagoon

Management Authority

Chilika Development Authority

Values and Benefits



~12,500 MT of commercial fish harvested annually



Stabilises Coastline



~10,000 MT of plants harvested annually



70% of migratory fish and 100+ intercontinental migrant waterbirds



Several medicinal and ornamental resources



Over 0.5 million tourists



10-17 t CO₂ blue carbon equivalent soaked by seagrass beds



Scientific and educational importance



Buffers communities from storms and cyclones



Kalijai temple and several historical sites



Purifies water

Significance

Low

Medium

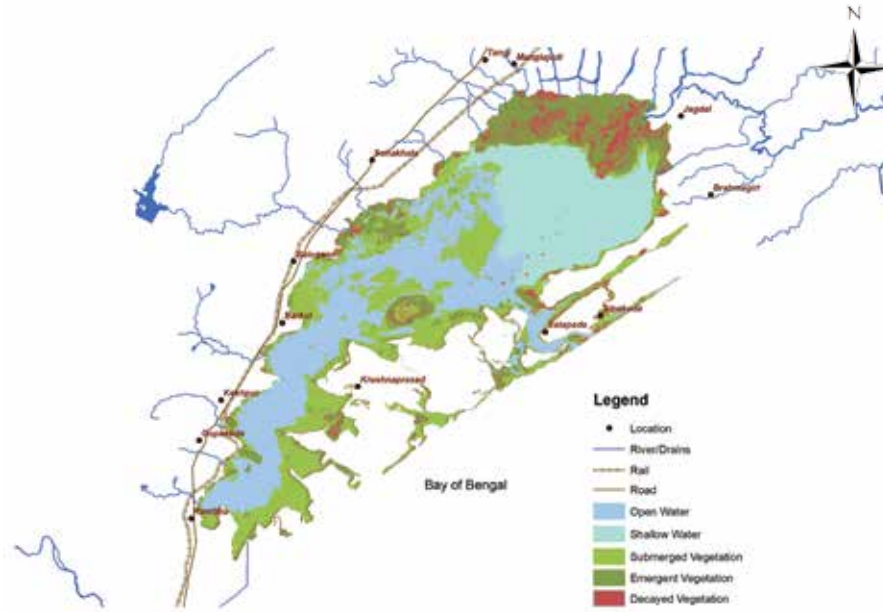
High

Significance

Low

Medium

High



Threats



Siltation



Extreme events changes lagoon mouth



Pollution from settlements



Illegal aquaculture



Unsustainable fish harvest



Phragmites in northern sector



Unsustainable tourism

Species richness

225 Birds

300+ Fishes

18 Mammals

37 Reptiles & Amphibians

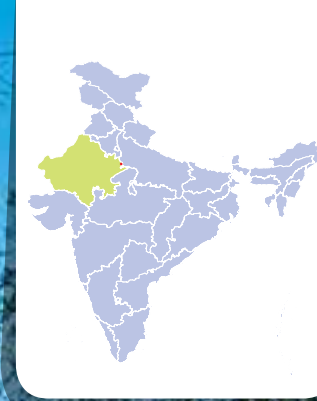
900+ Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Irrawaddy Dolphin	Scalloped Hammerhead, Smalltooth Sawfish, Ganges Shark	Irrawaddy Dolphin, Winghead Shark, Longhead Eagle Ray	Lesser White-fronted Goose, Indian Skimmer, Woolly-necked Stork, Great Knot, Common Pochard, Toli Shad, <i>Otolithes ruber</i>

Keoladeo National Park

Rajasthan



Dhritiman Mukherjee

Date of Designation

October 1, 1981

Location

Bharatpur District

Area

2,873 hectares

Designation Criteria

2

Protection Status

National Park

Wetland Type

Freshwater marsh and swamp

Other Designations

UNESCO World Heritage Site

Management Authority

Rajasthan Forest Department

Values and Benefits



Groundwater recharge



Habitat for several migratory species



Tourism offers livelihood to local communities

Significance

Low

Medium

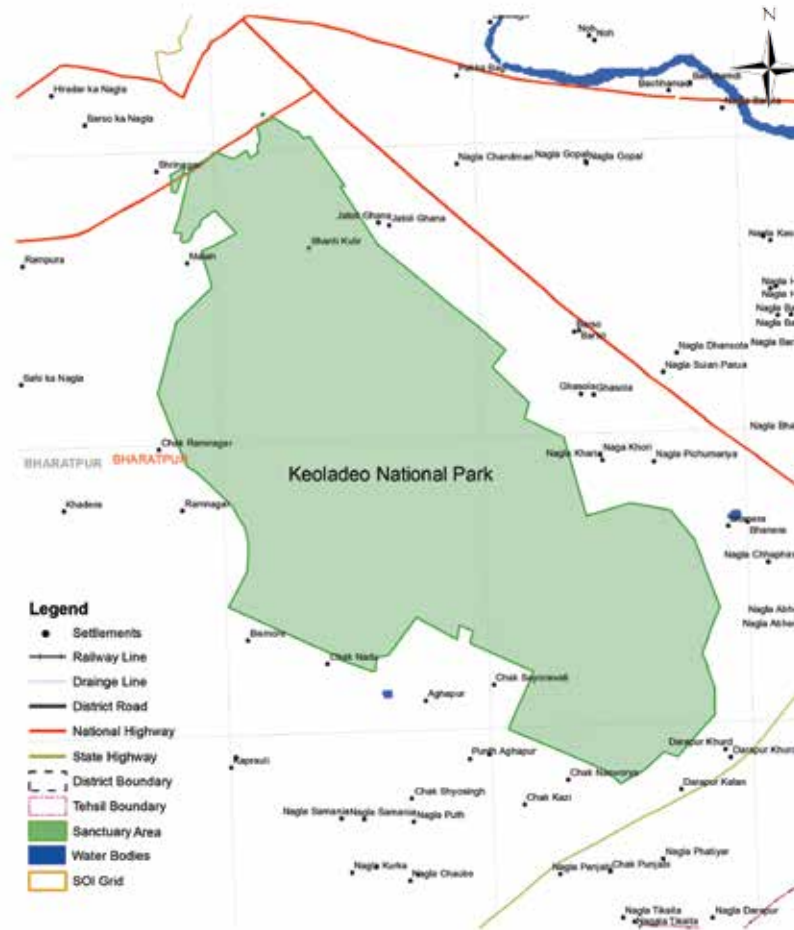
High

Significance

Low

Medium

High



Threats



Hydrological regime alteration



Encroachment



Invasive species proliferation like Water hyacinth, Knot grass, Mesquite and African catfish

Species richness

375 Birds

57 Fishes

34 Mammals

32 Amphibians and Reptiles

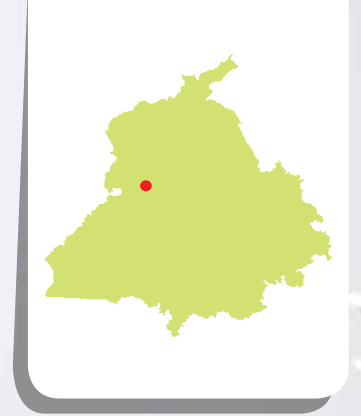
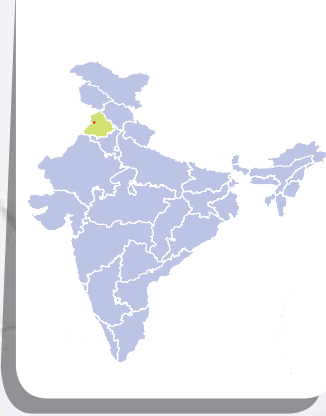
372 Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Sarus Crane, Greater spotted Eagle, Painted Stork, Hog Deer		Greater Adjutant, Hog Deer	Common Pochard, Woolly-necked Stork, Sarus Crane, Lesser Adjutant, Greater spotted Eagle, Smooth-coated Otter, Sambar

Harike Lake

Punjab



Wetlands International South Asia Photo Library

Date of Designation

March 23, 1990

Location

Tarn Taran, Kapurthala and Ferozepur Districts

Area

4100 hectares

Designation Criteria

1

Protection Status

Wildlife Sanctuary

Wetland Type

Reservoir and water storage area

Management Authority

Department of Forest and Wildlife Preservation, Punjab

Values and Benefits



Water for irrigation to southern Punjab and Rajasthan



Recreation and tourism



Buffers flood



Scientific and educational values



Purifies wastewater



Cultural and spiritual importance



Traps sediment



Recharges groundwater



Habitat for several migratory species

Significance

Low Medium High

Significance

Low Medium High

Threats



Siltation



Pollution from upstream cities and towns



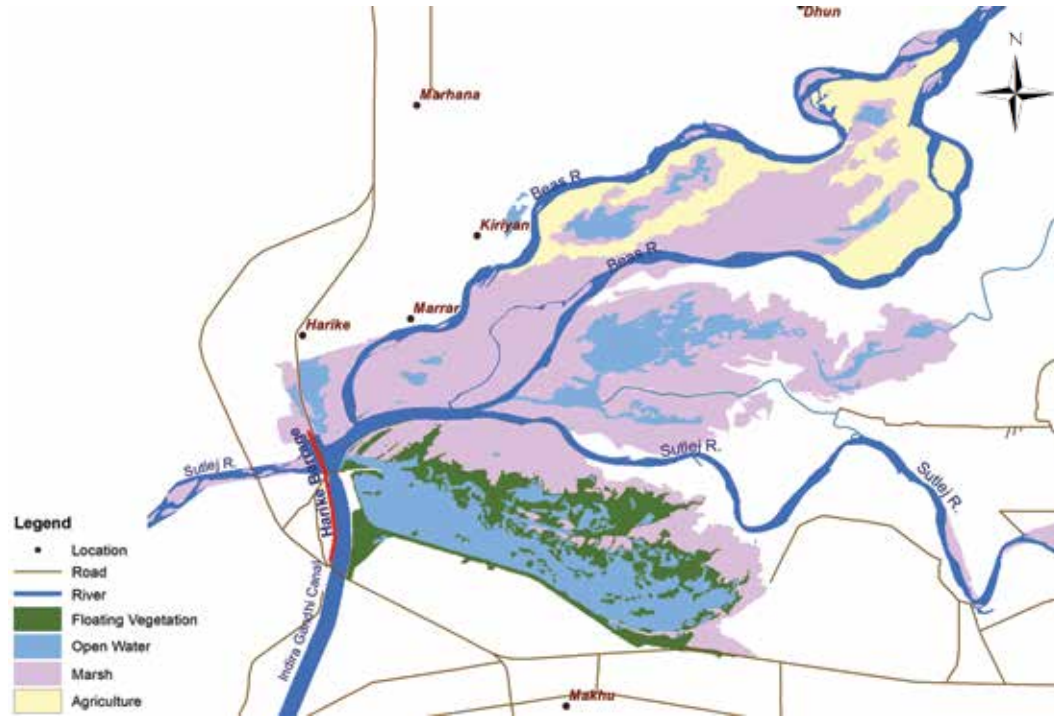
Encroachment



Illegal fishing



Water hyacinth proliferation



Species richness

365 Birds

90 Fishes

13 Mammals

11 Reptiles

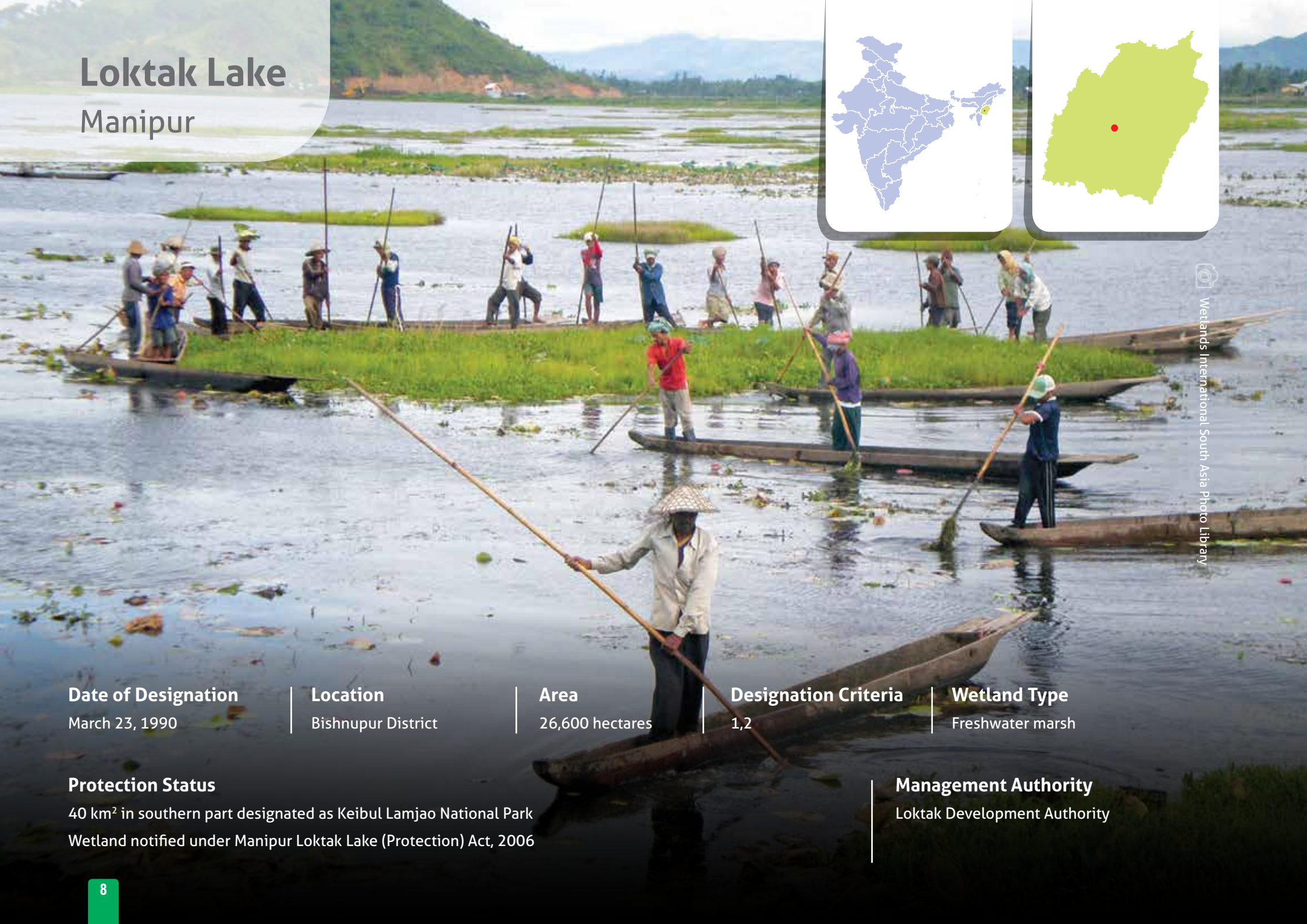
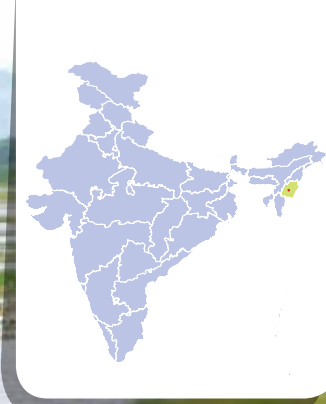
38 Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Indus River Dolphin, Smooth Coated Otter	Gharial, Red-crowned Roofed Turtle	Indus River Dolphin, Black-Bellied Tern, Egyptian Vulture, Indian Narrow-headed Softshell Turtle	Smooth-coated Otter, Jerdon's Babbler, Lesser White fronted Goose, Eastern Imperial Eagle, Common Pochard, European Carp, Batchwa Vacha, Spotted Snow Trout

Loktak Lake

Manipur



Wetlands International South Asia Photo Library

Date of Designation

March 23, 1990

Location

Bishnupur District

Area

26,600 hectares

Designation Criteria

1,2

Wetland Type

Freshwater marsh

Protection Status

40 km² in southern part designated as Keibul Lamjao National Park
Wetland notified under Manipur Loktak Lake (Protection) Act, 2006

Management Authority

Loktak Development Authority

Values and Benefits



Source of drinking water



Purifies wastewater



Water for 105 MW hydropower



Groundwater recharge



Livelihood for 5,000 fishers



Lifecycle maintenance



Medicinal & ornamental plants



Tourism & recreation



Carbon sink



Scientific and educational importance



Protection from floods



Revered as Loktak Ima

Significance

Low

Medium

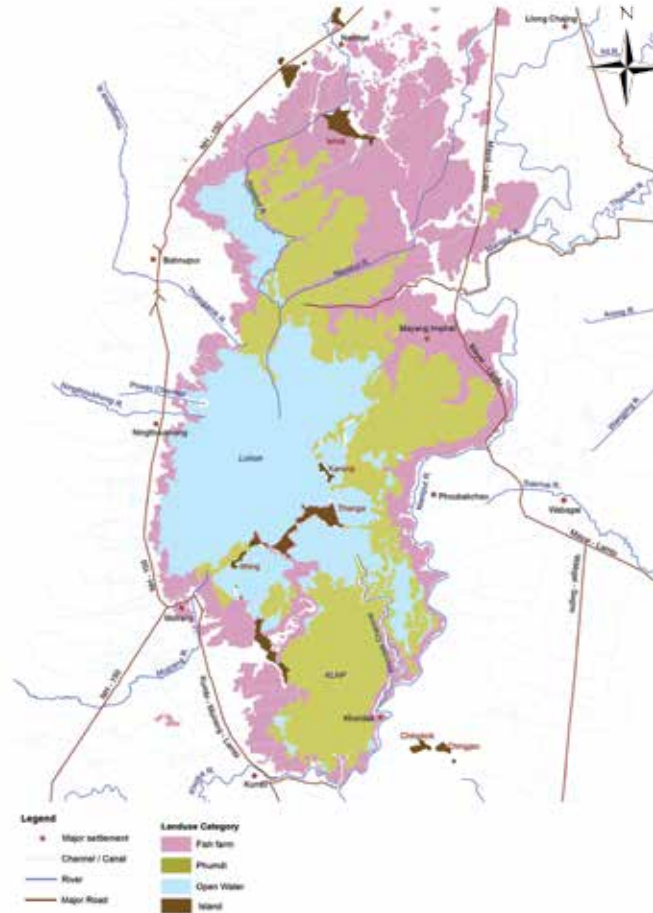
High

Significance

Low

Medium

High



Threats



Water regime alteration by Ithai barrage



Siltation



Pollution



Unsustainable water abstraction for hydropower



Spread of Phumdi



Fragmentation by roads

Species richness

116 Birds

54 Fishes

22 Mammals

68 Reptiles & Amphibians

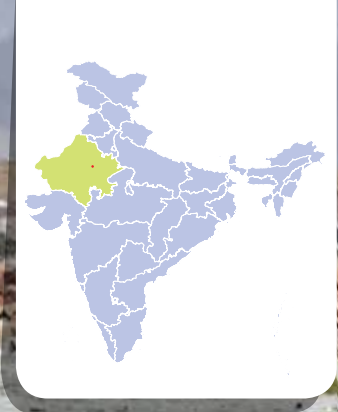
200+ Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Manipur Brow Antlered Deer or <i>Sangai</i>		Manipur Brow Antlered Deer, Hog Deer, Dhole, Red Jasper Barb, Keelad Box Turtle	Lesser Adjutant, Sarus Crane, Common Pochard, Hooded Crane, Common Carp, Amboina Box Turtle, King Cobra, Burmese Python

Sambhar Lake

Rajasthan



Wetlands International South Asia Photo Library

Date of Designation

March 23, 1990

Location

Jaipur, Nagaur and Ajmer Districts

Area

24,000 hectares

Designation Criteria

1

Wetland Type

Natural saline lake

Management Authority

Rajasthan State Wetlands Authority

Values and Benefits



~5% of country's salt production



Lifecycle of migratory waterbirds



Tourism destination



Scientific and Educational values



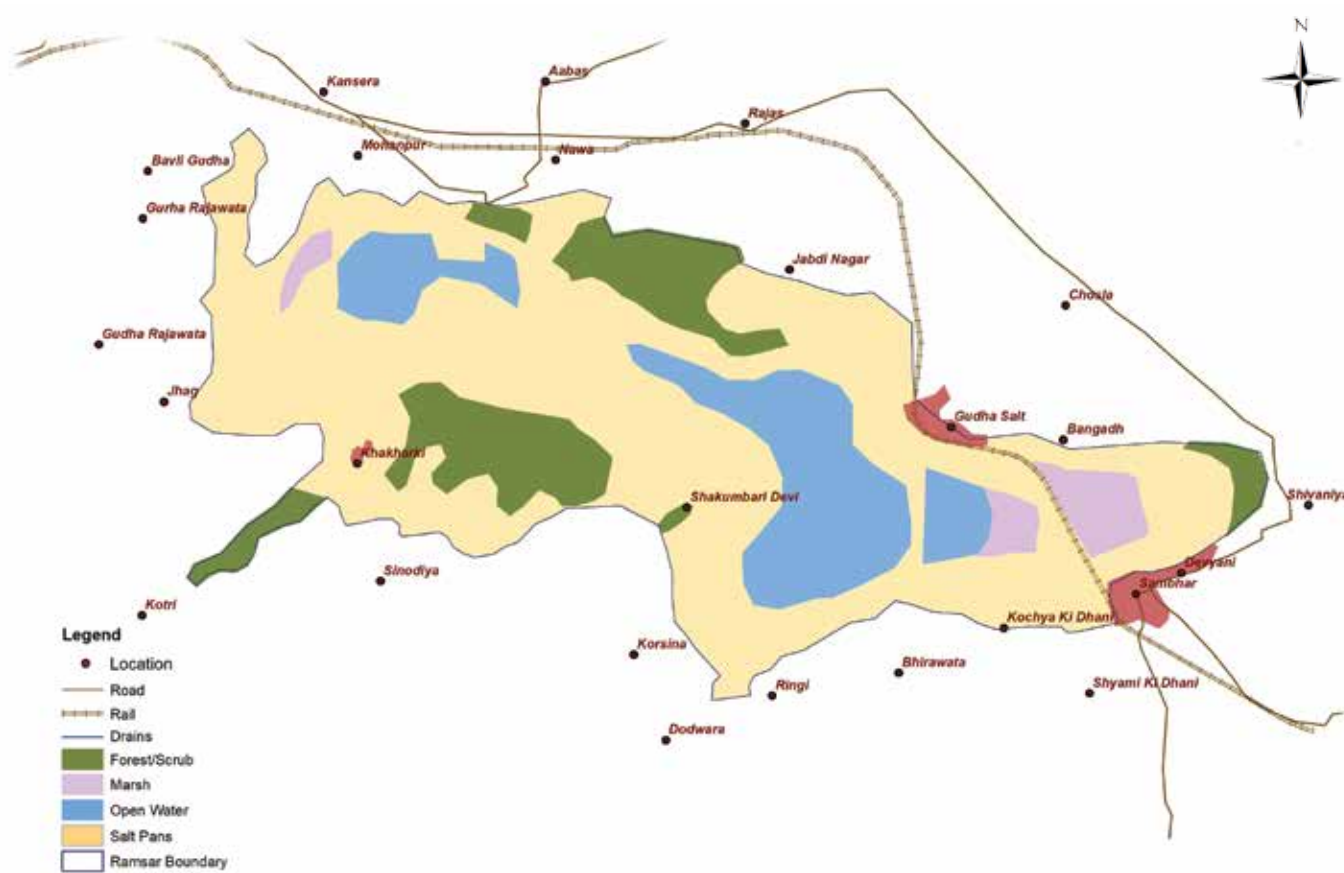
Ancient temple of Shakambari Devi

Significance

Low Medium High

Significance

Low Medium High



Threats



Hyper-salinity



Illegal salt mining



Regime fragmentation by roads and railways

Species richness

71 Birds

6 Mammals

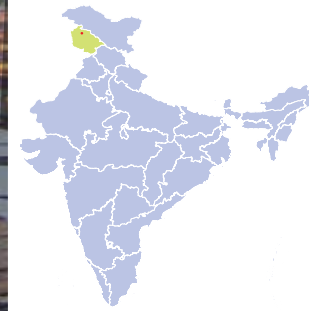
49 Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Lesser and Greater Flamingo, Demoiselle Crane		Egyptian Vulture	Common Pochard

