# Ramsar Information Sheet

Published on 24 March 2025

# Nigeria

## Ebute Oni coastal Wetland


| | |
|---|---|
| Designation date | 1 March 2024 |
| Site number | 2564 |
| Coordinates | 06°33'37"N 04°13'40"E |
| Area | 102,60 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

Ebute Oni Coastal Wetland is located in Ijebu Waterside Local government Area in Ogun State, Nigeria. It has a coastline on the bight of Benin and borders the Lagos Lagoon. The area measures 53,780 hectares. It is a coastal mangrove wetland which comprises of marshes, waterlogged and swampy environment. It supports a wide range of fish species, migratory and resident water birds like waterfowls, heron, egret, falcons, eagles and reptile species. The site hosts a wide range of fishing activities which are orchestrated by the presence of some rare aquatic mammal and Pisces species such as sea cow (Hydrodamalis gigas), shark fish (Sclechimorpha), eels (Anguilia anguilia), Crabs (Uca tangeri and Potamonautes sidneyi) and water turtles (Chelonia mydas). Likewise, some site attraction in these wetlands include some large animal species which depend on these wetlands for their survival and they include forest warthog, Gorilla, Bushbuck, Monkeys, Python, Crocodiles, Water fowls and migratory bird species that flock to the site on seasonal bases. Some notable rural population within and around the wetlands engage in livelihood systems involving fishing, exploitation of natural resources and farming in the environment.
Like many coastal wetlands worldwide, Ebute Oni faces threats such as pollution, habitat destruction due to urbanization, overfishing, and climate change impacts like sea-level rise.
Despite the ecological significance and biodiversity of the Ebute Oni Coastal Wetland in Ogun State, Nigeria, it currently lacks a comprehensive management plan to address the various threats it faces, including pollution, habitat destruction, overfishing, and the impacts of climate change.

# 2 - Data & location

## 2.1 - Formal data

### 2.1.1 - Name and address of the compiler of this RIS

#### Responsible compiler

Institution/agency: Federal Ministry of Environment, Nigeria

Postal address: Federal Department of Forestry,
Plot 393/394 Augustus Aikhomu Way, Utako District, PMB 468, Garki, Abuja, Nigeria

#### National Ramsar Administrative Authority

Institution/agency: Federal Ministry of Environment, Nigeria

Postal address: Federal Department of Forestry,
Plot 393/394 Augustus Aikhomu Way, Utako District, PMB 468, Garki, Abuja, Nigeria

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

From year: 2023

To year: 2023

### 2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish): Ebute Oni coastal Wetland

Unofficial name (optional): Ebute Oni

## 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 Ebute Oni Coastal Wetland, located at latitude 6°32'0" N and longitude 4°14'0" E in Oni, Ijebu Waterside, Ogun State, Nigeria, is a significant ecological area defined by its low-lying coastal landscape, generally below 30 meters above sea level. The boundary is shaped by natural topography, following the coastline, water bodies, and adjacent dense tropical vegetation that includes mangroves and coastal rainforests. These natural features create a rich habitat that supports diverse flora like ferns, sedges, and various mangrove species, as well as fauna such as aquatic birds and fish, which are integral to the area's biodiversity.

While the wetland does not formally overlap with any other designated protected area, it forms part of a broader ecosystem that supports conservation goals and provides connectivity with nearby ecological areas. The site's boundaries remain within Nigeria's national jurisdiction and do not cross any international borders. The coastal topography and high-water marks are key natural delineators for the site, ensuring that the boundary encompasses the wetland's essential habitats and hydrological features.

The boundary was defined using a combination of remote sensing imagery and field surveys, with a GIS-based approach to accurately capture the site's topographic and ecological characteristics. High-resolution satellite data were used to map the wetland, focusing on coastal contours and vegetation that define the transition between land and water. Field validation was performed to verify the accuracy of the boundary in reflecting the wetland's ecological and hydrological dynamics.