Wular Lake

Jammu and Kashmir



Wetlands International South Asia Photo Library

Date of Designation

March 23, 1990

Location

Bandipora District

Area

18900 hectares

Designation Criteria

1

Wetland Type

Freshwater lake and marsh

Management Authority

Wular Conservation and Management Authority

Values and Benefits



~1500 MT fish catch annually



Spiritual and historical significance



Important source of vegetables for 30+ villages



Fodder



Buffers floods



Groundwater recharge



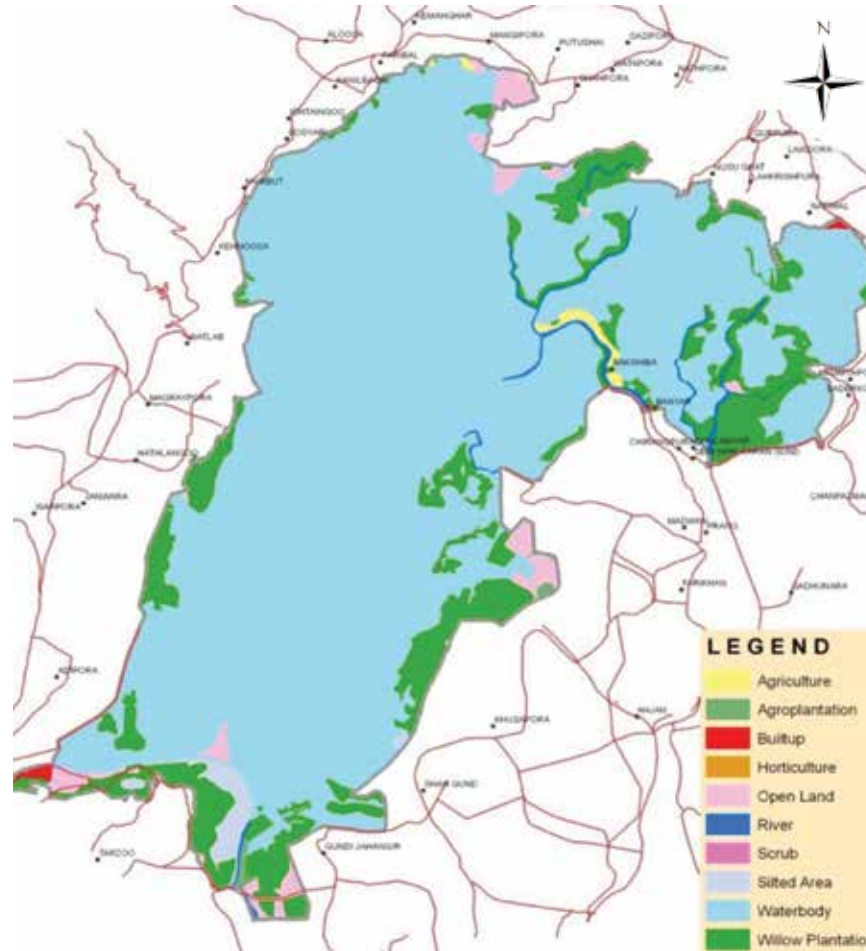
Tourism and recreation

Significance

Low Medium High

Significance

Low Medium High



Threats



Construction of embankments



Siltation



Pollution



Encroachment (Willow plantation)

Species richness

56 Birds

39 Fishes

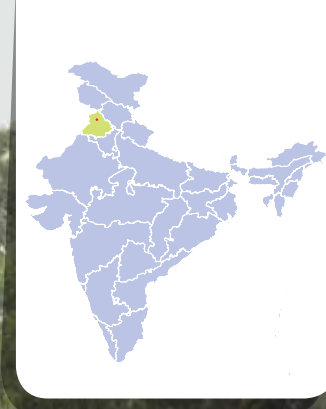
20+ Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
	White-bellied Heron, Pink-headed Duck, Baer's Pochard, Kashmir Catfish	Oriental Stork, White-headed Duck, White-winged Duck, Black-bellied Tern	Black-necked Crane, Indian Skimmer, Marbled Teal, Asla, Common Carp

Kanjli

Punjab



Wetlands International South Asia Photo Library

Date of Designation

January, 22, 2002

Location

Kapurthala District

Area

183 hectares

Designation Criteria

3

Protection Status

Conservation Reserve

Wetland Type

River stretch

Management Authority

Department of Forest and Wildlife Preservation, Punjab

Values and Benefits



Provides water for irrigation



Recreation and tourism



Buffers floods



Scientific and educational values



Purifies wastewater



Holy river associated with Guru Nanak Dev ji



Traps sediment



Recharges groundwater



Habitat for several migratory species

Significance

Low Medium High

Significance

Low Medium High

Threats



Hydrological regime alteration



Siltation



Pollution from upstream cities and towns



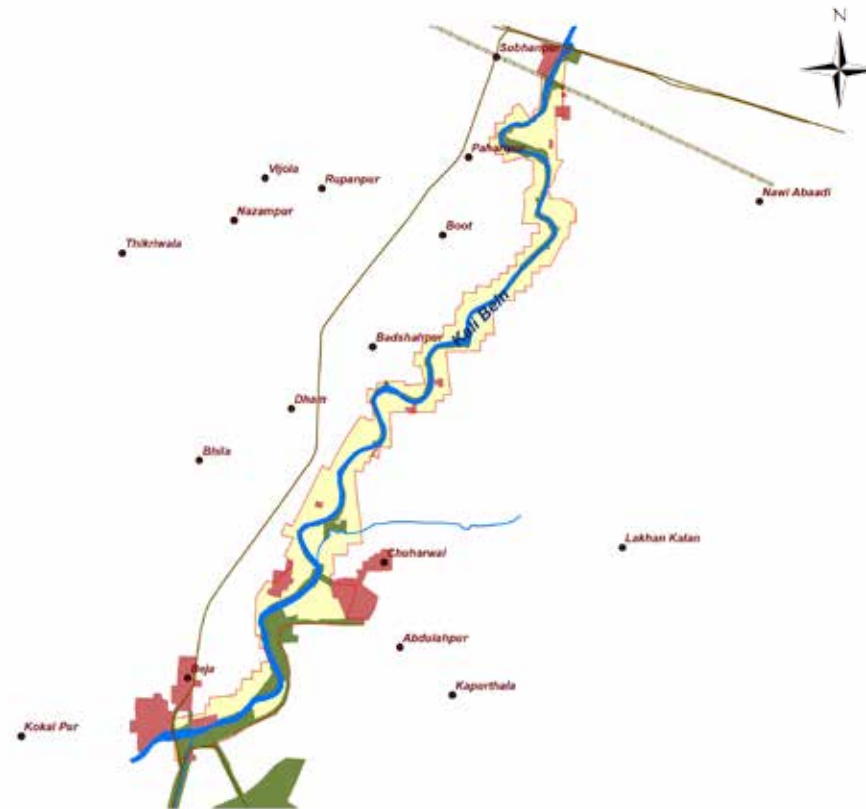
Encroachment



Water hyacinth proliferation

Legend

- Location
- Road
- Rail
- Drains
- River
- Forest/Scrub
- Settlement/Builtup
- Ramsar Boundary



Species richness

97 Birds

11 Fishes

4 Mammals

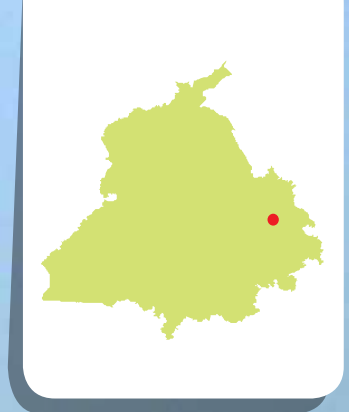
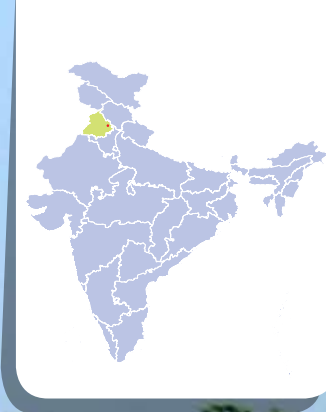
35 taxa of Invertebrates

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
<i>Utricularia sp.</i>			Common Pochard, Woolly-necked Stork, Common Carp, Wallagu Catfish

Ropar Lake

Punjab



Wetlands International South Asia Photo Library

Date of Designation

January 22, 2002

Location

Rupnagar and Nawanshahr Districts

Area

1365 hectares

Designation Criteria

2,3

Protection Status

Conservation Reserve

Wetland Type

Barrage / Water storage area

Management Authority

Department of Forest and Wildlife Preservation, Punjab

Values and Benefits



Source of drinking water, irrigation for lower Satluj Basin



Recreation and tourism adjoining historical site



Flood buffer



Scientific and educational values



Purifies wastewater



Traps sediment



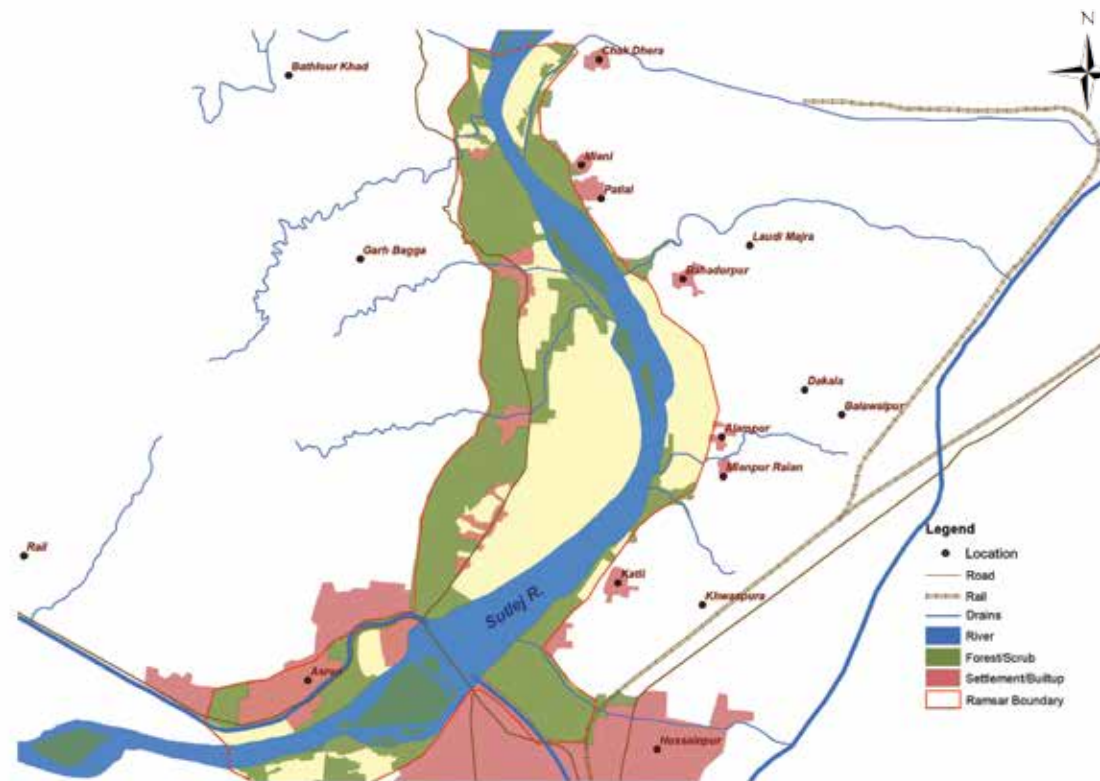
Recharges groundwater



Habitat for several migratory species

Significance

Low Medium High



Significance

Low Medium High

Threats



Alteration in hydrological regimes



Siltation



Pollution from upstream cities and towns



Encroachment



Sand Mining

Species richness

318 Birds

35 Fishes

10 Mammals

22 Reptiles & Amphibians

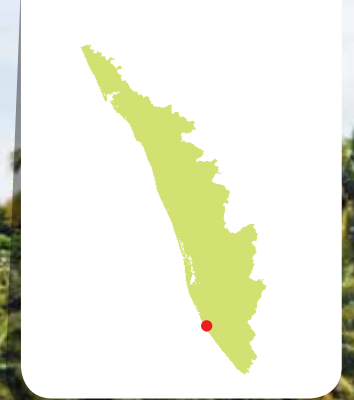
47 Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Hog Deer, Indian Narrow-headed Softshell Turtle, Indian Pangolin			Common Pochard, Wolly-necked Stork, Mrigal Carp, Common Carp, Smooth Indian Otter, Sambar

Ashtamudi Wetland

Kerala



Wetlands International South Asia Photo Library

Date of Designation

August 19, 2002

Location

Kollam District

Area

6140 hectares

Designation Criteria

1,2,3,8







Wetland Type

Estuary

Management Authority

State Wetland Authority Kerala

Values and Benefits

- 
Livelihood for 30,000 fishers
- 
Carbon sink
- 
Flood buffering
- 
Prevents shoreline erosion
- 
Habitat for migratory fish and water birds
- 
Part of famed cochin backwaters

Significance

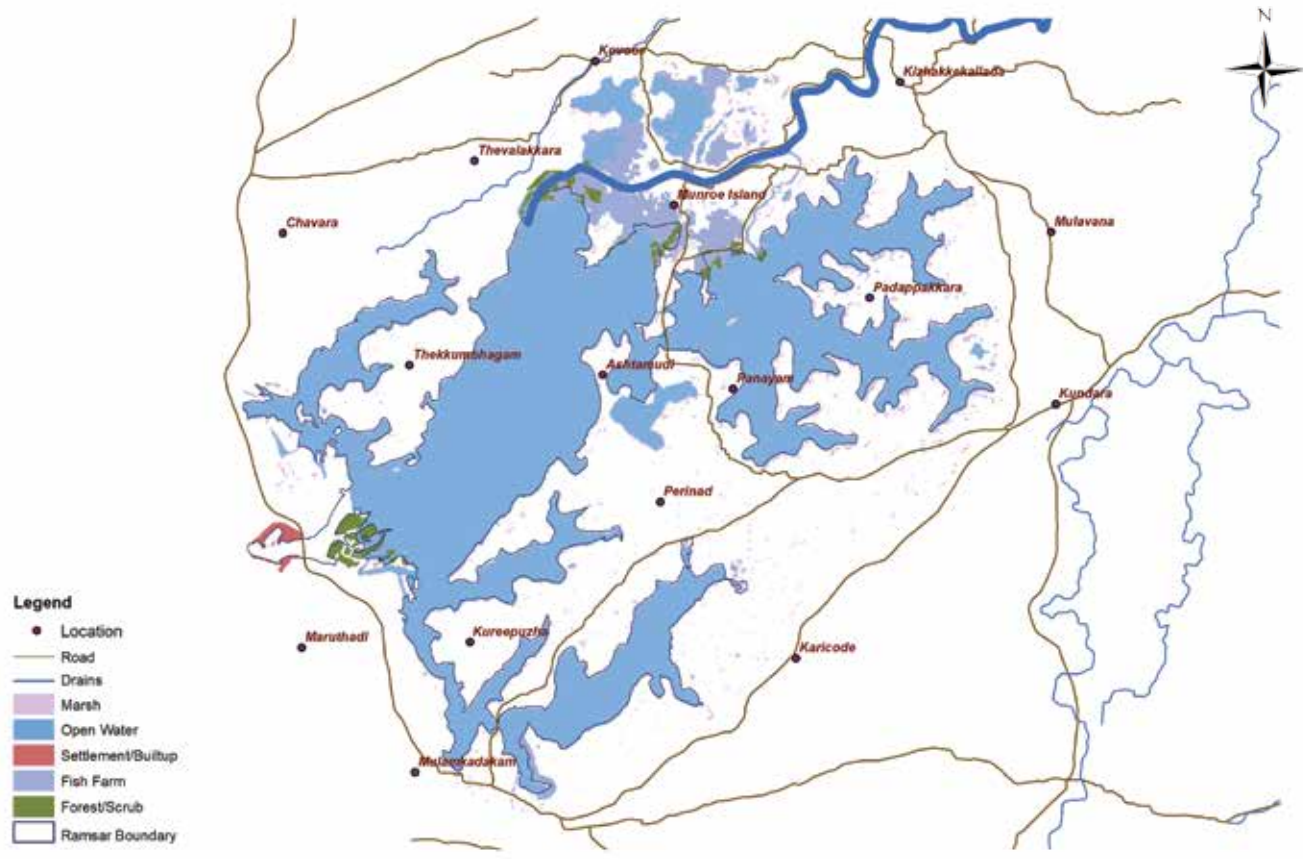
Low Medium High

Significance

Low Medium High

Threats

- 
Freshwater flow reduction
- 
Salinization
- 
Silt deprivation
- 
Pollution
- 
Encroachment
- 
High pressure on fishing



Species richness

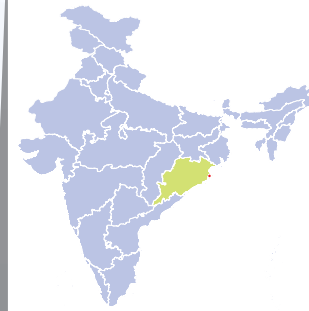
- 116 Birds
- 87 Fishes
- 115 Plants

Species of global conservation significance

	Notable	Critically endangered	Endangered	Vulnerable
Pearlspot		<i>Syzygium travancoricum</i>		Günther's Catfish, Greater Spotted Eagle

Bhitarkanika Mangroves

Odisha



Wetlands International South Asia Photo Library

Date of Designation

August 19, 2002

Location

Kendrapada District

Area

65,000 hectares

Designation Criteria

2,4,5,8

Protection Status

Wildlife Sanctuary

Wetland Type

Mangroves and tidal flats

Management Authority

Mangrove Forest Division, Odisha

Values and Benefits



Fisheries & Aquaculture
supports livelihoods such as agriculture, fishing and aquaculture



Buffers from cyclones and tidal surges



Carbon sink



Prevents erosion



Ecotourism hotspot
60,000 tourists per year



Lifecycle maintenance
Nesting site for 0.5 million Olive Ridley Turtles

1700+ Salt-water crocodiles (highest density of Saltwater crocodiles in India)
60+ mangrove species

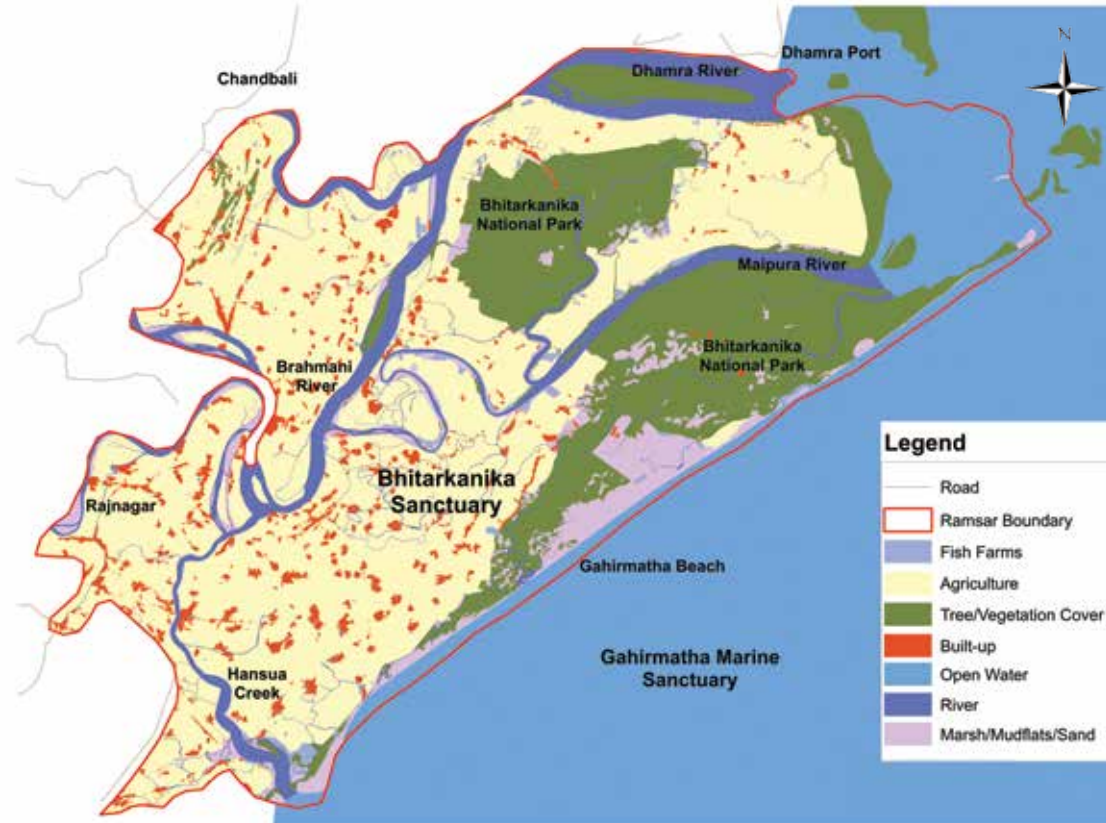


Scientific and educational importance

Significance



Significance



Threats



Changes in freshwater flow



Expansion of and effluents from shrimp farms



Proposed expansion of Paradip and Dhamra ports



High fishing pressure



Extreme events

Species richness

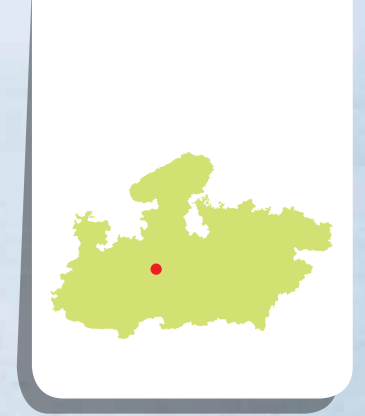
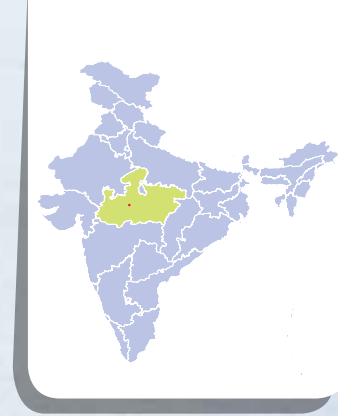
- 280 Birds
- 33 Fishes
- 24 Mammals
- 43 Reptiles & Amphibians
- 300+ Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Olive Ridley Sea Turtle, Salt-water Crocodile, <i>Avicennia sp.</i> and <i>Heritiera sp.</i>	Baer's Pochard, White-rumped Vulture	Irrawaddy Dolphin, Black-bellied Tern	Indo-Pacific Humpback Dolphin, Scrub Mahogany

Bhoj Wetland

Madhya Pradesh



Wetlands International South Asia Photo Library

Date of Designation

August 19, 2002

Location

Bhopal District

Area

3201 hectares

Designation Criteria

1,2,3,5,8

Wetland Type

Reservoir

Management Authority

Bhopal Municipal Corporation

Values and Benefits



Water source for capital city



Livelihoods for 200+ fishers



Buffers floods



Recreation and tourism



Scientific and educational value



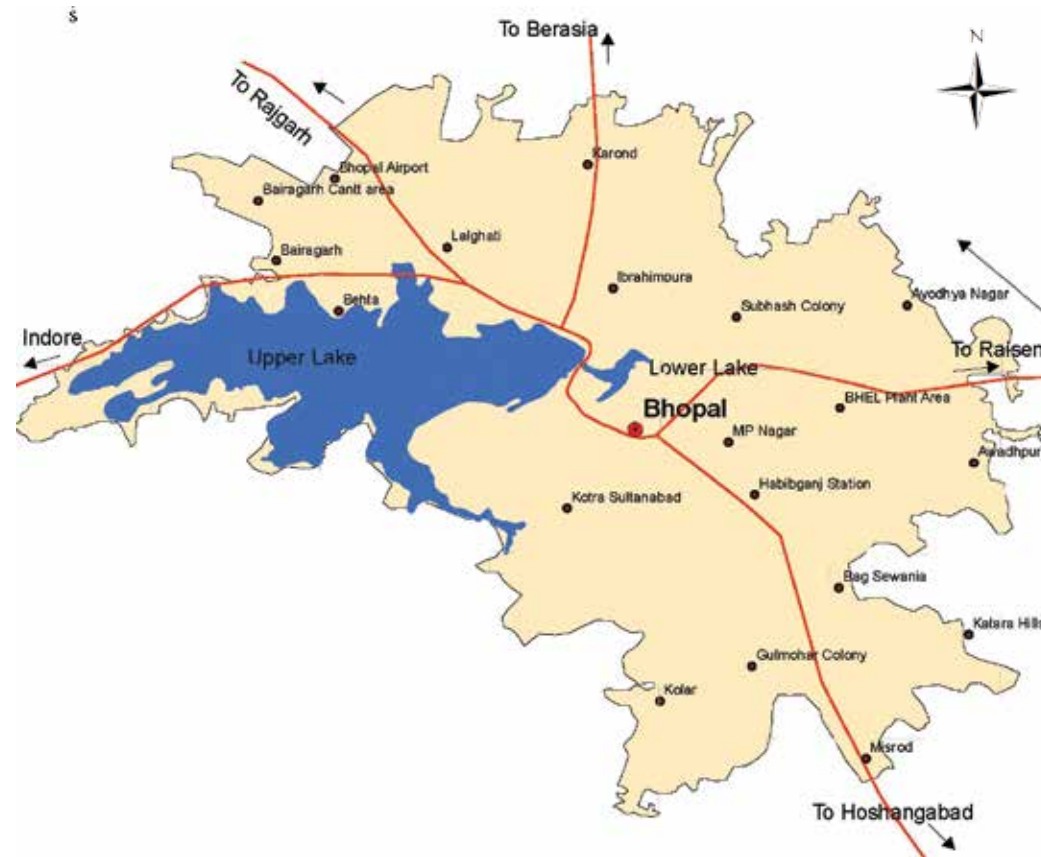
Cultural and spiritual importance

Significance

Low Medium High

Significance

Low Medium High



Threats



Siltation



Pollution



Encroachment



Invasive species

Species richness

160+ Birds

43 Fishes

10+ Reptiles & Amphibians

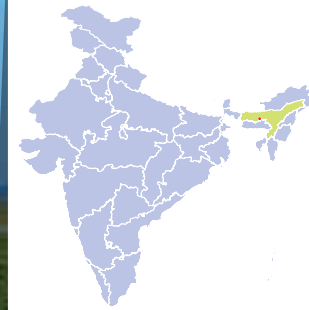
106 Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Red-crested Pochard		Egyptian Vulture	Sarus Crane, Wolly-necked Stork

Deepor Beel

Assam



Dhritiman Mukherjee

Date of Designation

August 19, 2002

Location

Kamrup District

Area

4000 hectares

Designation Criteria

1,2,4,7,8

Protection Status

Part of wetland notified as Wildlife Sanctuary

Wetland Type

River floodplain

Management Authority

Forest Department, Assam

Values and Benefits



Source of fresh water



Recreation and tourism



Support livelihoods of 500+ fishers



Cultural and spiritual importance



Fodder



Medicinal and ornamental resources



Flood buffer for Guwahati city



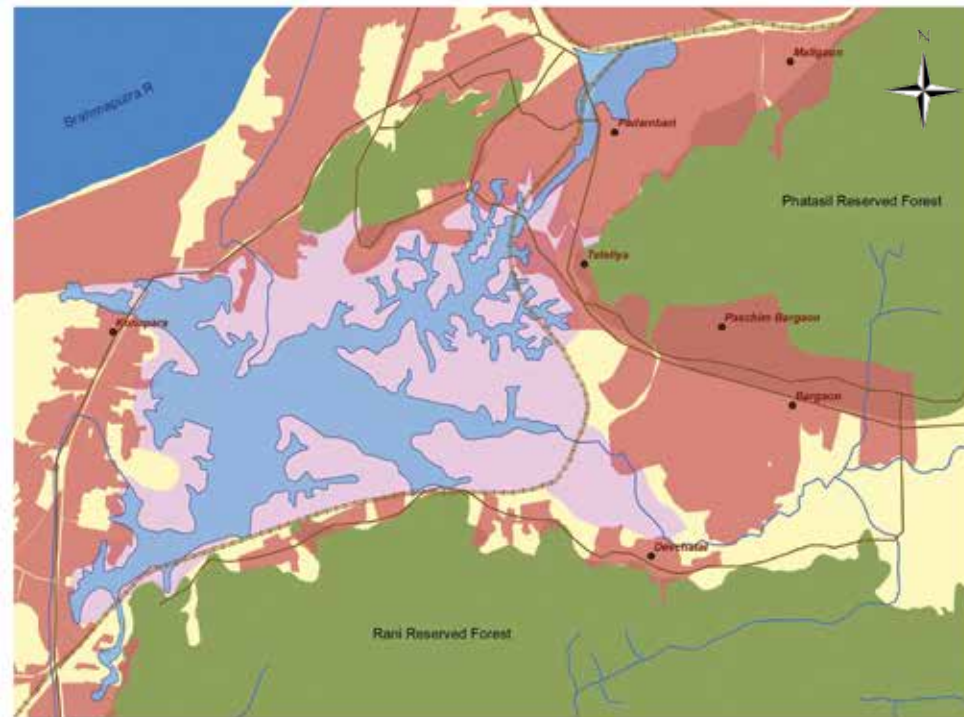
Lifecycle maintenance of migratory fish and birds

Significance

Low Medium High

Significance

Low Medium High



Threats



Hydrological regime alteration



Pollution from sewage and solid waste dumping



Encroachment



Invasive species



Regime fragmentation by roads and railways

Species richness

219 Birds

50 Fishes

38 Reptiles & Amphibians

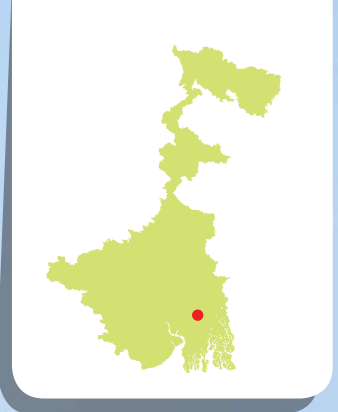
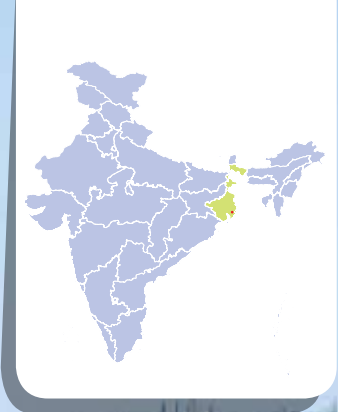
448 Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Asian Elephant	Baer's Pochard	Greater Adjutant, Asian Elephant	Lesser Adjutant

East Calcutta Wetlands

West Bengal



Wetlands International South Asia Photo Library

Date of Designation

August 19, 2002

Location

Kolkata District

Area

12,500 hectares

Designation Criteria

1

Protection Status

Protected under the East Kolkata Wetlands (Conservation and Management) Act, 2006

Wetland Type

Aquaculture ponds and Wastewater treatment areas

Management Authority

East Kolkata Wetlands Management Authority

Values and Benefits

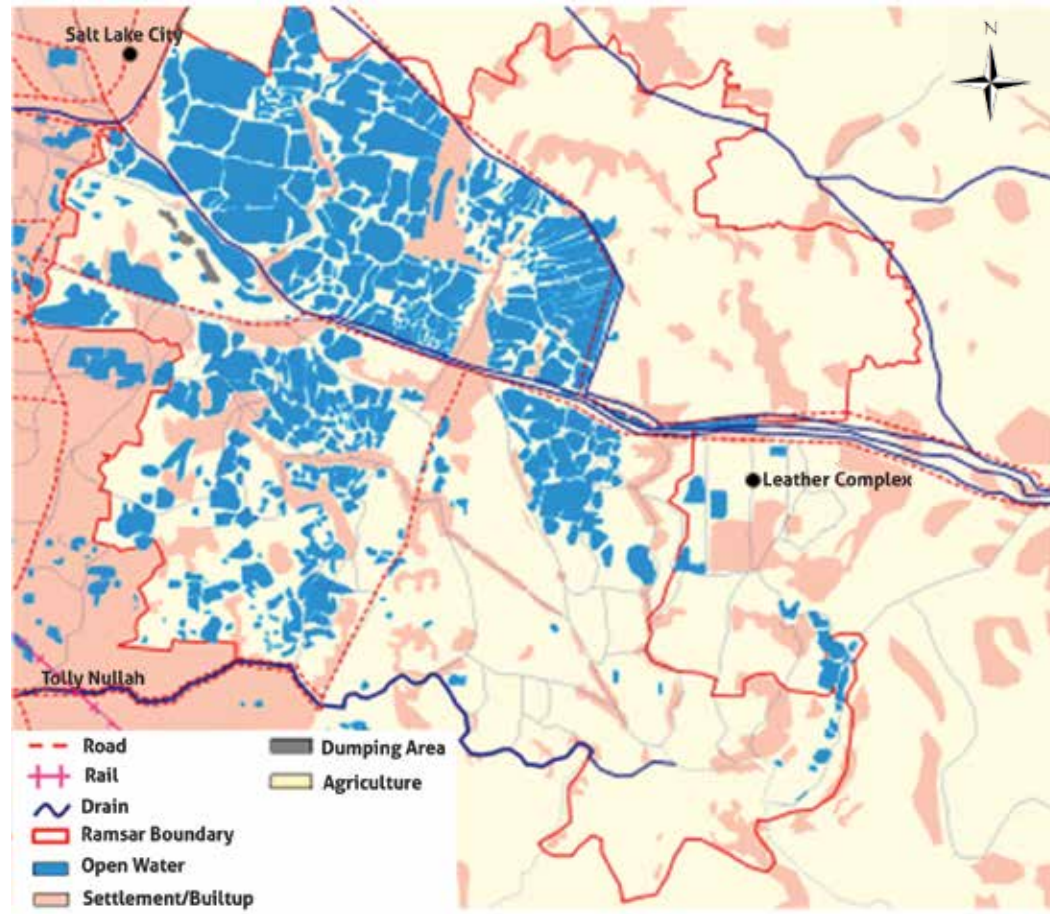
-  Livelihoods for 20,000+ families
-  Largest assemblage of sewage fed fisheries
-  Climate regulation
-  Treats Kolkata city's sewage
-  Recreation and tourism
-  Recreation and tourism

Significance
Low Medium High

Significance
Low Medium High

Threats

-  Siltation
-  Pollution
-  Encroachment



Species richness

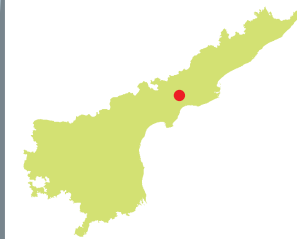
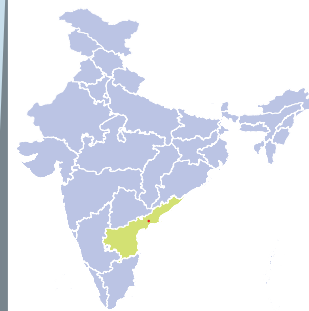
- 267 Birds
- 45 Fishes
- 20 Mammals
- 49 Reptiles & Amphibians
- 120 Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Catla, Rohu, Common Water Monitor, Aztech Arrowhead	Baer's Pochard		Indian Spotted Eagle, Wood Snipe, Common Carp

Kolleru Lake

Andhra Pradesh



Wetlands International South Asia Photo Library

Date of Designation

August 19, 2002

Location

Krishna and Godavari District

Area

90100 hectares

Designation Criteria

1,2,4,5,8

Protection Status

Part designated as Wildlife Sanctuary

Wetland Type

Lakes, marsh and aquaculture ponds

Management Authority

Andhra Pradesh Forest Department

Values and Benefits



Fisheries



Buffers floods



Habitat for migratory species



Recreation and tourism



Spiritual and inspirational importance

Significance

Low

Medium

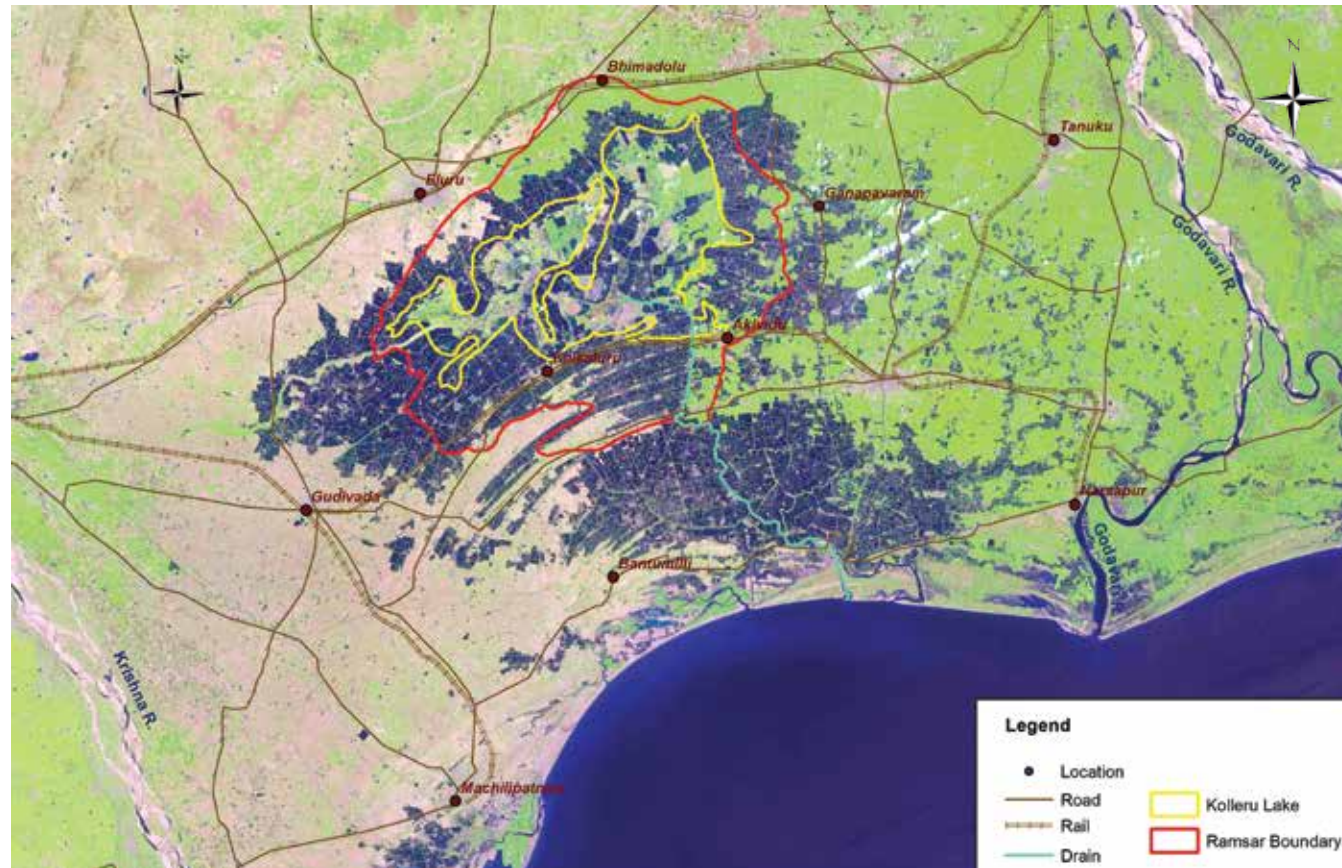
High

Significance

Low

Medium

High



Threats



Hydrological regime regulation



Siltation



Pollution



Aquaculture



Invasive species



Road network

Species richness

224 Birds

75 Fishes

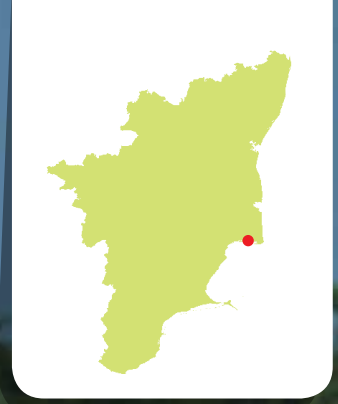
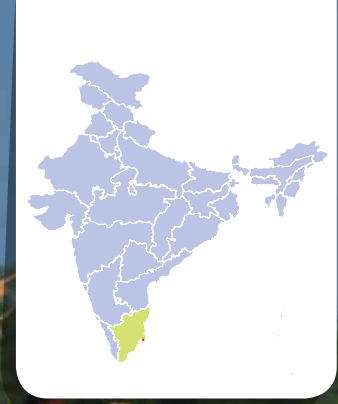
34 Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Spot-billed Pelican		Greater Adjutant	Grey Pelican, Lesser Adjutant

Point Calimere Wildlife and Bird Sanctuary

Tamil Nadu



S. Balachandran

Date of Designation

August 19, 2002

Location

Nagapattinam District

Area

38500 hectares

Designation Criteria

2,5,6,8

Protection Status

Part notified as Wildlife Sanctuary and Reserve Forest

Wetland Type

Mangrove swamps, lagoons, mud-flats, salt pans

Management Authority

Tamil Nadu Forest Department

Values and Benefits



~100 MT annual fish catch



Ecotourism hotspot



Nearly 40 km² under salt production



Scientific and educational importance



Blue Carbon Sink
120 km² of Muthupet mangrove wetland



Sites of historical importance such as Ramar Padam, Modi mandapam and Chola lighthouse



Wintering ground for waterbirds
Nesting site for olive Ridley Turtles
Largest Blackbuck population in Tamil Nadu
~200 species of medicinal plants

Significance

Low Medium High

Significance

Low Medium High



Threats



Salinisation



Siltation



Pollution from Settlements



Illegal aquaculture and unsustainable fish harvest

Species richness

260 Birds

70 Fishes

14 Mammals

37 Reptiles & Amphibians

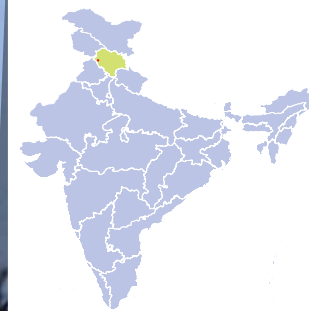
364 Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Blackbuck, Spot-billed Pelican	Spoon-billed Sandpiper, Hawksbill Turtle	Green turtle	Star Tortoise, Olive Ridley Turtle

Pong Dam Lake

Himachal Pradesh



S. Balachandran

Date of Designation

August 19, 2002

Location

Kangra District

Area

15662 hectares

Designation Criteria

2,5,8

Protection Status

Wildlife Sanctuary

Wetland Type

Reservoir

Management Authority

Himachal Pradesh Forest Department

Values and Benefits



Irrigates 1.6 million ha agricultural land



Moderation of extreme events



Water for 396MW hydropower generation



Erosion prevention



~ 400 tonnes annual fish production
Livelihood for nearly 2700 fishers



Groundwater recharge



Lifecycle maintenance
Over 1 lakh migratory birds
One of the world's largest congregation of Bar-headed Geese



Tourism and Recreation



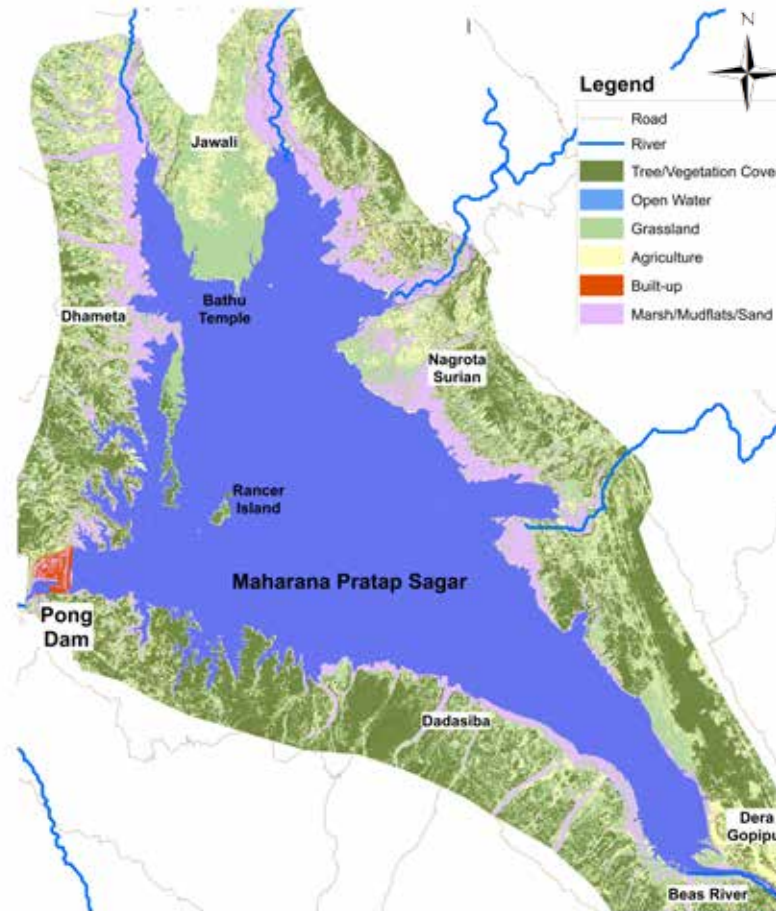
Scientific and educational importance



Cultural and spiritual importance

Significance

Low Medium High



Significance

Low Medium High

Threats



Hydrological regime alteration / Regime fragmentation



Siltation



Pollution



Unsustainable harvest of wetland resources



Over grazing



Extreme events

Species richness

400 Birds

27 Fishes

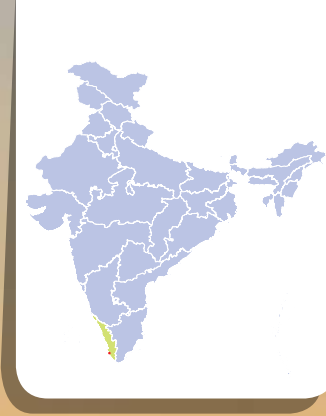
24 Mammals

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Bar-headed Goose	White-rumped Vulture	Black-bellied Tern, Mahaseer	Common Pochard, Woolly-necked Stork, Indian Softshell Turtle

Sasthamkotta Lake

Kerala



Wetlands International South Asia Photo Library

Date of Designation

August 19, 2002

Location

Kollam District

Area

373 hectares

Designation Criteria

1,2,7,8

Wetland Type

Freshwater lake

Management Authority

State Wetland Authority Kerala

Values and Benefits



Water for Kollam city



Means of transport



Buffers flood



Groundwater recharge



Local tourism

Significance

Low

Medium

High

Significance

Low

Medium

High

Threats



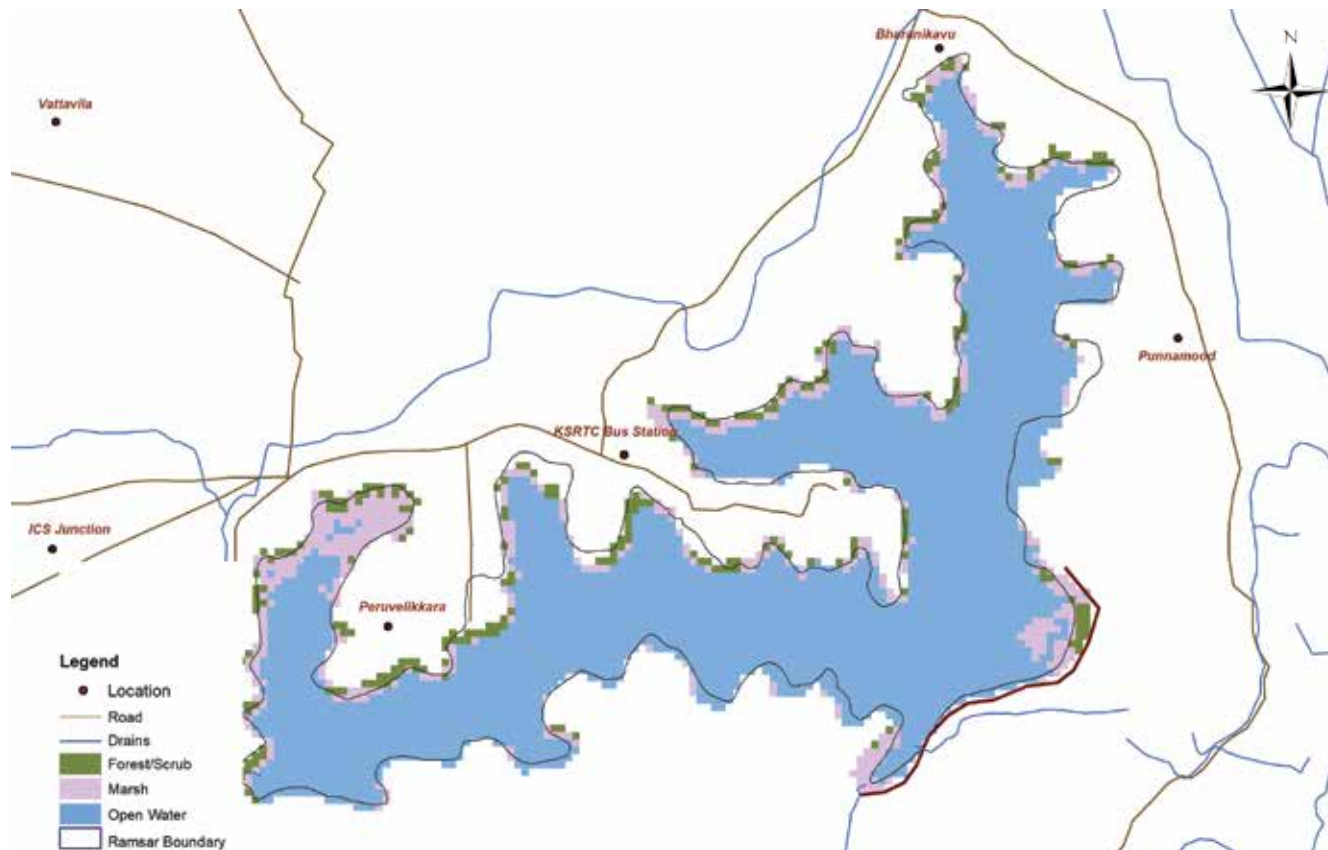
Pollution



Laterite mining



Over abstraction of water



Species richness

35 Waterbirds

37 Fishes

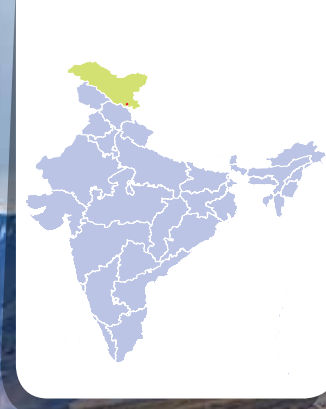
158 Plants


Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Butter Catfish, Day's Glassy Perchlet, Malabar mystus			Gunther's catfish, Wallago Catfish