The delineation of the boundary was chosen to protect the integrity of the wetland as an interconnected ecosystem. By including critical habitats and the adjacent vegetation, the boundary ensures the preservation of the area's biodiversity and supports coastal resilience. These natural markers, particularly the high-water line, were chosen to ensure the wetland's ecological processes and unique habitat structure are fully represented, emphasizing the site's value for biodiversity conservation and as a buffer against coastal erosion.

### 2.2.2 - General location

a) In which large administrative region does the site lie? Ijebu Waterside Local Government Area

b) What is the nearest town or population centre? Ijebu Waterside

### 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): 102.6

Area, in hectares (ha) as calculated from GIS boundaries: 102.615

### 2.2.5 - Biogeography

Biogeographic regions

| Regionalisation scheme(s) | Biogeographic region |
|---|---|
| Marine Ecoregions of the World (MEOW) | Marine and Coastal Wetland |

Other biogeographic regionalisation scheme

The wetland is located on Latitude 6o32' 16.7" N and Longitude 4o13' 15.8'' E (Figure 1 and 2). The site is located about 110 km to Lagos. Geologically, the wetland area lies within a transition zone between the Precambrian Basement Complex of Southwestern Nigeria and the Cretaceous sediments of the Abeokuta Group in the eastern part of the Dahomey basin. The Basement Complex is dominant in the northeastern part and typically exposed rock units are Biotite Granite Gneiss; Biotite hornblende gneiss and Migmatite gneiss with varying degrees of fracturing.
According Jones and Hockey (1964), Omatsola and Adegoke (1980), Agagu (1985) and Akinade and Olisa (2014), the Dahomey Basin is filled with Cretaceous-Jurassic sediments which were derived from different sources (clastic, lacustrine, and marine) due to series of marine transgression and regressions.

# 3 - Why is the Site important?

## 3.1 - Ramsar Criteria and their justification

☑ Criterion 1: Representative, rare or unique natural or near-natural wetland types

| | |
|---|---|
| Hydrological services provided | Ebute Oni Coastal Wetland is important for flood protection and hydrological regime control. It serves as a point for wildlife food and habitat. It filters chemicals and sediments out of water before the water is discharged into the ocean. |
| Other ecosystem services provided | Ebute Oni Coastal Wetland is also a recreational area for tourists. The indigenous people have several festivals that are held annually . these festivals are frequented by tourists and indigenes. The site is also used for recreational fishing and hunting. The site is also big enough for commercial fisheries and the natives are known to practice artisanal fisheries. The site has a mangrove coastal wetland ecosystems that sequesters and stores large amounts of carbon due to its rapid growth rate and slow decomposition rate. |
| Other reasons | The water way on the wetland are navigable and are used for navigation to the bordering communities. It also serves as a source of revenue and micro climate. |

☑ Criterion 2 : Rare species and threatened ecological communities

☑ Criterion 3 : Biological diversity

Justification

The wetland is a typical representative example of a natural wetland with the characteristic of the coastal swamp biogeographical region. It is repository of diverse flora and fauna endemic to both the coastal and swamp wetland in a single limited location. The flora composition of the site includes multipurpose plant species which are used for both food and medicinal purpose to the rural population around the wetlands. These plant species include Raphia hookeri, Arthocleista vogeli, Aframomum sceptrum, Bambusa vilgaris, Ceratopteris pterdoides (Waterfern) Nauclea diderrichii, Mitrgyna ciliata, Rhizophora racemosa, Avicenia nitida, Sterculia oblonga, Harungana madagascariensis, Pycnanthus angolensis and Ficus thompsonii. Also, mangrove palm (Nypa fruticans), Elaeis guineense (oil palm) and grass species like Bracharia mutica, Leersia haxandra, Polygonum senegalense, Heliotropium indicum were abundant which are of great importance to the survival and wellbeing of the fauna in this environment. Sedge species prominent in the ecosystem include Cyperus papyrus, Cyperus difformis, Cyperus involucratus and Cyperus squarrosus which provide materials for bird nesting and plankton for aquatic lives in this habitat. The water weeds common in the site were Nymphaea lotus, Pistia stratiotes, Hydrilla vercitillata and Eichhornia crassipes which supply abundant plankton for fishes and other aquatic animals in this wetland.