Tsomoriri

Ladakh



 Dhritiman Mukherjee

Date of Designation

August 19, 2002

Location

Leh District

Area

12000 hectares

Designation Criteria

1,2,4

Protection Status

Conservation Reserve

Wetland Type

Brackish / Alkaline lake

Management Authority

Forest Department, Jammu & Kashmir

Values and Benefits



Fodder



Carbon sink



Buffers flood



Breeding ground for migratory waterbirds



400-year-old Korzok Monastery is a tourism destination



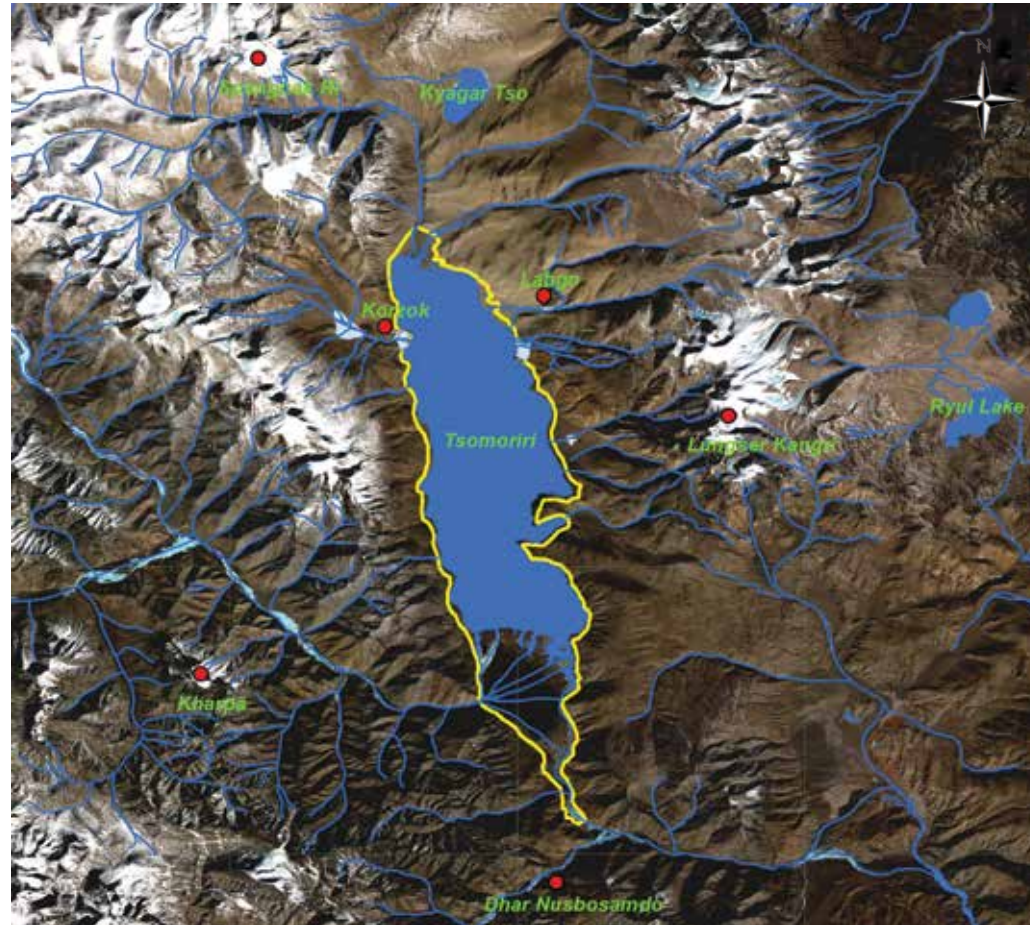
Scientific and educational values

Significance

Low Medium High

Significance

Low Medium High



Threats



Over grazing



Construction of roads



Tourism pressure

Species richness

11 Birds

8 Mammals

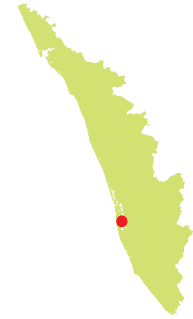
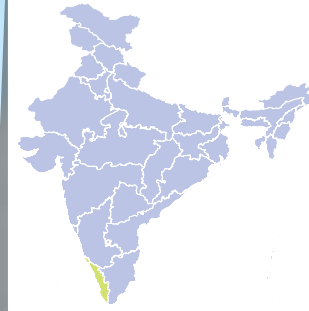
7 Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Black-necked Crane			Common Pochard, Black-necked Crane

Vembanad-Kol Wetland

Kerala



Wetlands International South Asia Photo Library

Date of Designation

August 19, 2002

Location

Ernakulum, Alapuzha, Kottayam and Thrissur District

Area

1,51,250 hectares

Designation Criteria

1,2,4,5,8

Wetland Type

Lagoon and floodplain complex

Management Authority

State Wetland Authority Kerala

Values and Benefits



livelihoods for over 0.2 million households
Kuttanad: Rice bowl of Kerala



Flood buffer for Cochin and Ernakulam cities



Habitat for several migratory species



Backwater tourism



Scientific and educational values v



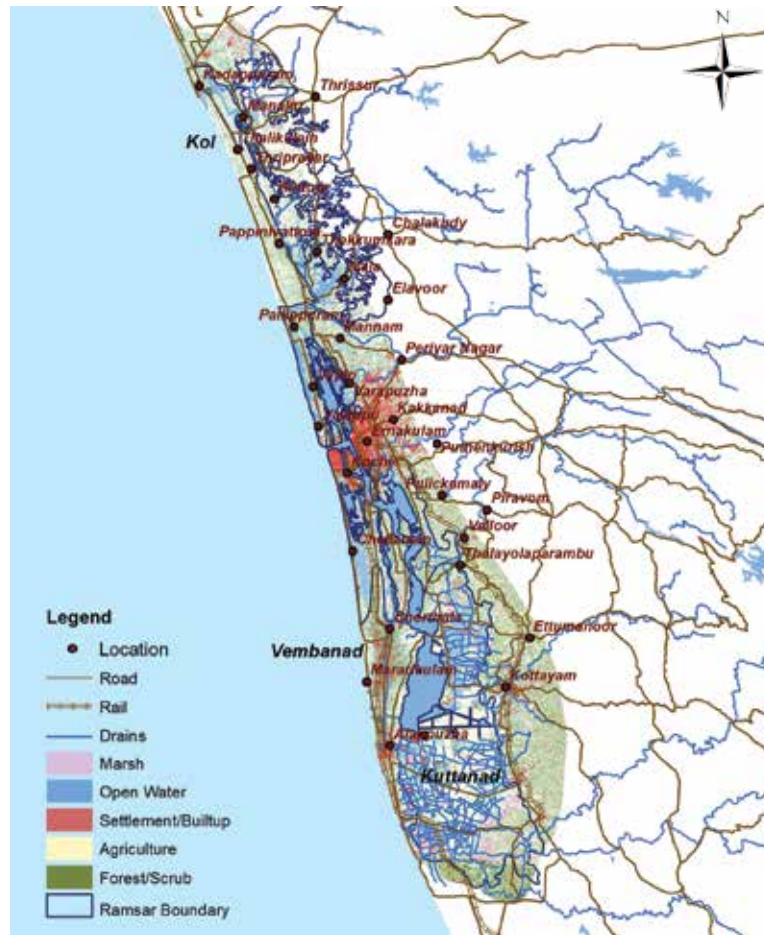
Cultural significance: Pokkali farming-geographical indication

Significance

Low Medium High

Significance

Low Medium High



Threats



Regulation by Thaneermukkom barrier



Pollution



Encroachment



Invasive species



Regime fragmentation



Tourism pressure

Species richness

225 Birds

102 Fishes

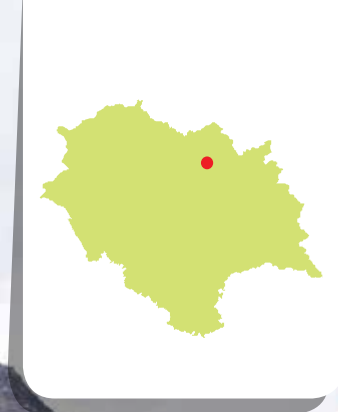
200+ Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Pearl Spot, Malabar mystus, Day's round herring		Steppe Eagle	Wooly-necked Stork, Gunther's catfish

Chandertal Wetland

Himachal Pradesh



Wetlands International South Asia Photo Library

Date of Designation

November 8, 2005

Location

Lahaul and Spiti District

Area

49 hectares

Designation Criteria

2,3

Protection Status

Wildlife Sanctuary

Wetland Type

Freshwater lake

Management Authority

Himachal Pradesh Forest Department

Values and Benefits



Source of freshwater



Lifecycle Maintenance



Medicinal plants



Tourism & recreation



Carbon storage in Peatlands



Scientific and educational importance



Buffers flash floods



Cultural and spiritual value



Erosion prevention



Recharges groundwater

Significance

Low

Medium

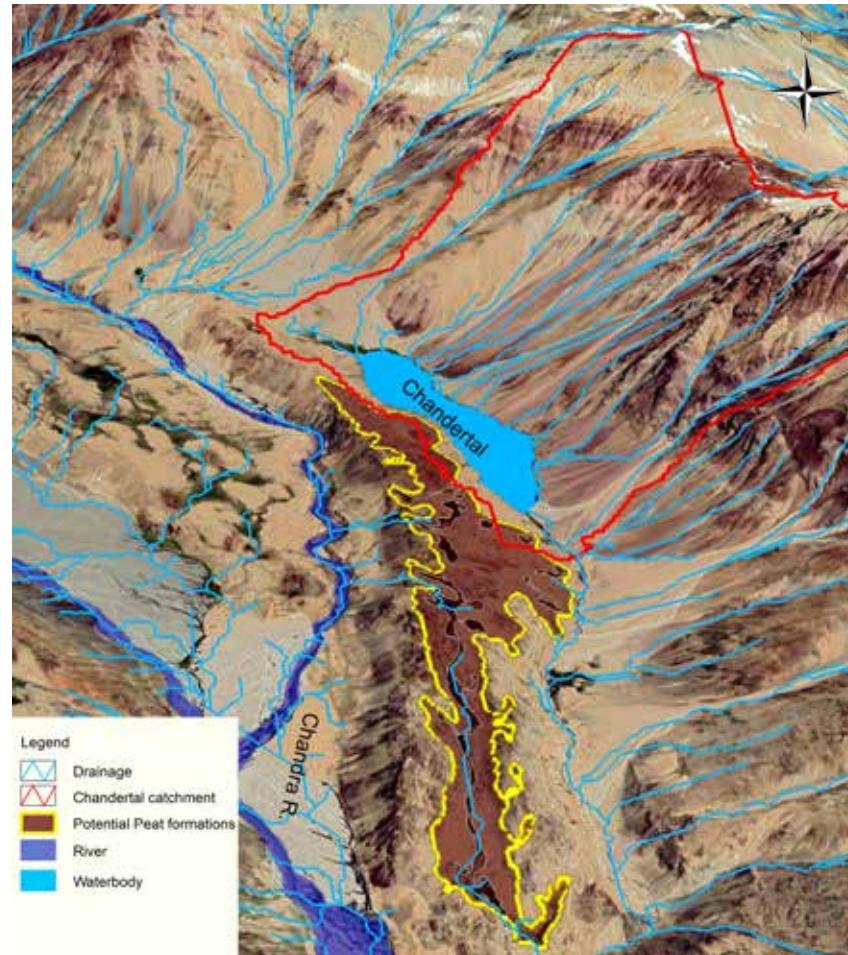
High

Significance

Low

Medium

High



Threats



Siltation



Solid waste



Over Grazing



Unsustainable tourism



Climate Change

Species richness

26 Birds

11 Mammals

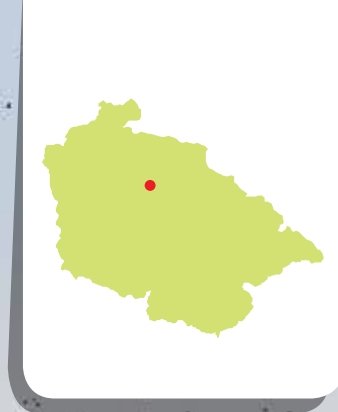
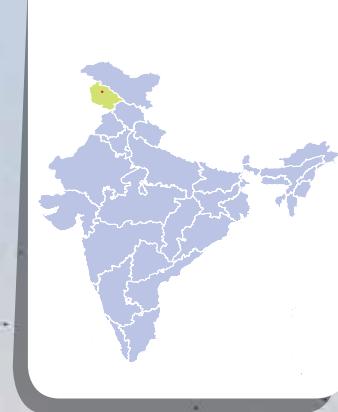
28 Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Snow Leopard, Tibetan Wolf, Himalayan Ibex, Ruddy Shelduck			Snow Leopard

Hokera Wetland

Jammu and Kashmir



Wetlands International South Asia Photo Library

Date of Designation

November 8, 2005

Location

Budgum and Srinagar Districts

Area

1375 hectares

Designation Criteria

2,4,5,8

Protection Status

Conservation Reserve

Wetland Type

Marshes

Management Authority

Department of Wildlife Protection,
Jammu & Kashmir

Values and Benefits



Water for agriculture



Scientific and educational value



Fisheries, supports livelihood for 30 villages,



Tourism and recreation



Ground water recharge,



Reeds, fibre and fodder



Flood protection



Water purification

Significance

Low Medium High

Significance

Low Medium High

Threats



Siltation



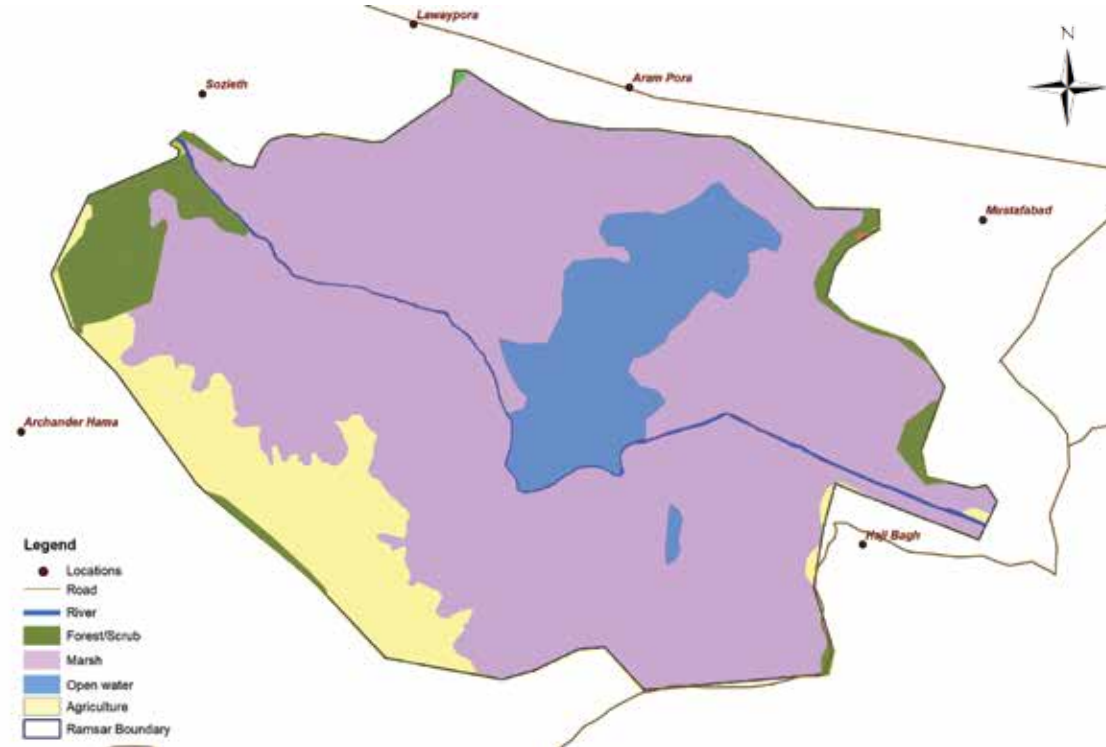
Pollution



Encroachment



Invasive species



Species richness

68 Birds

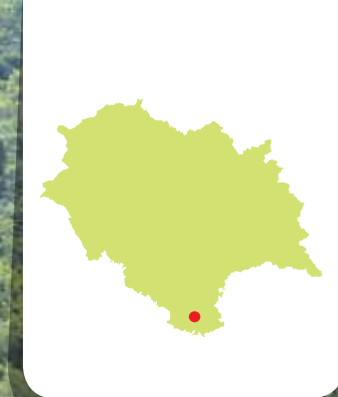
38 Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Eurasian Otter, Schizothorax sp., Little Grebe		Pallas's Fish-Eagle	Common Carp, Common Pochard

Renuka Wetland

Himachal Pradesh



Wetlands International South Asia Photo Library

Date of Designation

November 8, 2005

Location

Sirmaur District

Area

20 hectares

Designation Criteria

3,4

Protection Status

Wildlife Sanctuary

Wetland Type

Freshwater lake and marshes

Management Authority

Himachal Pradesh Forest Department

Values and Benefits



Freshwater for domestic use and irrigation



Groundwater recharge



Moderation of extreme events



Lifecycle maintenance



Erosion prevention



Tourism and recreation



water purification



Scientific and educational importance



Cultural and spiritual importance

Sacred land based on the legend of Renuka ji and Lord Parshuram

2-3 lakh pilgrims visit during annual 6-day Renuka ji fair

Significance

Low

Medium

High

Significance

Low

Medium

High

Threats



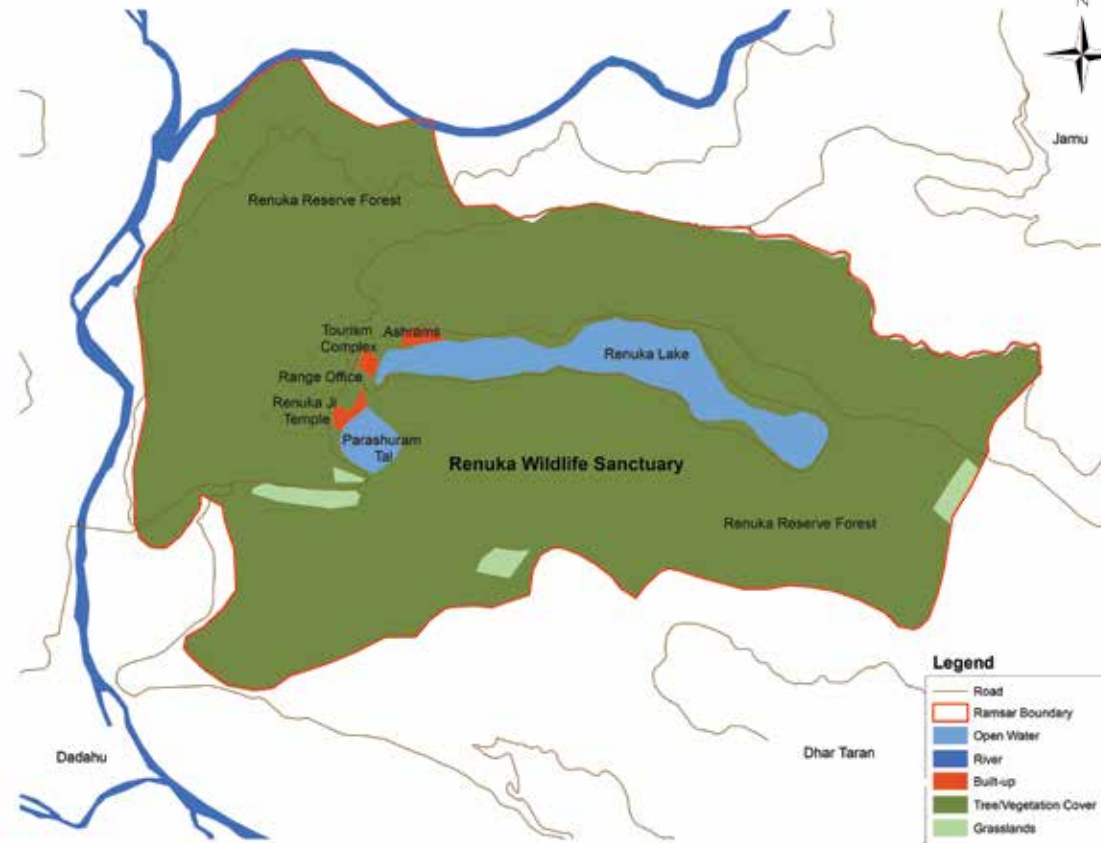
Siltation



Pollution



High tourism pressure



Species richness

103 Birds

19 Fishes

23 Amphibians & Reptiles

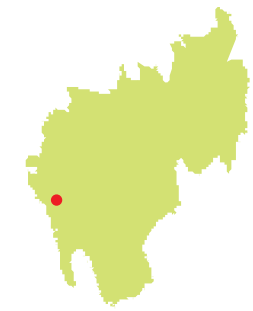
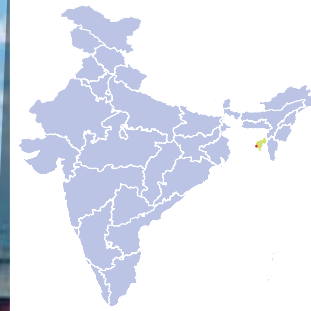
42 Plants

Species of global conservation significance

	Notable	Critically endangered	Endangered	Vulnerable
	Mahseer		Golden Mahseer	

Rudrasagar Lake

Tripura



 Dhritiman Mukherjee

Date of Designation

November 8, 2005

Location

West Tripura District

Area

240 hectares

Designation Criteria

2,3,8

Wetland Type

Freshwater lake and marshes

Management Authority

Department of Fisheries, Government of Tripura

Values and Benefits



Freshwater for domestic use and irrigation



Source of fisheries



Provides medicinal and ornamental resources



Buffers floods



Neer mahal is a tourist attraction, having 3,00,000+ visitors annually



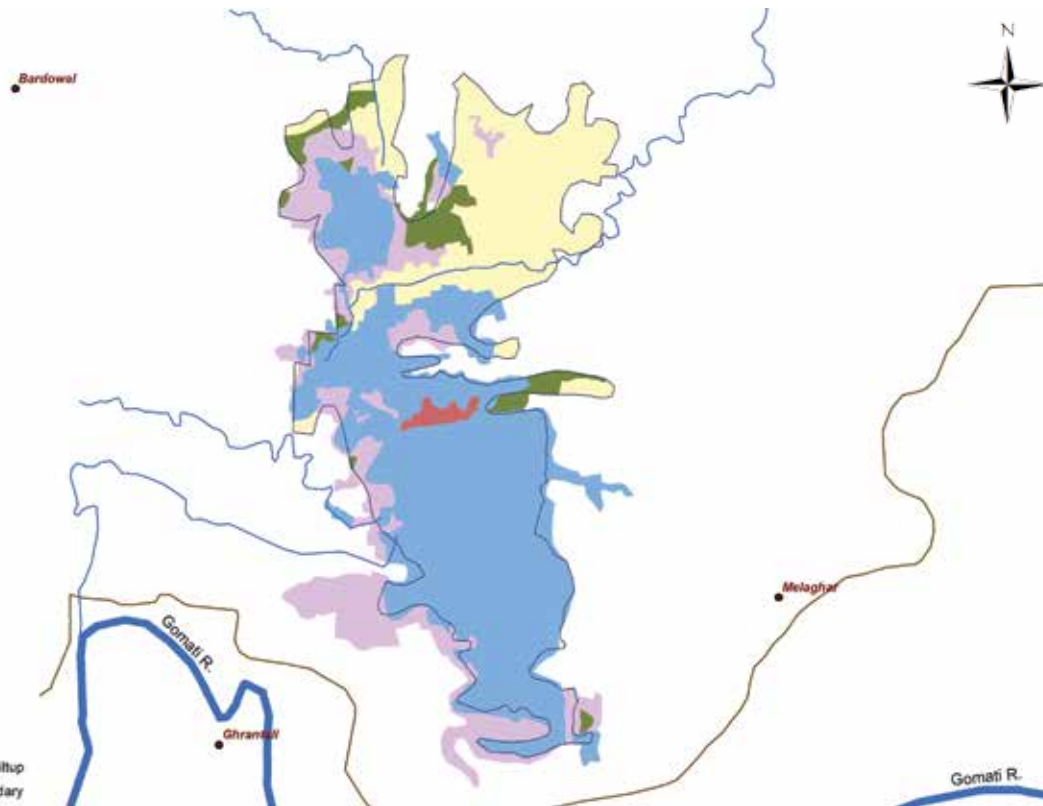
Cultural services valued at 33000 US dollars.

Significance

Low Medium High

Legend

- Location
- Road
- Drains
- Forest/Scrub
- Marsh
- Open Water
- Agriculture
- Settlement/Builtup
- Ramsar Boundary



Significance

Low Medium High

Threats



Hydrological regime alteration



Pollution/ disposal of urban sewage



Siltation



Encroachment



Invasive species



Regime fragmentation by roads

Species richness

50+ Fishes

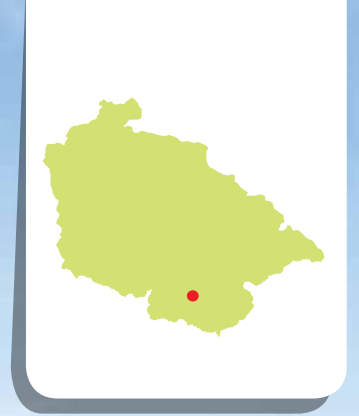
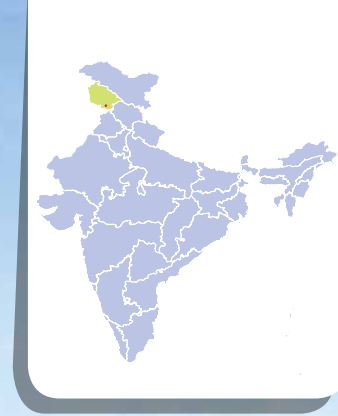
13 Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
	Baer's Pochard	Three striped Roof Turtle, Greater Adjutant	Common Pochard, Lesser Adjutant, Common Carp, Wallago Catfish

Surinsar-Mansar Lakes

Jammu and Kashmir



Pankaj Chandan

Date of Designation

November 8, 2005

Location

Udhampur District

Area

350 hectares

Designation Criteria

2,3,4

Protection Status

Wildlife Sanctuary

Wetland Type

Freshwater lakes

Management Authority

Surinsar-Mansar Development Authority

Values and Benefits



Water for agriculture



Recharges groundwater



Fodder for livestock



Buffers floods



Tourism and recreation



Religious tourism

Significance

Low Medium High

Significance

Low Medium High



Threats



Siltation



Pollution



Invasive species

Species richness

34 Birds

8 Fishes

8 Mammals

2+ Reptiles & Amphibians

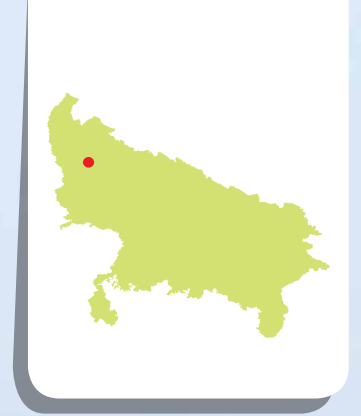
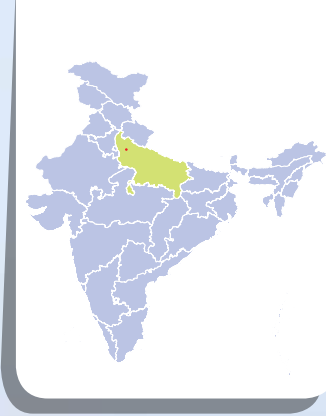
28 Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Indian Flapshell Turtle			Common Pochard, Indian Softshell Turtle, Common Carp

Upper Ganga River

Uttar Pradesh



Wetlands International South Asia Photo Library

Date of Designation

November 8, 2005

Location

Hapur, Sambhal, Amroha and Bulandshahr Districts

Area

26,590 hectares

Designation Criteria

2,3,4,5,7









Wetland Type

River stretch

Management Authority

Uttar Pradesh State Wetland Authority

Values and Benefits

-  Provides water for irrigation
-  Tourism and recreation
-  Support fisheries
-  Bathing ghats having religious value namely Brijghat, Anoopshahr ghat and Rajghat
-  Buffers flood
-  Traps sediment and water purification
-  Recharges groundwater
-  Habitat for migratory species

Significance

- Low
- Medium
- High

Significance

- Low
- Medium
- High



Threats

-  Hydrological regime alteration
-  Siltation
-  Encroachment
-  Pollution due to agricultural runoff
-  High pressure on wetland resources
-  Mining
-  Spread of invasive species
-  Tourism pressure

Species richness

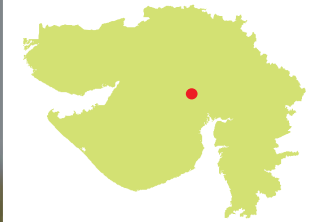
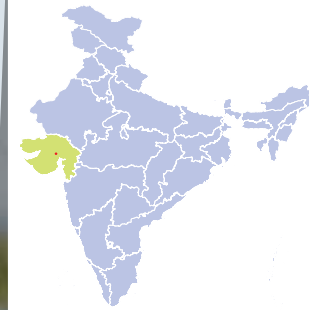
- 100+ Birds
- 82 Fish
- 12 Turtles

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Gangetic Dolphin	Gharial, White-rumped Vulture, Red-crowned Roofed Turtle	Pallas's Fish-eagle, Gangetic Dolphin	Wolly-necked Stork

Nalsarovar

Gujarat



Wetlands International South Asia Photo Library

Date of Designation

September 24, 2012

Location

Surendranagar and
Ahemdabad Districts

Area

12000 hectares

Designation Criteria

1,2,3,4,5,6

Protection Status

Bird Sanctuary

Wetland Type

Marsh

Management Authority

Forest Department, Gujarat

Values and Benefits



Support livelihood of 40,000+ fishers



Cultural and spiritual importance



Provides food & fodder



Support several grass species



Maintains hydrological regime



Supports large congregation of waterbirds



Attracts 70,000+ visitors annually

Significance

Low

Medium

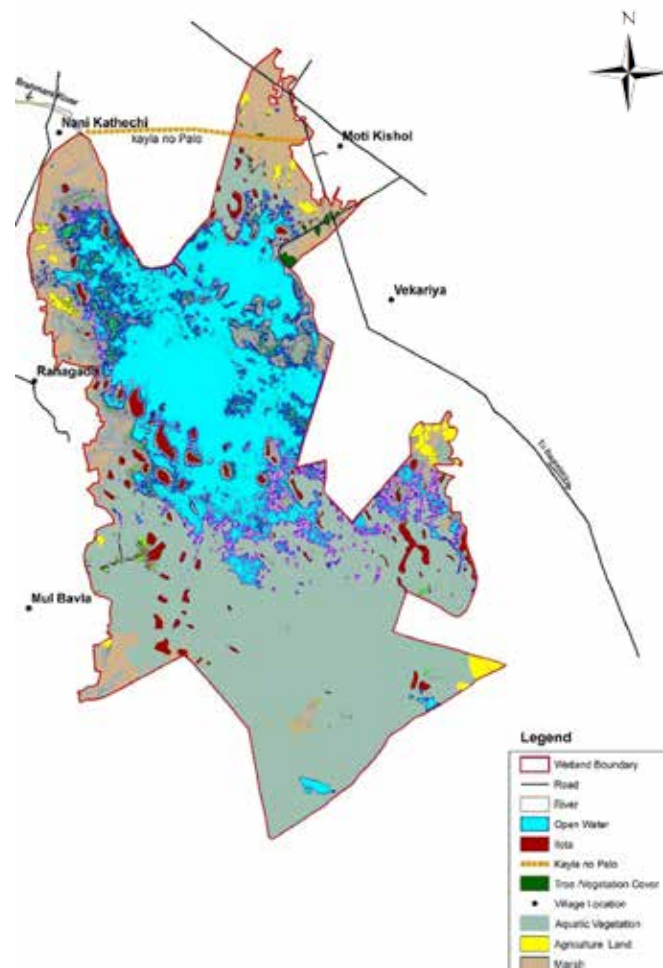
High

Significance

Low

Medium

High



Threats



Pollution



Poaching, high pressure on resources



Unsustainable tourism

Species richness

250 Birds

20 Fishes

13 Mammals

11 Amphibians & Reptiles

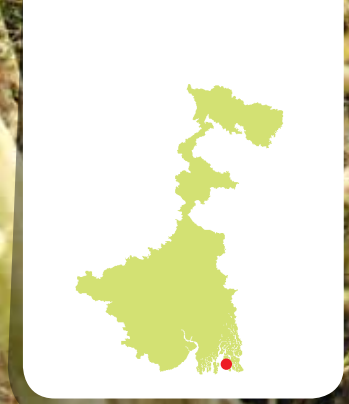
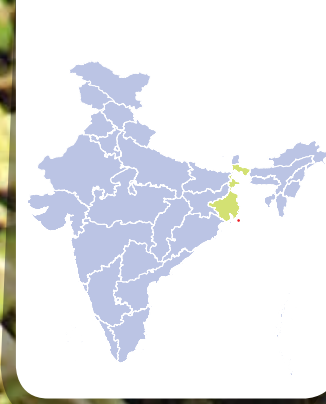
153 Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Greater Flamingo, Dalmatian Pelican	Sociable Lapwing, Red-headed Vulture, White-rumped Vulture	Indian Wild Ass, Spotted Greenshank, Lesser Florican, Black-bellied Tern, Pallas's Fish Eagle	Eastern Imperial Eagle

Sundarban Wetland

West Bengal



David V. Raju



Date of Designation

January 30, 2019

Location

24 Parganas District

Area

423000 hectares

Designation Criteria

2,3,7,8

Protection Status

National Park

Wetland Type

Mangrove swamps, mud flats, lagoons

Other designations

UNESCO World Heritage Site
UNESCO Biosphere Reserve

Management Authority

West Bengal Forest Department

Values and Benefits



Fisheries



Habitat for several migratory species



Wild honey



Recreation and tourism



Fodder



Scientific and educational values



Blue carbon sink



Tropical cyclone buffer



Shoreline protection

Significance

Low Medium High

Significance

Low Medium High

Threats



Salinization



Coastal erosion



Pollution



Encroachment



Prawn larva collection



High tourism pressure



Species richness

356 Birds

350 Fishes

50 Mammals

72 Reptiles & Amphibians

280+ Plants

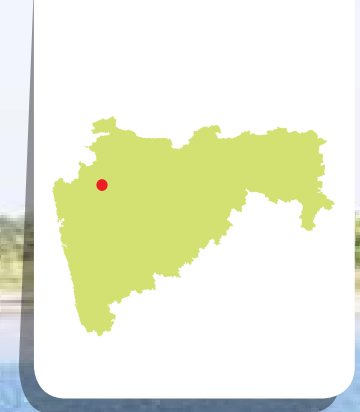
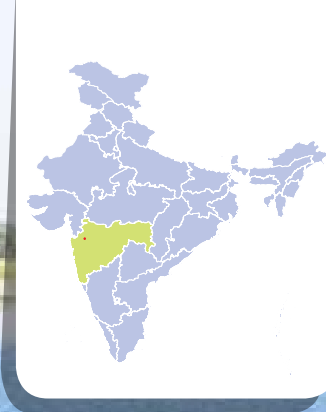
753 Insects

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Royal Bengal Tiger, Sundari	Ganges Shark, Northern River Terrapin, Spoon-billed Sandpiper	Arrow-headed hammer-head Fish, Irrawaddy Dolphin, Greater adjutant	Lesser Adjutant, Masked Finfoot, Estuarine Crocodile, Smooth-coated Otter, Oliver Ridley Turtle

Nandur Madhameshwar

Maharashtra



 Bharat Baburoo Shinde

Date of Designation

June 21, 2019

Location

Nashik District

Area

1437 hectares

Designation Criteria

2,3,4,5,6,7,8

Protection Status

Wildlife Sanctuary

Wetland Type

Barrage & water storage area

Management Authority

Maharashtra Forest Department (Wildlife Wing)

Values and Benefits



Provides water for domestic use and irrigation



Lifecycle maintenance of Migratory fish and water bird



Micro-climate regulation



Site for tourism and recreation



Flood control



Scientific and educational value



Water Purification



Madhmeshwar temple is a pilgrimage site



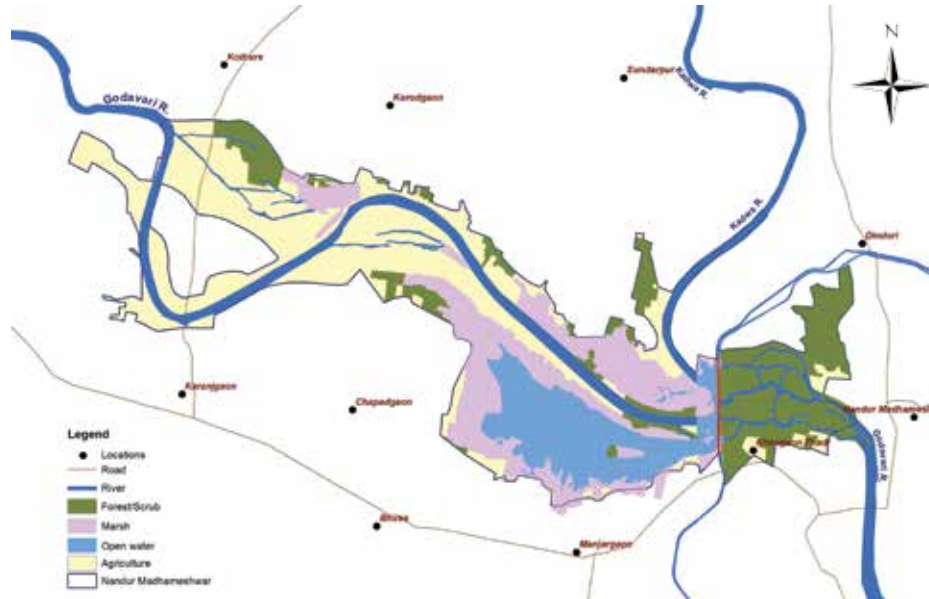
Prevention of erosion



Ground water recharge

Significance

Low Medium High



Significance

Low Medium High

Threats



Hydrological regime alteration



Unsustainable tourism



Pollution



Unsustainable fish harvest



Regime fragmentation



Over-grazing



Unsustainable water abstraction



Invasive species

Species richness

256 Birds

8 Fishes

8 Mammals

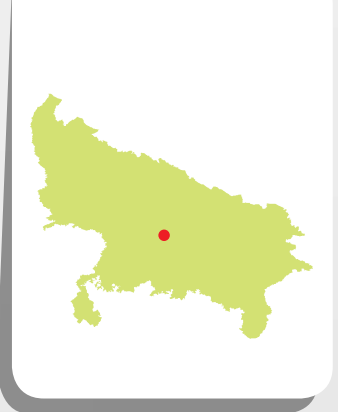
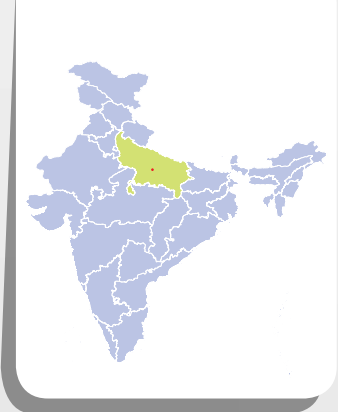
536 Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Butter Catfish	White-rumped Vulture, Indian Vulture, Deolali Minnow	Egyptian Vulture, Kooral	Common Pochard, Bristled Grassbird, Woolly-necked Stork, Shalyni Barb

Nawabganj Bird Sanctuary

Uttar Pradesh



Uttar Pradesh State Wetlands Authority



Date of Designation

September 19, 2019

Location

Unnao District

Area

224.6 hectares

Designation Criteria

2,3,4,5,6

Protection Status

Bird Sanctuary

Wetland Type

Marsh

Management Authority

Uttar Pradesh State Wetland Authority

Values and Benefits



Buffer floods



Groundwater recharge



Habitat for migratory water birds



Tourism and recreation



Scientific and educational values

Significance

Low Medium High

Significance

Low Medium High

Threats



Canalization



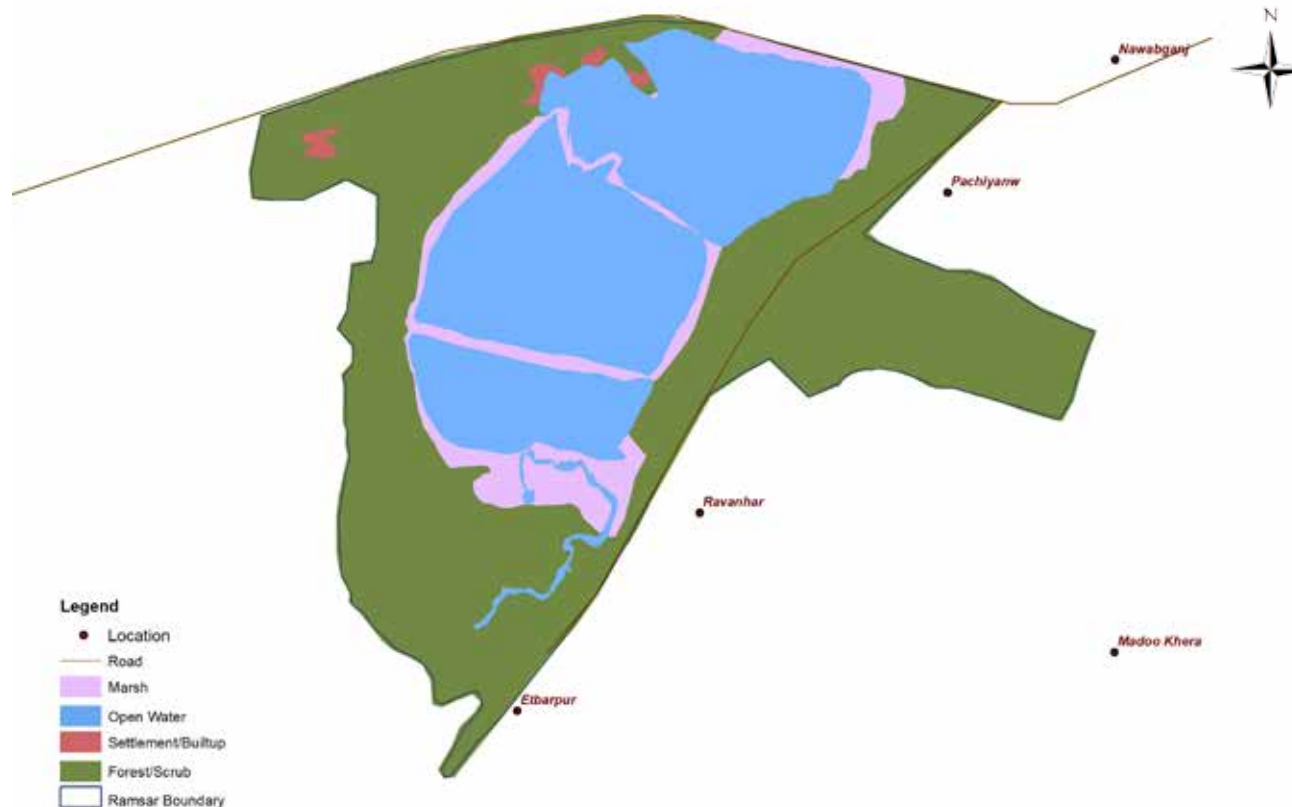
Siltation



Pollution



Invasive species



Species richness

220 Birds

20 Fishes

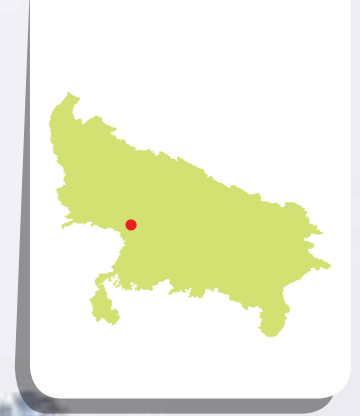
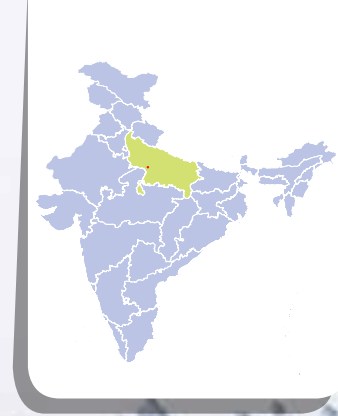
200 Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
		Palla's fish eagle, Egyptian Vulture	Greater Spotted Eagle, Common Pochard, Woolly necked stork, Lesser Adjutant

Sarsai Nawar Jheel

Uttar Pradesh



Uttar Pradesh State Wetlands Authority

Date of Designation

September 19, 2019

Location

Etawah District

Area

161.3 hectares

Designation Criteria

2,3,5,7,8

Wetland Type

Marsh

Management Authority

Uttar Pradesh State Wetland Authority

Values and Benefits



Water for irrigation



Recharges groundwater



Lifecycle maintenance of fish and water birds



Scientific and educational value



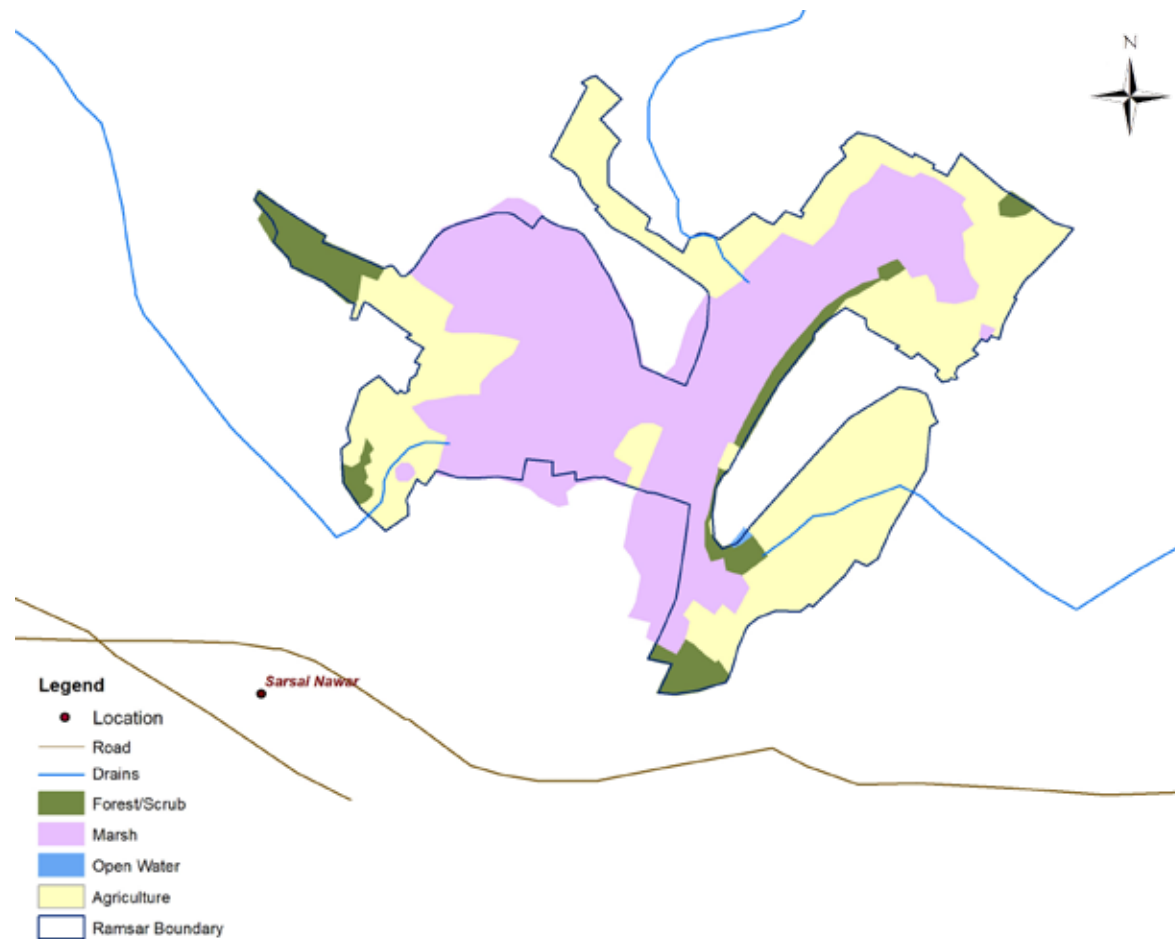
Hajari Mahadev temple is revered in the region

Significance

Low Medium High

Significance

Low Medium High



Threats



Hydrological regime alteration



Encroachment



Intensive agriculture



Invasive species

Species richness

250 Birds

46 Fishes

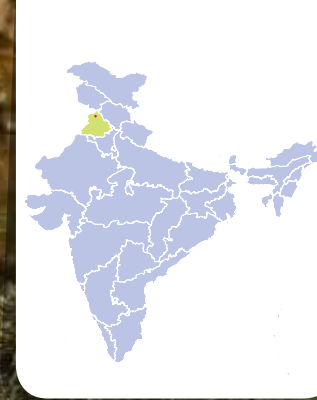
246 Plants


Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Sarus crane	White-rumped Vulture	Palla's Fish Eagle	Greater Spotted Eagle, Sarus crane, Woolly necked stork

Beas Conservation Reserve

Punjab



 Citanjali Kanwar

Date of Designation

September 26, 2019

Location

Hoshiarpur, Amritsar,
Gurdaspur, Kapurthala,
Jalandhar and Tarn Taran
Districts

Area

6428.9 hectares

Designation Criteria

2.7

Protection Status

Conservation Reserve

Wetland Type

River stretch

Management Authority

Department of Forest and Wildlife
Preservation, Punjab

Values and Benefits



Source of freshwater



Maintenance of hydrological regime



Nutrient and sediment retention



Lifecycle maintenance
Hosts the only population of the Indus River Dolphin in India