The wetland is a natural host to rare fauna species which are endemic to the site. Some of these species are Crocodiles (Crocodylus niloticus) and West Africa dwarf crocodile (Osteolaemus tetraspis), monitor lizards (Varanus niloticus), tortoises (Testudo graeca), terrapins and snake species like python (Python molurus). There are many species of toads (Buffo regularis) and frogs (Rana tigrina) as well as crabs (Potamenautes sidneyi and Uca tangeri) and mollusca species (Lymnaea stagnalis) on the site. The wetland is also noted for hosting rare aquatic mammal and pisces species such as the generally assumed extinct species called sea cow (Hydrodamalis gigas) is abundant in the site, Catfish (Clarias gariepinus), eels (Anguilia anguilia) and water turtles (Chelonia mydas). Likewise, some site attractions in these wetlands include some large animal species which depend on these wetlands for their survival and procreation. They include forest warthog (Phacochoerus africanus), Gorilla (Gorilla gorilla), Bushbuck (Tragelaphus scriptus), Antelope (Cephalophus dorsalis), Monkeys (Cercopithecus mona), Python (Python regius), Cobra (Naja melanoleuca) and watersnake (Nerodia sipedon). The wetland also hosted some species of migratory birds and water fowl such as Herons (Egretta ardesiaca), Woolly necked storks (Ciconia episcopus), white stork (Ciconia ciconia), water egrets (Egretta alba), Garganey (Anas querquedula), Little bittern (Isobrycus minutus), Knobbilled goose (Sarkidiornis melanotos), and many other bird species.

End year: 2023

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

| Phylum | Scientific name | Criterion 2 | Criterion 3 | Criterion 4 | IUCN Red List | CITES Appendix I | Other status | Justification |
|---|---|---|---|---|---|---|---|---|
| **Plantae** | | | | | | | | |
| TRACHEOPHYTA / MAGNOLIOPSIDA | *Lophira alata* | ☑ | ☑ | ☐ | VU | ☐ | | Vunerable Status on the IUCN List |
| TRACHEOPHYTA / MAGNOLIOPSIDA | *Mitragyna ledermannii* | ☐ | ☑ | ☐ | NT | ☐ | | the bark of the tree is used for its trypanosidal activity |
| TRACHEOPHYTA / MAGNOLIOPSIDA | *Nauclea diderrichii* | ☐ | ☑ | ☐ | NT | ☐ | | Near Threatened Status on the IUCN List |

Othe plant species of international importance include: Raphia hookeri, Arthocleista vogeli, Aframomum sceptrum, Bambusa vilgaris, Ceratopteris pterdoides (Waterfern) Nauclea diderrichii, Mitrgyna ciliata, Rhizophora racemosa, Avicenia nitida, Sterculia oblonga, Harungana madagascariensis, Pycnanthus angolensis and Ficus thompsonii. Also, mangrove palm (Nypa fruticans), Elaeis guineense (oil palm) and grass species like Bracharia mutica, Leersia haxandra, Polygonum senegalense, Heliotropium indicum were abundant which are of great importance to the survival and wellbeing of the fauna in this environment. Sedge species prominent in the ecosystem include Cyperus papyrus, Cyperus difformis, Cyperus involucratus and Cyperus squarrosus which provide materials for bird nesting and plankton for aquatic lives in this habitat. The water weeds common in the site were Nymphaea lotus, Pistia stratiotes, Hydrilla vercitillata and Eichhornia crassipes which supply abundant plankton for fishes and other aquatic animals in this wetland.