Scientific and educational importance



Cultural and Spiritual values

Significance

Low

Medium

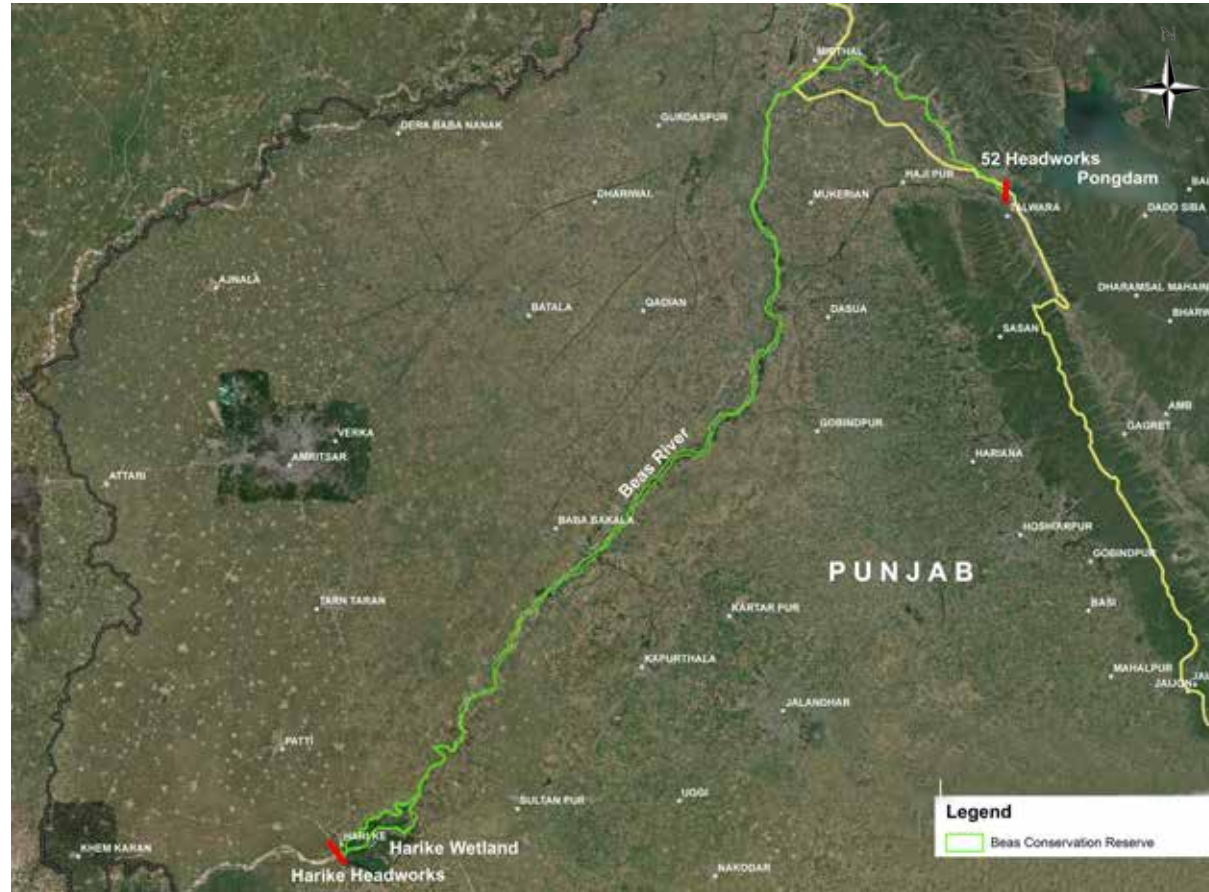
High

Significance

Low

Medium

High



Threats



Alteration in hydrological regimes



Pollution due to domestic and industrial effluents



Encroachment



Over grazing



Water abstraction



Invasive species

Species richness

~500 Birds

90 Fishes

7 Turtles

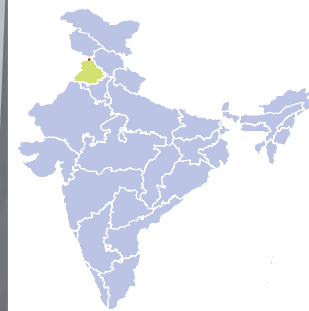
20+ Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Indus river Dolphin, Gharial	Gharial	Indus river Dolphin, Spotted Pond Turtle, Hog Deer, Mahseer, Pabdah Catfish	Common Pochard, Woolly-necked Stork, Crowned River Turtle, Smooth Coated Otter, Indian Softshell Turtle, Common Carp, Wallago Catfish

Keshopur-Miani Community Reserve

Punjab



Citanjali Kanwar

Date of Designation

September 26, 2019

Location

Gurdaspur District

Area

343.9 hectares

Designation Criteria

2,5

Protection Status

Community Reserve

Wetland Type

Marshes and aquaculture ponds

Management Authority

Department of Forest and Wildlife Preservation, Punjab

Values and Benefits



Supports Agro-ecology: Rice, Water chestnut and other crops along with Fisheries



Tourism and recreation



Fodder



Buffers flood



Recharge groundwater



Lifecycle maintenance of migratory species



Scientific and educational importance

Significance

Low Medium High

Significance

Low Medium High



Threats



Drainage



Pollution due to agricultural runoff



Invasive and alien species

Species richness

131 Birds

27 Fishes

16 Mammals

21 Amphibians & Reptiles

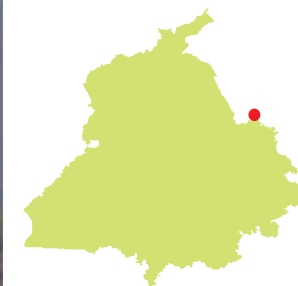
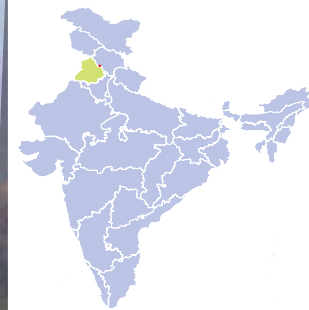
130 Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Common Crane, Sarus Crane		Spotted Pond Turtle, Black-bellied Tern	Common Pochard, Woolly-necked Stork, Sarus Crane, Greater spotted Eagle, Indian Softshell Turtle, Common Carp

Nangal Wildlife Sanctuary

Punjab



Citanjali Kanwar

Date of Designation

September 26 2019

Location

Rupnagar District

Area

116 hectares

Designation Criteria

2,3

Protection Status

Wildlife Sanctuary

Wetland Type

Reservoir

Management Authority

Department of Forest and Wildlife
Preservation, Punjab

Values and Benefits



Source of freshwater



Buffers flood



Sediment and nutrient retention



Groundwater recharge.



Lifecycle maintenance of migratory birds

Significance

Low Medium High

Significance

Low Medium High



Threats



Pollution
(Sewage inflow and
garbage dumping)



Tourism pressure

Species richness

154 Birds

35 Fishes

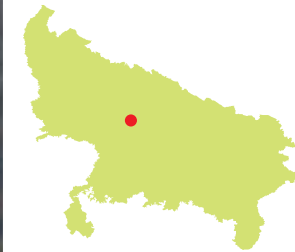
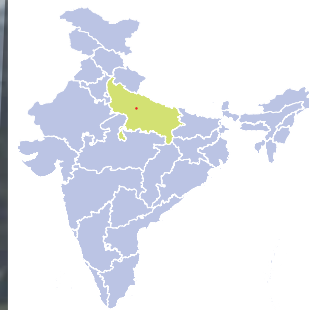
9 Mammals

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
		Pallas's Fish Eagle, Egyptian Vulture, Black-bellied Tern, Hog Deer, Indian Pangolin, Golden Mahseer	Common Pochard, Leopard, Wallago Catfish, Burmese Python

Sandi Bird Sanctuary

Uttar Pradesh



Abu Arshad Khan

Date of Designation

September 26, 2019

Location

Hardoi District

Area

308.5 hectares

Designation Criteria

2,3,4,5,6,7

Protection Status

Bird Sanctuary

Wetland Type

Freshwater marsh

Management Authority

Uttar Pradesh State Wetland Authority

Values and Benefits



Water for agriculture



Fisheries for livestock



Recharges groundwater



Buffers floods



Maintenance of lifecycles of migratory birds



Tourism and recreation

Significance

Low

Medium

High

Significance

Low

Medium

High

Threats



Pollution



Encroachment



Over grazing



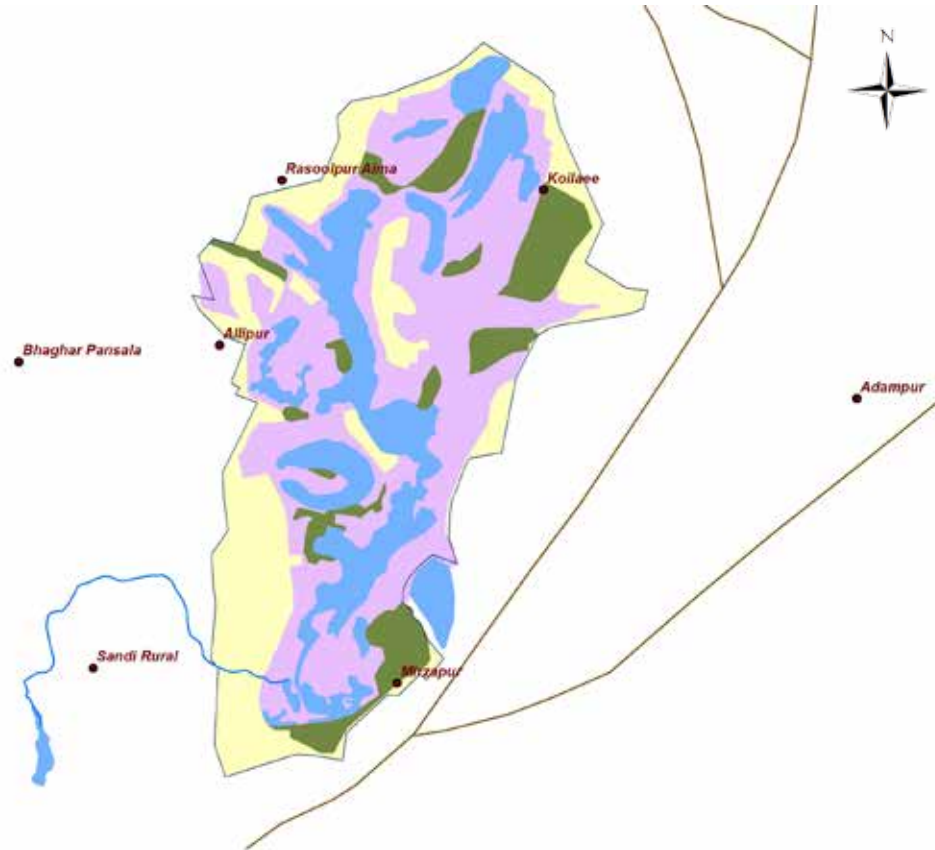
Water abstraction for agriculture



Invasive species

Legend

- Location
- Road
- Drains
- Forest/Scrub
- Marsh
- Open Water
- Agriculture
- Ramsar Boundary



Species richness

150 Birds

13 Fishes

19 Mammals

18 Reptiles & Amphibians

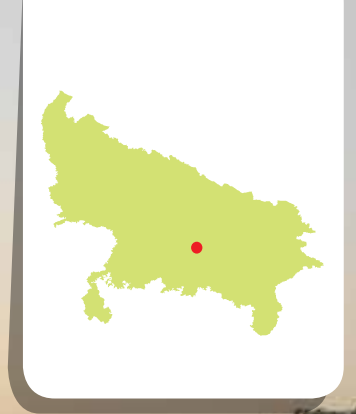
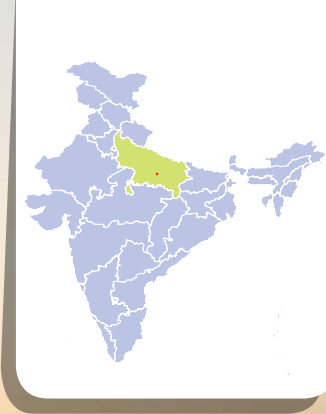
209 Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Sarus Crane			Greater Spotted Eagle, Sarus Crane

Samaspur Bird Sanctuary

Uttar Pradesh



Abu Arshad Khan

Date of Designation

October 3, 2019

Location

Raebareli District

Area

799.4 hectares

Designation Criteria

2,3,4,5,6,7

Protection Status

Bird Sanctuary

Wetland Type

Freshwater marsh

Management Authority

Uttar Pradesh State Wetland Authority

Values and Benefits



Water for agriculture



Fisheries



Fodder



Buffer for floods



Groundwater recharge

Significance

Low Medium High

Significance

Low Medium High

Threats



Drainage



Siltation



Pollution



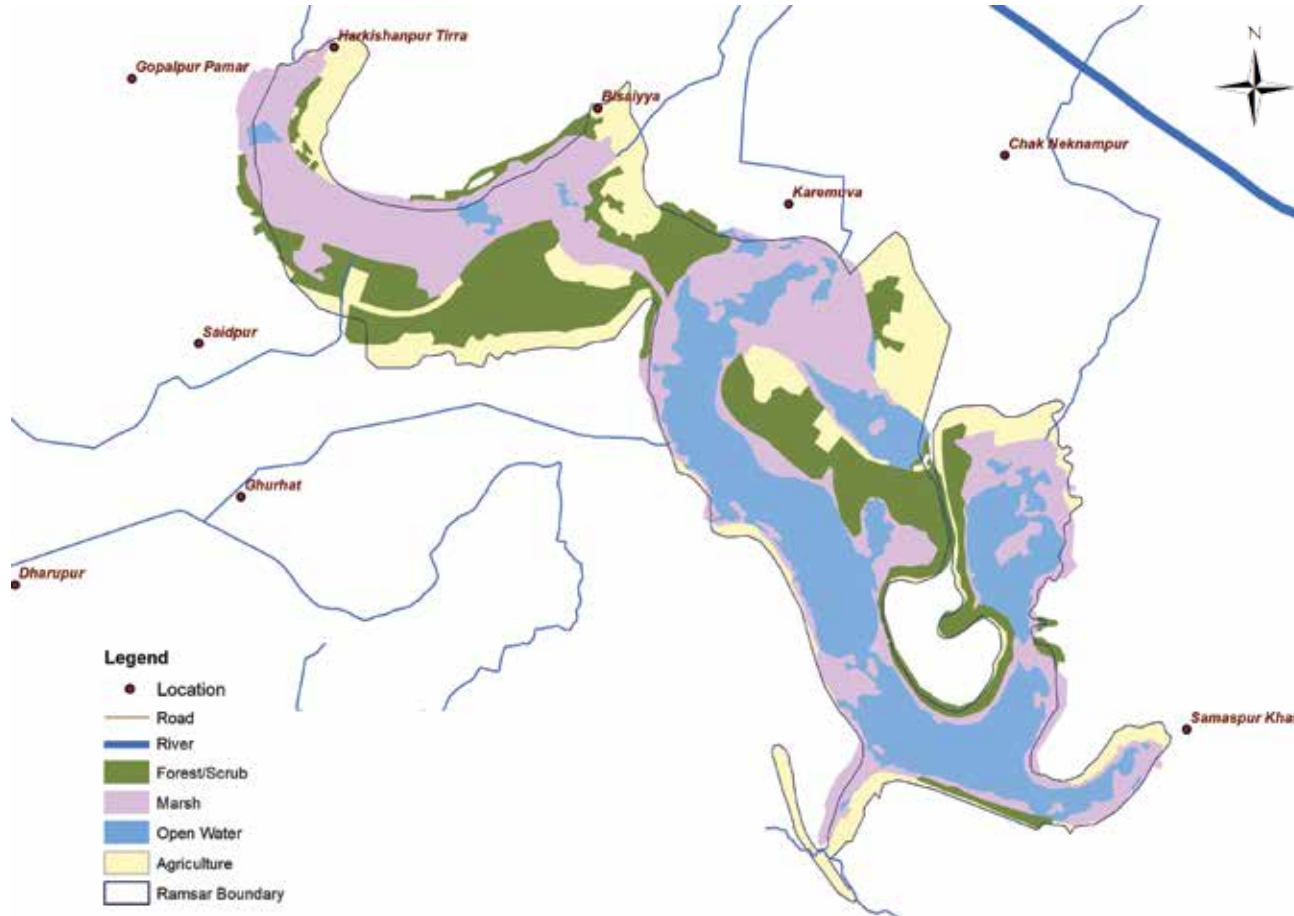
Over grazing



Intensive agriculture



Invasive species



Species richness

250 Birds

46 Fishes

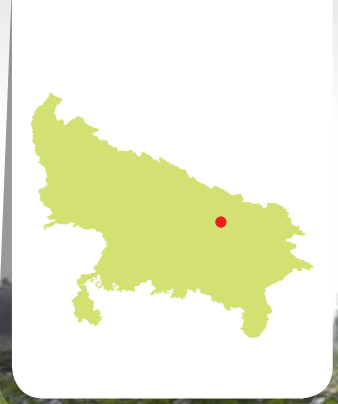
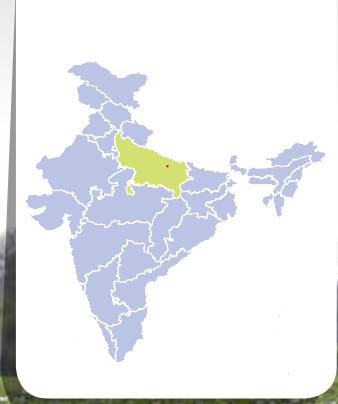
149 Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Sarus Crane		Pallas's Fish Eagle	Greater Spotted Eagle, Common Pochard, Sarus crane

Parvati Arga Bird Sanctuary

Uttar Pradesh



Abu Arshad Khan

Date of Designation

December 2, 2019

Location

Gonda District

Area

722 hectares

Designation Criteria

2,3,4,5,8

Protection Status

Bird Sanctuary

Wetland Type

Freshwater marshes

Management Authority

Uttar Pradesh State Wetland Authority

Values and Benefits



Water for agriculture



Groundwater recharge



Buffers flood



Maintenance of lifecycles of migratory birds and fish



Scientific and educational values



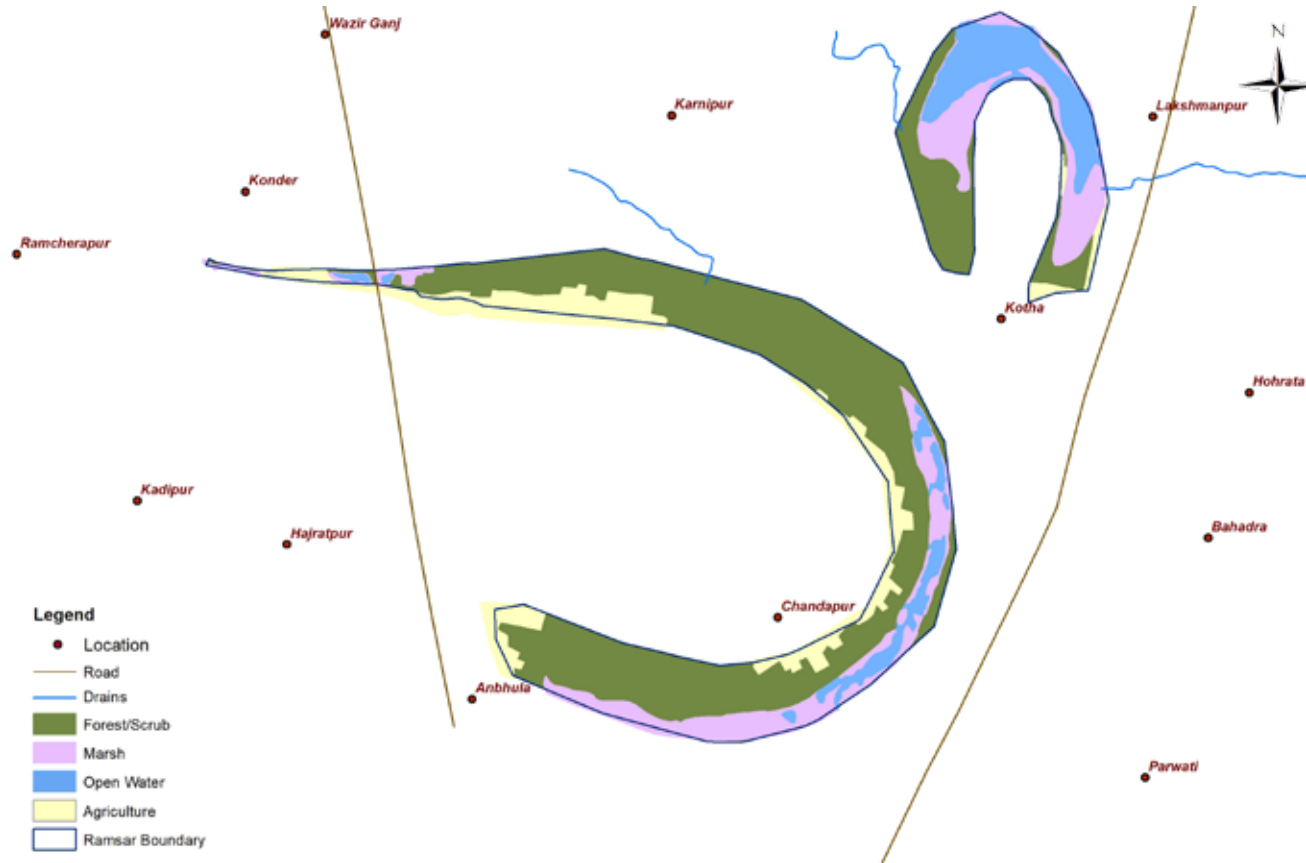
Cultural and spiritual importance

Significance

Low Medium High

Significance

Low Medium High



Threats



Pollution from agricultural run-off



Regime fragmentation through roads



Invasive species,



Tourism pressure

Species richness

37 Birds

18 Mammals

2 Reptiles & Amphibians

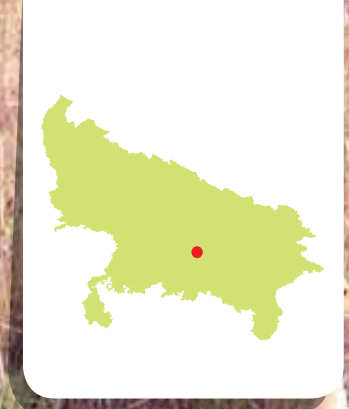
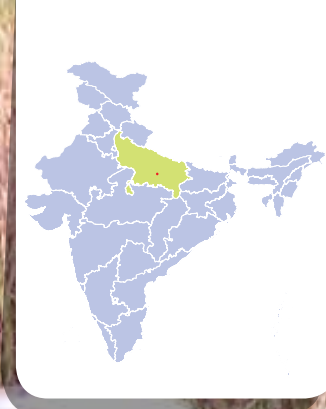
37 Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Sarus Crane	White-rumped Vulture, Indian Vulture	Egyptian Vulture	Greater Spotted Eagle, Common Pochard, Woolly-necked stork, Sarus Crane