These plants and trees are useful for their medicinal properties and economic properties and their usefulness to the indigenous communities.

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

| Phylum | Scientific name | Species qualifies under criterion | | | | Species contributes under criterion | | | | Pop. Size | Period of pop. Est. | % occurrence 1) | IUCN Red List | CITES Appendix I | CMS Appendix I | Other Status | Justification |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2 | 4 | 6 | 9 | 3 | 5 | 7 | 8 | | | | | | | | |
| **Others** | | | | | | | | | | | | | | | | | |
| CHORDATA / REPTILIA | *Bitis gabonica* | ☑ | ☐ | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | | 2023 | 2.63 | VU | ☐ | ☐ | | Vulnerable species |
| CHORDATA / MAMMALIA | *Cercopithecus sclateri* | ☑ | ☐ | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | | 2023 | 18.42 | EN | ☐ | ☐ | | large population found at the site |
| CHORDATA / REPTILIA | *Chelonia mydas* | ☑ | ☐ | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | | 2023 | 2.63 | EN | ☑ | ☑ | | Endangered species |
| CHORDATA / MAMMALIA | *Enhydra lutris* | ☑ | ☐ | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | | 2023 | 2.63 | EN | ☑ | ☑ | | sighted at the site |
| CHORDATA / MAMMALIA | *Gorilla gorilla diehli* | ☑ | ☐ | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | | 2023 | 1.32 | CR | ☑ | ☐ | | This specie has been sited in the area |
| CHORDATA / MAMMALIA | *Hydrodamalis gigas* | ☐ | ☐ | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | | 2023 | 2.63 | EX | ☐ | ☐ | | This specie has been sited in this area |
| CHORDATA / REPTILIA | *Python molurus* | ☑ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 2023 | 1.32 | NT | ☑ | ☐ | | nests in this site |
| **Fish, Mollusc and Crustacea** | | | | | | | | | | | | | | | | | |
| CHORDATA / ACTINOPTERYGII | *Amia calva* | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 2023 | 2.99 | LC | ☐ | ☐ | | |
| CHORDATA / ACTINOPTERYGII | *Anguilla anguilla* | ☑ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 2023 | 2.99 | CR | ☐ | ☐ | | Critical species on the IUCN redlist |
| CHORDATA / ACTINOPTERYGII | *Clarias gariepinus* | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 2023 | 26.87 | LC | ☐ | ☐ | | |
| CHORDATA / ACTINOPTERYGII | *Gambusia holbrooki* | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 2023 | 17.91 | LC | ☐ | ☐ | | |
| CHORDATA / ACTINOPTERYGII | *Ictalurus punctatus* | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 2023 | 8.96 | LC | ☐ | ☐ | | |
| CHORDATA / ACTINOPTERYGII | *Labeo rohita* | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 2023 | | LC | ☐ | ☐ | | |
| CHORDATA / ACTINOPTERYGII | *Micropogonias undulatus* | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 2023 | 4.48 | LC | ☐ | ☐ | | |
| CHORDATA / ACTINOPTERYGII | *Micropterus floridanus* | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 2023 | 5.97 | | ☐ | ☐ | | |
| CHORDATA / ELASMOBRANCHII | *Squalus acanthias* | ☑ | ☐ | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | | 2023 | 5.97 | VU | ☐ | ☐ | | Listed as vulnerable species on the IUCN |
| **Birds** | | | | | | | | | | | | | | | | | |
| CHORDATA / AVES | *Acrocephalus schoenobaenus* | ☐ | ☐ | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | | 2023 | 11.76 | LC | ☐ | ☐ | | Afrotropical - Palearctic migrants |
| CHORDATA / AVES | *Anas platyrhynchos* | ☐ | ☐ | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | | 2023 | 4.41 | LC | ☐ | ☐ | | Intra African Migrants |

| Phylum | Scientific name | Species qualifies under criterion | | | | Species contributes under criterion | | | | Pop. Size | Period of pop. Est. | % occurrence 1) | IUCN Red List | CITES Appendix I | CMS Appendix I | Other Status | Justification |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2 | 4 | 6 | 9 | 3 | 5 | 7 | 8 | | | | | | | | |
| CHORDATA / AVES | *Ardea herodias herodias* | ☐ | ☐ | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | | 2023 | 4.41 | | ☐ | ☐ | | Afrotropical - Palearctic migrants |
| CHORDATA / AVES | *Bubulcus ibis* | ☐ | ☐ | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | | 2023 | 7.35 | LC | ☐ | ☐ | | Native to Sub-Saharan Africa |
| CHORDATA / AVES | *Ceyx pictus* | ☐ | ☐ | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | | 2023 | 5.88 | LC | ☐ | ☐ | | Intra African migrants and Breeding Visitor |
| CHORDATA / AVES | *Ciconia ciconia* | ☐ | ☐ | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | | 2023 | 1.47 | LC | ☐ | ☐ | | Afrotropical - Palearctic migrants |
| CHORDATA / AVES | *Dendrocopus major* | ☐ | ☐ | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | | 2023 | 2.94 | | ☐ | ☐ | | Intra African Migrants |
| CHORDATA / AVES | *Milvus migrans* | ☐ | ☐ | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | | 2023 | 5.88 | LC | ☐ | ☐ | | Afrotropical - Palearctic migrants |
| CHORDATA / AVES | *Motacilla flava* | ☐ | ☐ | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | | 2023 | 7.35 | LC | ☐ | ☐ | | Intra African migrants |

*1) Percentage of the total biogeographic population at the site*

The site regularly supports over 80,000 birds which consist of different species such as waterfowls, egrets, little bittens, eagles, doves and stork species. The wetland has almost become an island in the environment that hosted and sustained diverse biodiversity. Hence, conservation and conscientious management of this and other wetlands in Nigeria are advocated in order to prevent biodiversity loss and corresponding forfeiture of all the ecosystem services that humans derive from them. The wetland also hosted some species of migratory birds and water fowl such as Herons (Egretta ardesiaca), Woolly necked storks (Ciconia episcopus), white stork (Ciconia ciconia), water egrets (Egretta alba), Garganey (Anas querquedula), Little bittern (Isobrycus minutus), Knobbilled goose (Sarkidiornis melanotos), and many other bird species.

The wetland is a natural host to rare fauna species which are endemic to the site. Some of these species are Crocodiles (Crocodylus niloticus) and West Africa dwarf crocodile (Osteolaemus tetraspis), monitor lizards (Varanus niloticus), tortoises (Testudo graeca), terrapins and snake species like python (Python molurus). There are many species of toads (Buffo regularis) and frogs (Rana tigrina) as well as crabs (Potamenautes sidneyi and Uca tangeri) and mollusca species (Lymnaea stagnalis) on the site. The wetland is also noted for hosting rare aquatic mammal and pisces species such as the generally assumed extinct species called sea cow (Hydrodamalis gigas) is abundant in the site, Catfish (Clarias gariepinus), eels (Anguilia anguilia) and water turtles (Chelonia mydas). Likewise, some site attractions in these wetlands include some large animal species which depend on these wetlands for their survival and procreation. They include forest warthog (Phacochoerus africanus), Gorilla (Gorilla gorilla), Bushbuck (Tragelaphus scriptus), Antelope (Cephalophus dorsalis), Monkeys (Cercopithecus mona), Python (Python regius), Cobra (Naja melanoleuca) and watersnake (Nerodia sipedon).