Saman Bird Sanctuary

Uttar Pradesh



Arvind Kumar

Date of Designation

December 2, 2019

Location

Mainpuri District

Area

526.3 hectares

Designation Criteria

2,3,4,5,6

Protection Status

Bird Sanctuary

Wetland Type

Freshwater marsh

Management Authority

Uttar Pradesh State Wetland Authority

Values and Benefits



Water for agriculture



Groundwater recharge



Habitat for migratory waterbirds



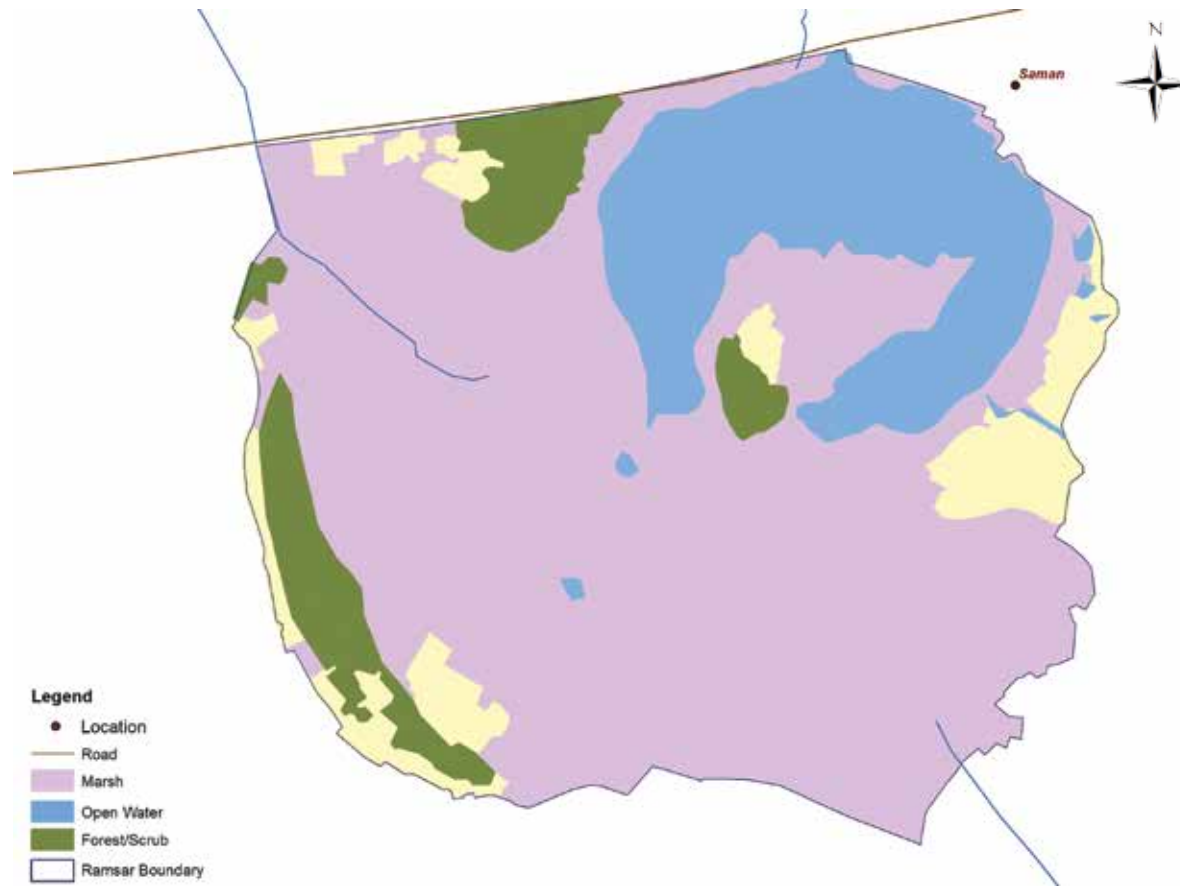
Recreation and tourism

Significance

Low Medium High

Significance

Low Medium High



Threats



Pollution



Encroachment



Over grazing and feral dogs



Intensive agriculture



Invasive species

Species richness

187 Birds

11 Mammals

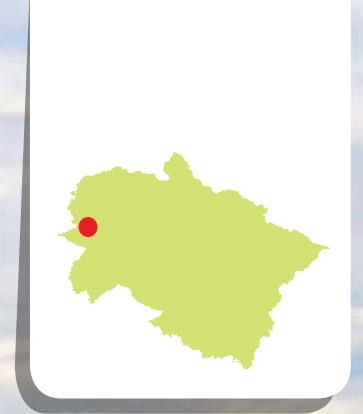
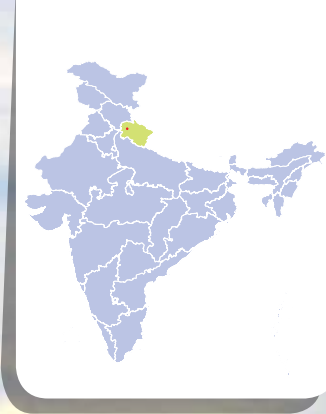
154 Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Sarus Crane		Palla's Fish Eagle, Egyptian Vulture	Greater Spotted Eagle, Sarus crane

Asan Conservation Reserve

Uttarakhand



Wetlands International South Asia Photo Library

Date of Designation

July 21, 2020

Location

Dehradun district

Area

444.4 hectares

Designation Criteria

2,3,4,6,8

Protection Status

Conservation Reserve

Wetland Type

Barrage/ Freshwater reservoir

Management Authority

Uttarakhand Forest Department

Values and Benefits



Water for energy production



Groundwater recharge



Recreation and tourism



Scientific and educational value



Habitat for migratory birds

Significance

Low Medium High

Significance

Low Medium High



Threats



Hydrological regime alteration



Pollution/ disposal of urban drainage



Siltation



Encroachment



Invasive species



Regime fragmentation

Species richness

330 Birds

49 Fishes

20 Mammals

5 Reptiles & Amphibians

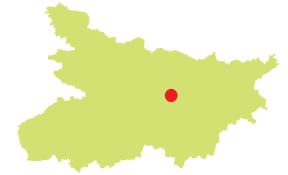
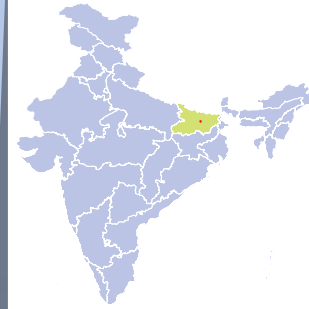
30 Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Himalayan Mahseer	Baer's Pochard, White-rumped Vulture, Red-headed Vulture	Steppe Eagle, Pallas's Fish, Eagle, Egyptian Vulture, Black-bellied Tern, Common, Himalayan Mahseer, Copper mahseer, Himalayan salmon, Yellowfin mahseer, Assam mahseer, Goold mahseer, Jungha mahseer	Lesser White fronted Goose, Common Pochard, Woolly-necked Stork, Marbled Duck

Kabartal Wetland

Bihar



Wetlands International South Asia Photo Library

Date of Designation

July 21, 2020

Location

Begusarai district

Area

2620 hectares

Designation Criteria

1,2,3,4,7,8

Protection Status

Bird Sanctuary

Wetland Type

Oxbow lake, Freshwater marshes

Management Authority

Environment and Forest Department of Bihar/
Bihar State Wetland Authority

Values and Benefits



Source of drinking water



Recreation and tourism



Fisheries support livelihood of 23 villages



Cultural and spiritual importance



Reeds fibre and fodder



Lifecycle maintenance



Groundwater recharge



Flood protection



Water purification



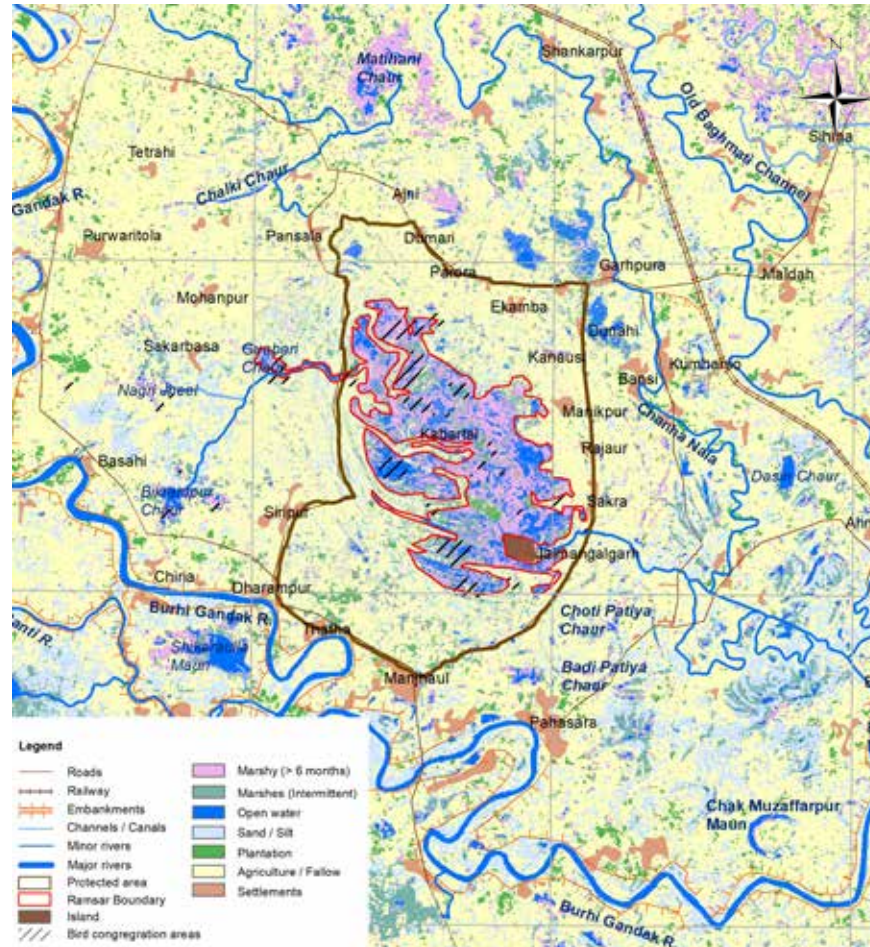
Scientific and education value

Significance

Low

Medium

High



Significance

Low

Medium

High

Threats



Hydrological regime alteration



Pollution/ disposal of urban drainage



Siltation



Encroachment



Invasive species



Regime fragmentation by roads

Species richness

221 Birds

35 Fishes

5 Mammals

12 Reptiles & Amphibians

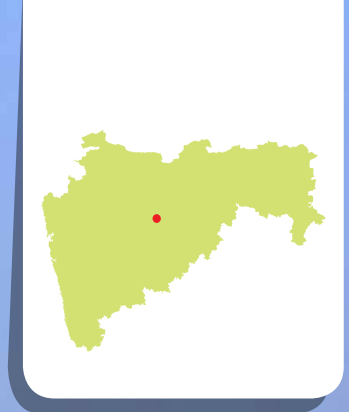
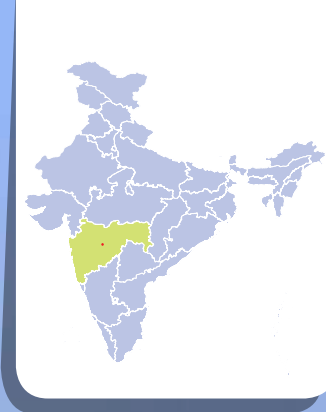
165 Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
	Baer's Pochard, White-rumped Vulture, Indian Vulture, Red-headed Vulture, Sociable Lapwing	Common Pochard, Saker Falcon, Greater Adjutant, Pallas's Fish Eagle, Egyptian Vulture	Wallago catfish, Greater Spotted Eagle, Woolly-necked Stork, Lesser Adjutant

Lonar Lake

Maharashtra



Dr. Sudhakar Kurhade

Date of Designation

July 22, 2020

Location

Buldhana district

Area

427 hectares

Designation Criteria

1,2,3,4

Protection Status

National Geo-heritage site, Wildlife Sanctuary

Wetland Type

Alkaline lake

Management Authority

Maharashtra Forest Department

Values and Benefits



Genes for tolerance to high salinity conditions



National Geo-heritage Monument as the wetland was created by an asteroid collision with earth impact during the Pleistocene Epoch



Important knowledge systems, importance for Research



Nature observation and nature-based tourism



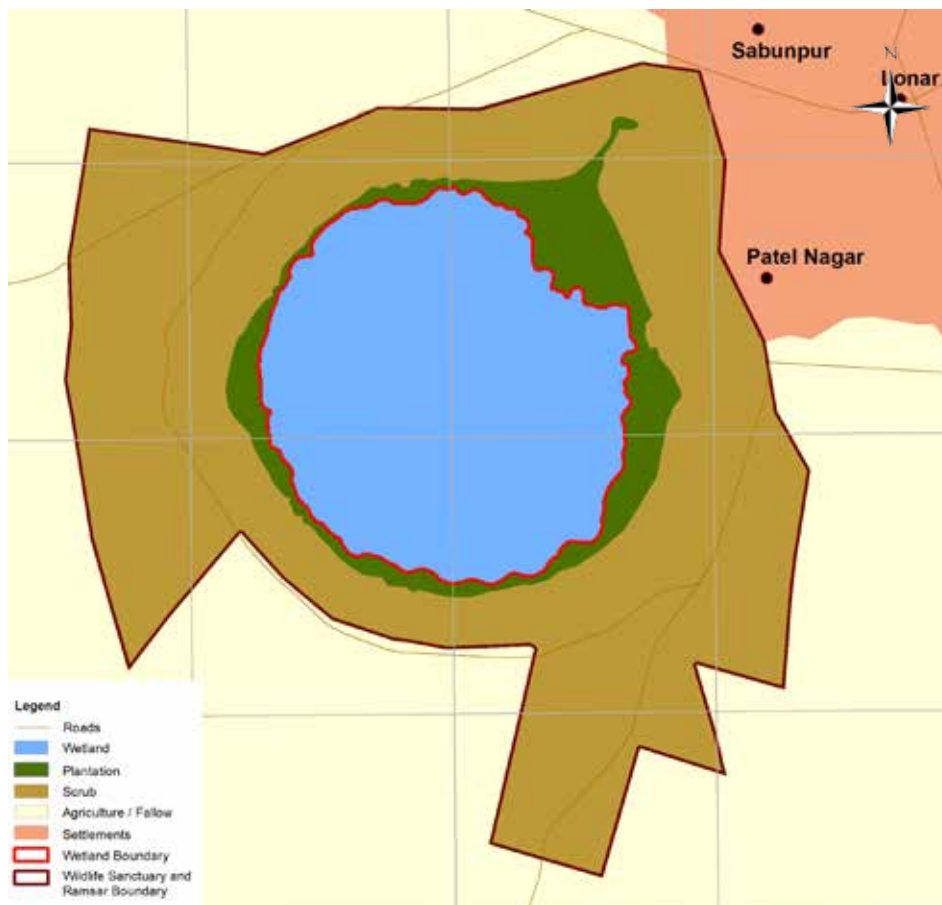
carbon storage and sequestration

Significance

Low Medium High

Significance

Low Medium High



Threats



Hydrological regime alteration



Encroachment



Pollution from Household sewage, urban wastewater



Livestock farming and ranching



Unsustainable tourism



Fragmentation due to roads

Species richness

160 Birds

12 Mammals

53 Reptiles & Amphibians

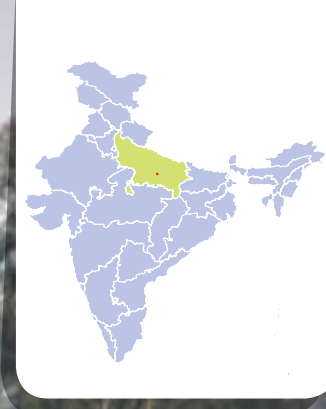
67 Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
			Common Pochard, Woolly-necked Stork,

Sur Sarovar

Uttar Pradesh



Diwaker Srivastava



Date of Designation

August 21, 2020

Location

Agra district

Area

431 hectares

Designation Criteria

2,3,4,5,6,7

Protection Status

Bird Sanctuary

Wetland Type

Water storage areas/Reservoirs

Management Authority

Uttar Pradesh Forest Department

Values and Benefits



Source of freshwater



Lifecycle maintenance



Maintenance of hydrological regimes



Hazard reduction



Scientific and education value



Recreation and tourism



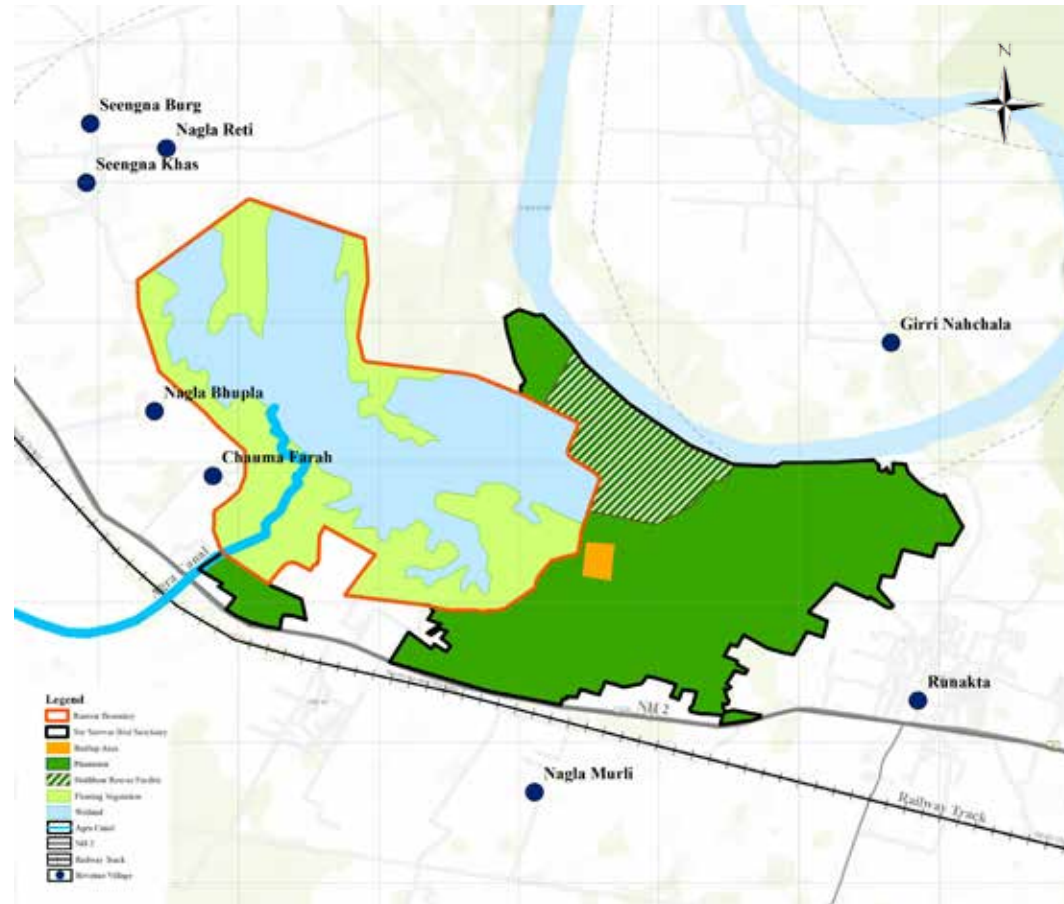
Cultural and spiritual importance

Significance

Low Medium High

Significance

Low Medium High



Threats



Hydrological regime alteration



Invasive species



Pollution from Household sewage, urban wastewater



Livestock farming and ranching



Unsustainable tourism



Fishing and harvesting aquatic resources

Species richness

330 Birds

60 Fishes

5 Mammals

24 Reptiles & Amphibians

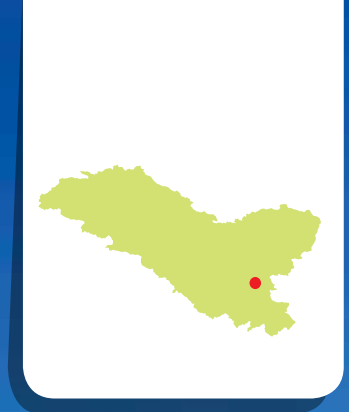
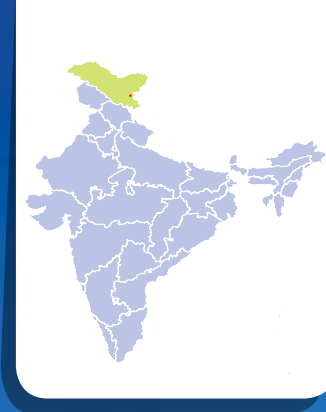
252 Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Ganges Softshelled Turtle, Indian Pangolin, Sarus Crane		Hog deer, Indian Pangolin	Ganges Soft shelled Turtle, Common carp, Whiskered Catfish, Greater Spotted Eagle, Sarus Crane, Lesser Adjutant

Tso Kar Wetland Complex

Ladakh



 Siddharth P



Date of Designation

17 November, 2020

Location

Leh District

Area

9577 hectares

Designation Criteria

1,2,3,4

Protection Status

Partly Designated as
Wildlife Sanctuary

Wetland Type

Brackish/ alkaline lakes & fresh water lake

Management Authority

Department of Wildlife Protection,
Government of the UT of Ladakh

Values and Benefits



Wetland non-food products
eg livestock fodder



Groundwater recharge
and discharge



Traditional knowledge



Recreation and
tourism



Cultural and spiritual
importance



Lifecycle
maintenance

Significance

Low Medium High

Significance

Low Medium High



Legend

Tso Kar Wetland Complex Ramsar site Boundary

Threats



Roads and railroads



Pollution from
Household sewage,
urban wastewater



Livestock farming and
ranching



Unsustainable tourism

Species richness

139 Birds

10 Mammals

2 Reptiles

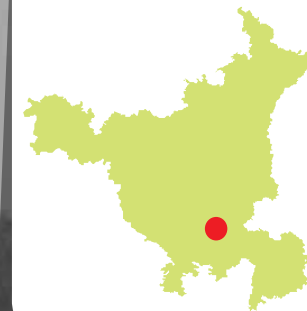
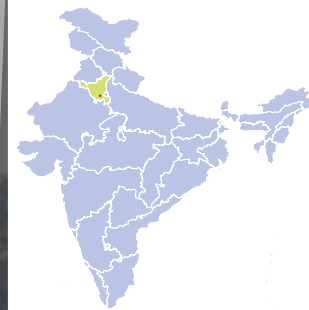
232 Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Tibetan Wolf, Kiang, Snow Leopard, Black-Necked Crane, Saker Falcon, Tibetan Argali		Saker Falcon	Common Pochard, Black Necked Crane, Snow Leopard

Bhindawas Wildlife Sanctuary

Haryana



Forest and Wildlife Department, Government of Haryana

Date of Designation

May 25, 2021

Location

Rohtak, Jhajjar District,
Haryana

Area

412 hectares

Designation Criteria

2,3,4, 6

Protection Status

Wildlife Sanctuary

Wetland Type

Water Storage Areas/ Reservoirs

Management Authority

Forest and Wildlife Department,
Govt. of Haryana

Values and Benefits



Local climate regulation



Storage recycling processing and acquisition of Nutrients



Ground water recharge



Flood control



Supports biodiversity



Nature based tourism

Significance

Low

Medium

High

Significance

Low

Medium

High



Threats



Weed infestation and choking of water channel



Diurnal fluctuation of water level

Species richness

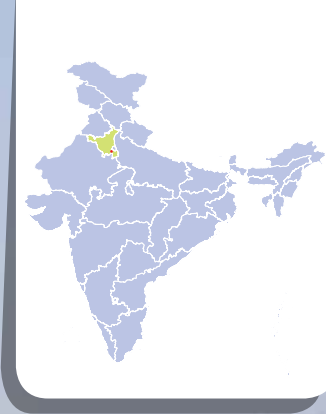
265 Birds

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Mallard, Red-crested Pochard, Ferruginous Duck, Baer's Pochard		Steppe Eagle, Palla's Fish Eagle, Egyptian Vulture, Black-bellied Tern	Lesser White-fronted Goose, Eastern Imperial Eagle, Common Pochard

Sultanpur National Park

Haryana



Haryana Forest Department

Date of Designation

May 25, 2021

Location

Gurugram district,
Haryana

Area

412.5 hectares

Designation Criteria

2,4,5, 6

Protection Status

National Park

Wetland Type

Freshwater lakes and pools, Seasonal/
intermittent freshwater lakes

Management Authority

Forest and Wildlife Department,
Government of Haryana

Values and Benefits



Local climate regulation



Storage recycling processing and acquisition of Nutrients



Ground water recharge



Educational activities and opportunities



Supports biodiversity



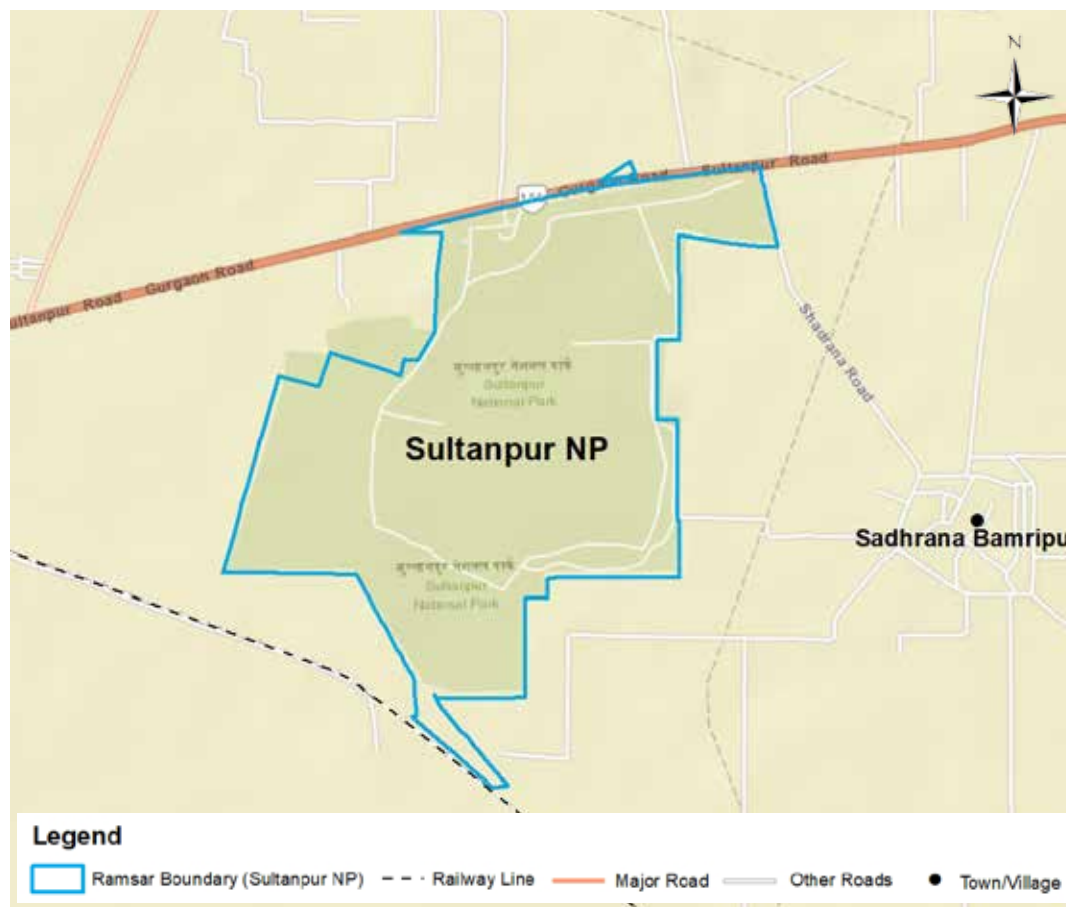
Nature based tourism

Significance

Low Medium High

Significance

Low Medium High



Threats



Increase in housing and urban areas



Agriculture and forestry effluents



Mining and Quarrying



Weed infestation

Species richness

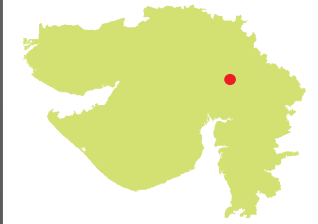
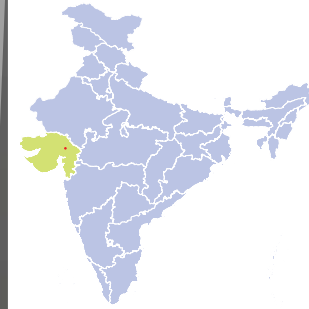
220 Birds
150 Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Bar-headed Goose, Greylag Goose, Lesser White-fronted Goose,	Sociable Lapwing	Saker Falcon, Pallas's Fish Eagle, Egyptian Vulture, Black-bellied Tern	Lesser White-fronted Goose, Eastern Imperial Eagle, Woolly-necked Stork, Sarus Crane, Common Pochard

Thol Lake Wildlife Sanctuary

Gujarat



Wildlife Division - Sanand

Date of Designation

April 5, 2021

Location

Mehsana district, Gujarat

Area

699 hectares

Designation Criteria

2,3,4,5, 6

Protection Status

Wildlife Sanctuary

Wetland Type

Water storage areas/Reservoirs

Management Authority

Gujarat Forest Department

Values and Benefits



Local climate regulation



Water Use for Irrigation and domestic use



Ground water recharge



Educational activities and opportunities



Supports biodiversity



Nature based tourism

Significance

Low Medium High

Significance

Low Medium High



Threats



Increase in housing and urban areas



Vegetation clearance



Oil & gas drilling



Domestic and urban waste



Roads and railroads

Species richness

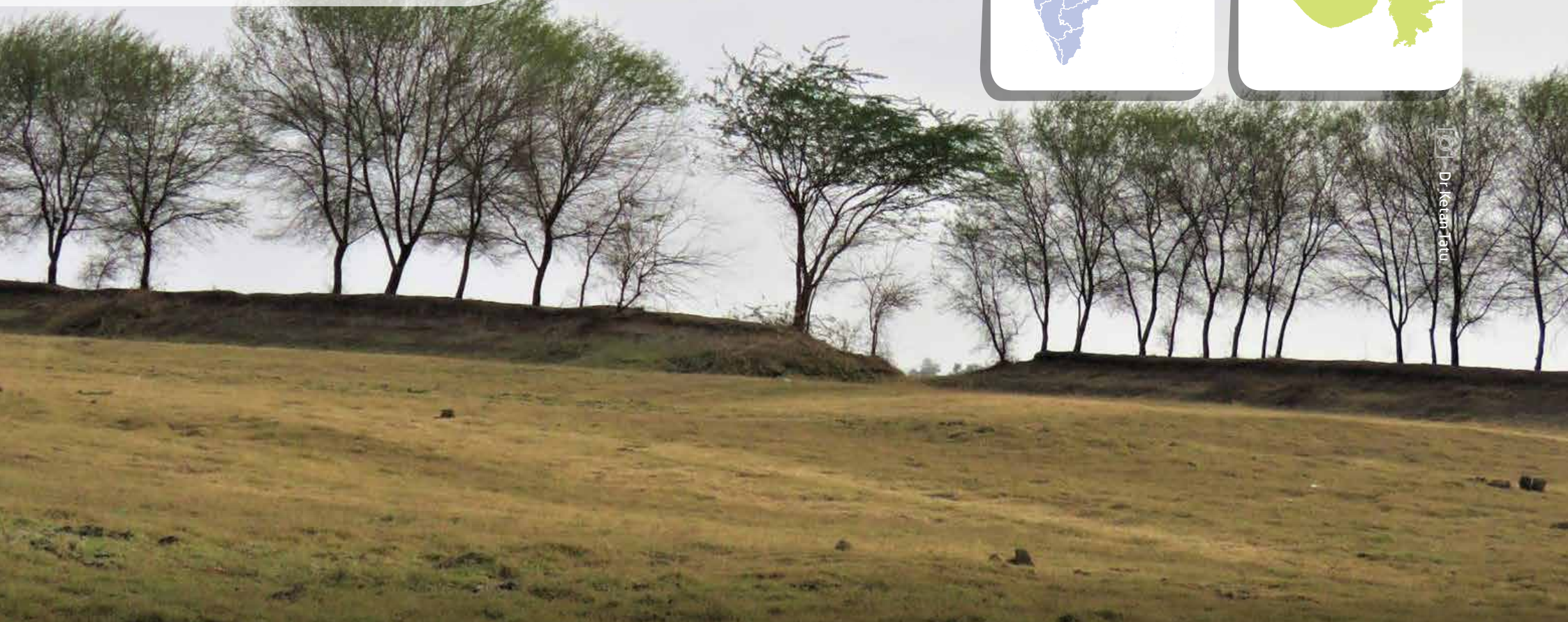
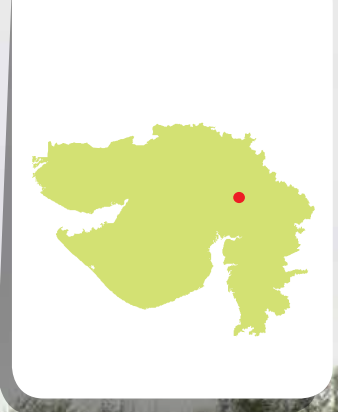
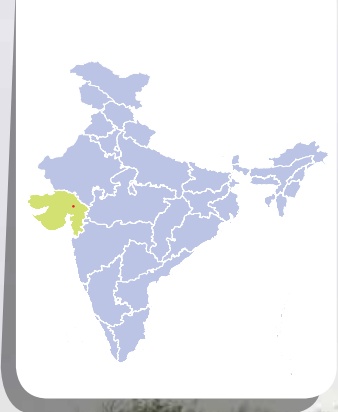
112 Birds

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Glossy Ibis, Graylag Goose, Bar Headed Goose, Black Tailed Godwit	Oriental White-backed Vulture, Sociable Lapwing	Saker Falcon, Pallas's Fish Eagle, Egyptian Vulture, Black-bellied Tern	Lesser White-fronted Goose, Common Pochard, Sarus Crane, River Tern

Wadhvana Wetland

Gujarat



Dr. Ketan Patil

Date of Designation

April 5, 2021

Location

Vadodara district,
Gujarat State

Area

630 hectares

Designation Criteria

2,3,4,5, 6, 7

Wetland Type

Water storage Fresh water, Flowing water;
Permanent rivers/ streams/creeks

Management Authority

Gujarat Forest Department

Values and Benefits



Food for Humans-
fisheries



Nature based
tourism



Water Use for Irrigation and
domestic use



Ground water
recharge



Flood protection



Educational activities and
opportunities



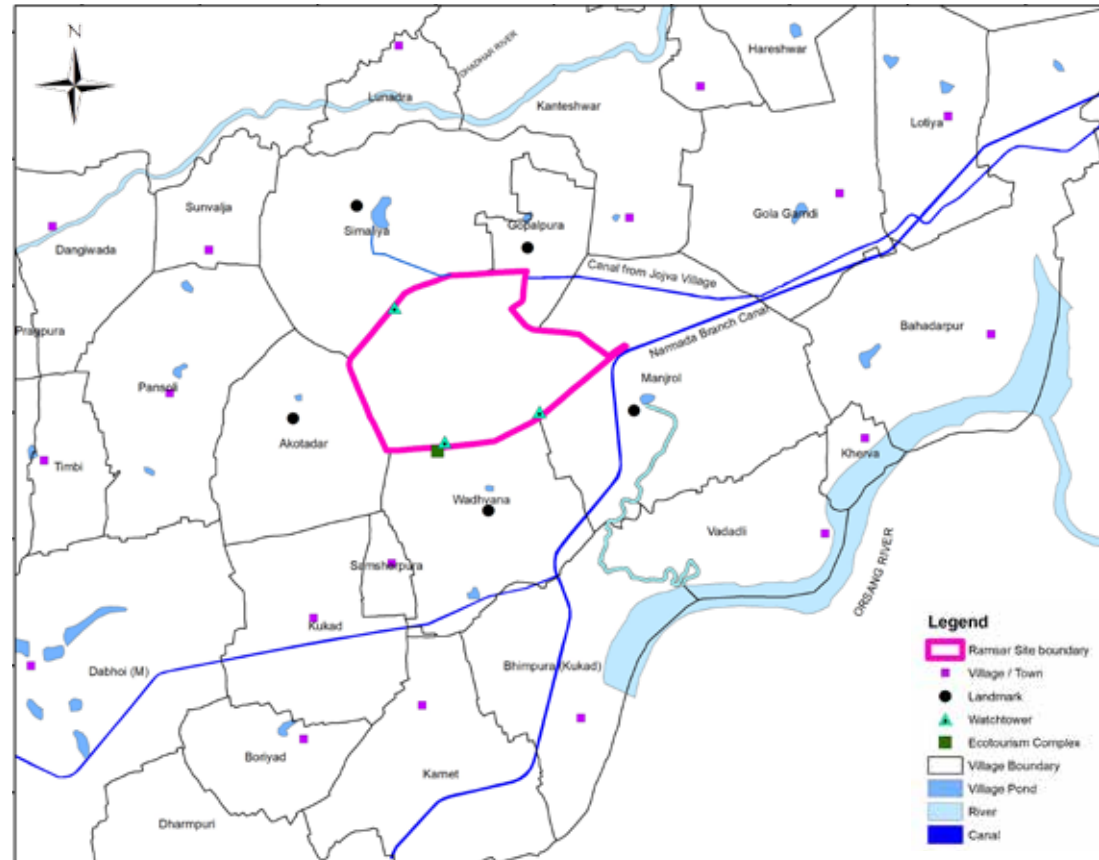
Supports
biodiversity

Significance

Low Medium High

Significance

Low Medium High



Threats



Alteration of hydrological
regime



Vegetation clearance



Unsustainable tourism



Invasive species



Biological resource
extraction/poaching

Species richness

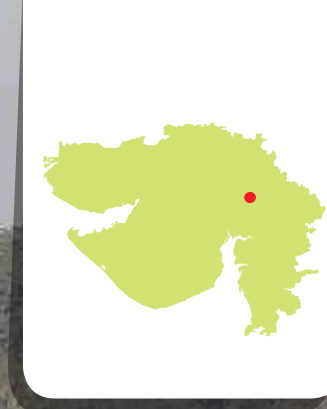
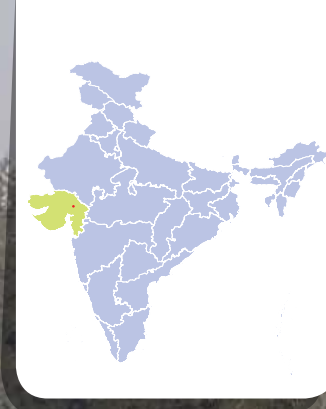
214 Birds
5 Fishes
9 Reptiles
7 Mammals

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Glossy Ibis, Graylag Goose, Ruddy Shelduck, Ruff, Knob Billed Duck	Oriental White-backed Vulture, Indian Vulture	Pallas' Fish Eagle, Greater Adjutant, Black-bellied Tern	Marsh Crocodile, Mringal, Greater Spotted Eagle, Common Pochard, Sarus Crane, River Tern

Khijadia Wildlife Sanctuary

Gujarat



office of the CCF MNP Jamnagar

Date of Designation

Location

Jamnagar District,
Gujarat State

Area

510 hectares

Designation Criteria

2, 3, 4, 5, 6, 8

Protection Status

Wildlife Sanctuary

Wetland Type

Water storage Fresh water, Flowing water;
Permanent streams/creeks

Management Authority

Gujarat Forest Department

Values and Benefits



Nutrient Cycling



Nature based tourism



Water Use for Irrigation and domestic use



Ground water recharge



Erosion protection



Scientific studies



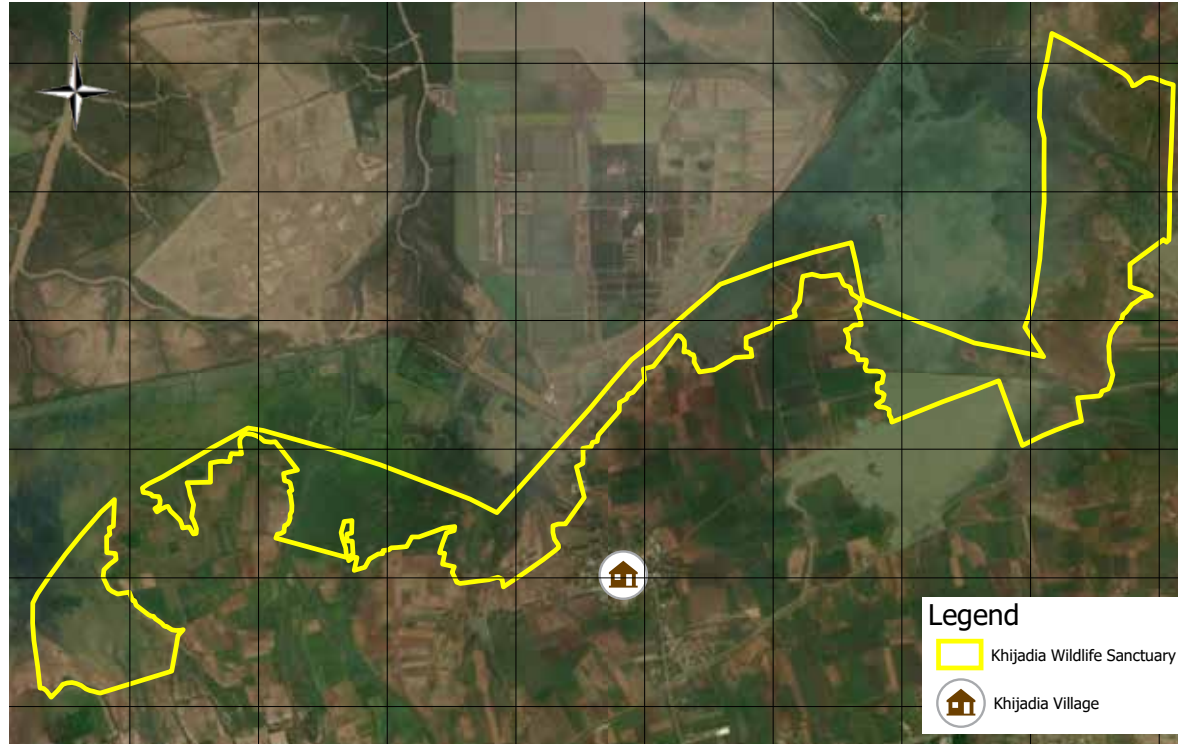
Supports biodiversity

Significance

Low Medium High

Significance

Low Medium High



Threats



Increase in housing and urban areas



Intensive agriculture



Water abstraction



Invasive species



Gathering terrestrial resources/grazing

Species richness

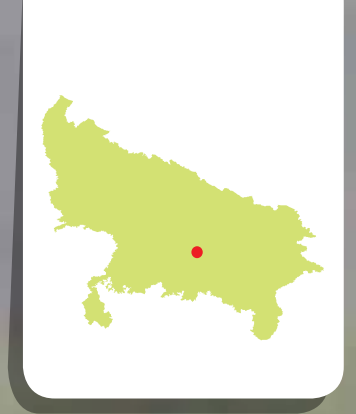
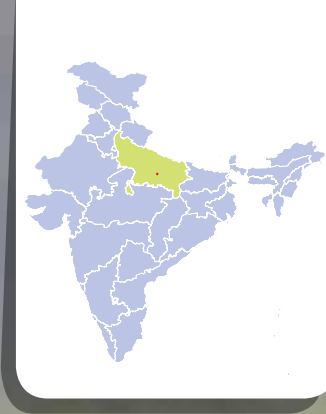
- 233 Birds
- 5 Fishes
- 4 Prawns
- 21 Butterflies
- 7 Reptiles
- 7 Mammals
- 183 Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Dalmatian Pelican, Great Knot, Greater Flamingo, Indian Skimmer		Great Knot, Palla's Fish Eagle, Indian Skimmer	

Bakhira Wildlife Sanctuary

Uttar Pradesh



Chandan Pratik



Date of Designation

Location

Sant Kabir Nagar District,
Uttar Pradesh

Area

2894 hectares

Designation Criteria

2,3,4,8

Protection Status

Wildlife Sanctuary

Wetland Type

Permanent freshwater marshes/pools

Management Authority

Uttar Pradesh Forest Department

Values and Benefits



Nutrient Cycling



Food for humans-Fishes



Ground water recharge



Supports biodiversity



Nature based tourism

Significance

Low Medium High

Significance

Low Medium High



Threats



Drainage



Drainage



Invasive species



Unsustainable fishing and harvesting of aquatic resources

Species richness

80 Birds

45 Fishes

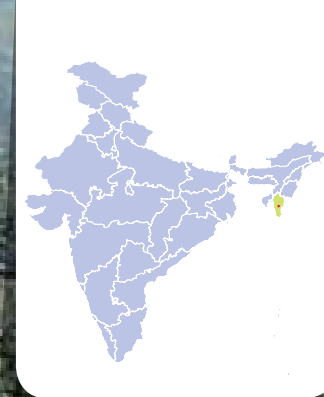
119 Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Purple Swamphen, Sarus Crane		Egyptian Vulture	Swamp Francolin, Greater Spotted Eagle, Common Pochard, Sarus Crane

Pala Wetland

Mizoram



ESFMADC

Date of Designation

Location

Area

Designation Criteria

Siaha district,
Mizoram

1850 hectares

1,2,3,4

Wetland Type

Permanent freshwater lakes

Management Authority

Environment and Forest Department,
Mara Autonomous District Council region,
Siaha, Mizoram

Values and Benefits



Food for humans-Fishes



Nature based tourism



Water Use for Irrigation and domestic use



Ground water recharge



Spiritual and inspirational values



Scientific studies



Supports biodiversity

Significance

Low

Medium

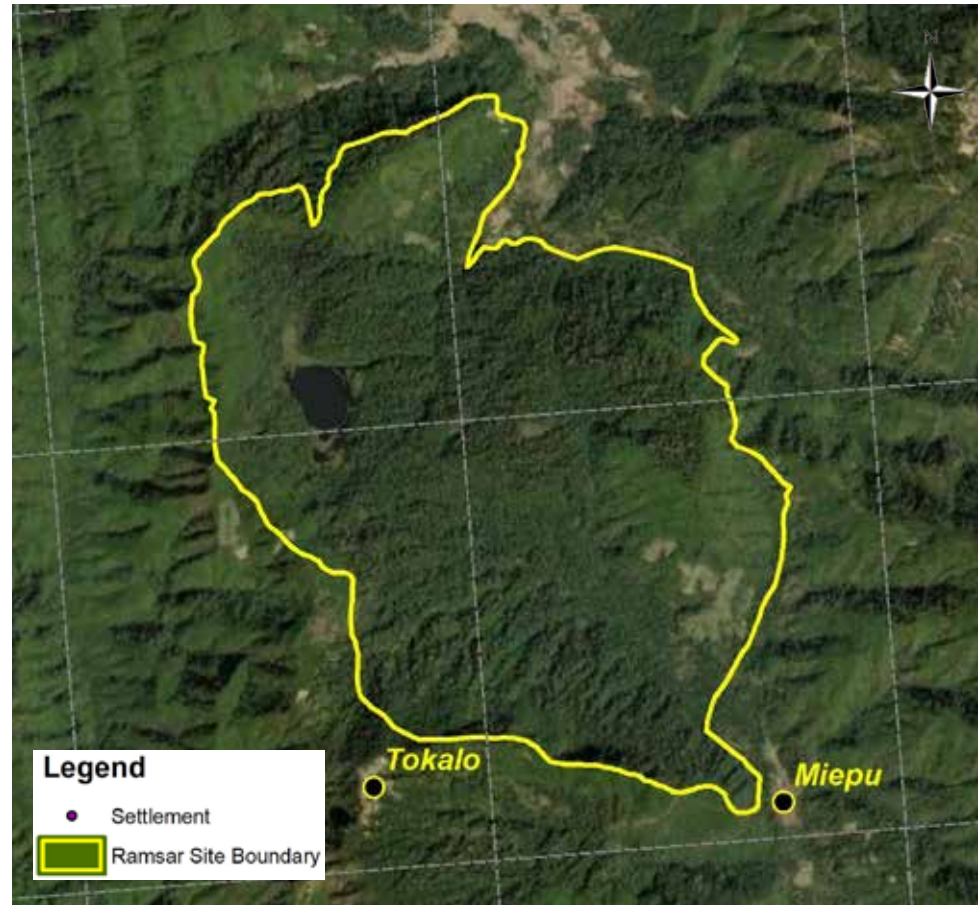
High

Significance

Low

Medium

High



Threats



Roads and railroads



Vegetation clearance



Unsustainable biological resource extraction



Invasive species



Livestock farming and ranching

Species richness

22 Birds

3 Fishes

7 Mammals

11 Amphibians

21 Reptiles

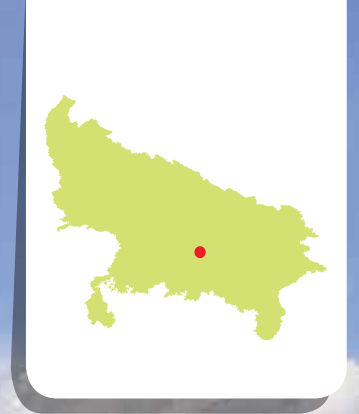
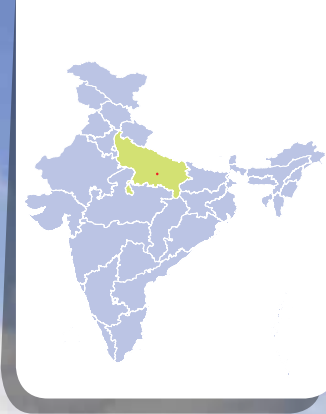
227 Plants

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Elongated Tortoise, Asian Brown Tortoise, Black Soft-shelled Turtle, Sambar	Elongated Tortoise, Asian Brown Tortoise, Black Soft-Shelled Turtle	Hoolock Gibbon, Bengal slow Loris, Phayre's Langur	Asiatic Softshell Turtle, Sambar, Asian Black Bear

Haiderpur Wetland

Uttar Pradesh



Dr Amit Dubey

Date of Designation

Location

Bijnor Barrage between Muzaffarnagar and Bijnor Districts, Uttar Pradesh

Area

6908 hectares

Designation Criteria

2,3,4,5, 6

Protection Status

Wildlife Sanctuary

Wetland Type

Freshwater Flowing Marshes,
Permanent Rivers/ streams/creeks

Management Authority

Uttar Pradesh Forest Department

Values and Benefits



Water chestnut cultivation



Source of drinking water



Ground water recharge



Source for irrigation



Capture fisheries



Socio cultural significance

Significance

Low

Medium

High

Significance

Low

Medium

High



Threats



Flow fluctuations



Catchment Degradation



Invasive weeds



Excessive use of fertilizer and pesticides in water chestnut cultivation



Inflow of chemical rich agricultural residue

Species richness

300 Birds

40 Fishes

10 Mammals

Species of global conservation significance

Notable	Critically endangered	Endangered	Vulnerable
Sarus Crane, Indian Skimmer, Smooth-coated Otter and Swamp Deer, Greylag Goose, Bar-headed Goose	Gharial	Indian Hog Deer, Indian Narrow Headed Softshell Turtle, Steppe Eagle, Indian Skimmer, Black-bellied Tern	Marsh Crocodile, Lesser White Fronted Goose, Tawny Eagle, Common Pochard

Compilation team

“

Overall direction

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Ms Manju Pandey, Joint Secretary, MoEFCC

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Wetlands Division, MoEFCC

Ms Rita Khanna, Director

Mr Chandan Singh, Joint Director

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Mr Suresh Babu

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Mr Yaiphaba Meetei Akoijam

Dr Abhishek Bhatnagar

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Dr Krishna Raj

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Mr Dhruv Verma

Mr Kamal Dalakoti

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Mr Ravindra Singh

Ms Shambhavi Krishna

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