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

| Name of ecological community | Community qualifies under Criterion 2? | Description | Justification |
|---|---|---|---|
| Raffia Palm community (Rafia hookeri) | ☐ | The Fresh water Swampy area of the site | cultivated for their commercial value to the indigenous communities |
| Nypa Palm (Nipa fruticans) | ☐ | Can be found in the mangrove areas of the site | Nypa palm is an invasive species in Nigeria probably from Asia or oceania. It has a very high density. The country is in the process of using nipa commercially. |
| African Oil Palm (Elaeis guineensis) | ☐ | An African Oil palm tree crop community can be found in the lowland areas of the site. | The Oil palm is useful as a cash crop for the indigenous community |
| Pistia Stratiotes, Hydrilla vercitillata, Nymphaea lotus, and Eichhornia crassipes | ☑ | The aquatic plant communities are threatened by the Water Hyacinth invasive species, which is fast growing and covering vast areas along the coast line | Eichhornia crassipes (Water Hyacinth) is an invasive species that is threatening the ecological community of naturally occurring aquatic plants in this area |

Optional text box to provide further information

Water Hyacinth is a notoriously dangerous invasive species in Nigeria. Apart from competing for space with indigenous plants it also blocks water ways and damages boat propellers. It has also been known to paralyze the fishing industry in the area (Akinyemiju 1987).

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

## 4.1 - Ecological character

The wetland is characterized with vegetated areas with vast open water landscape. The vegetation is typically a fresh water swamp forest with abundant distribution of Raffia palms and Nypa palms consisting of Raffia hookeri,Nypa fruticans, Elaeis guineensis and tree species like Mitragyna ciliata, Nauclea diderrichii, Alstonia boonei, Harungana madagascariensis with floating and submerged weed and herb species. The most abundant floating weeds are Cyperus spp (sedges), water ferns (Ceratopteris cornuta ), water lettuce (Pista sratiotes) and the invasive weed called water hyacinth (Eicchornea crassipes). The most common submerged weed species in the wetlands is Elodea canadensis.
The wetlands formation comprises majorly of clays with white sand and silty horizons. The vegetation within the catchment area is characterized notably by raffia palms (Rafia hookeri) with some economic tree species like Mitragyna ciliata, Alstonia boonei, Nauclea diderrichii, Pycnanthus angolensis, Harungana madagascariensis and Arthocleista vogeli. The herb species that colonized the area are mostly sedge weeds (Cyperus spp), water ferns (Nymphaea spp), water lettuce (Pistia stratiotes) and water hyacinth (Eicchornea crassipes) among others. The dominant aquatic grass species in the catchment area is the torpedo grass (Panicum repens) and species of narrow and broadleafed cumbungi. Some species of submerged aquatic weeds like Elodea canadensis are also abundant in the area.

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

Marine or coastal wetlands

| Wetland types (code and name) | Local name | Ranking of extent (1: greatest - 4: least) | Area (ha) of wetland type | Justification of Criterion 1 |
|---|---|---|---|---|
| I: Intertidal forested wetlands | | 2 | | Representative |
| J: Coastal brackish / saline lagoons | | 1 | | Representative |
| K: Coastal freshwater lagoons | | 3 | | Representative |

## 4.3 - Biological components

### 4.3.1 - Plant species

Other noteworthy plant species

| Phylum | Scientific name | Position in range / endemism / other |
|---|---|---|
| TRACHEOPHYTA/LILIOPSIDA | *Cyperus papyrus* | Endemic |
| TRACHEOPHYTA/LILIOPSIDA | *Elodea canadensis* | Endemic |
| TRACHEOPHYTA/LILIOPSIDA | *Nypa fruticans* | Endemic |
| TRACHEOPHYTA/LILIOPSIDA | *Panicum repens* | Endemic |
| TRACHEOPHYTA/LILIOPSIDA | *Raphia farinifera* | Endemic |
| TRACHEOPHYTA/MAGNOLIOPSIDA | *Rhizophora racemosa* | Endemic |

Invasive alien plant species

| Phylum | Scientific name | Impacts |
|---|---|---|
| TRACHEOPHYTA/LILIOPSIDA | *Eichhornia crassipes* | Actual (major impacts) |

Optional text box to provide further information

The characteristic of the vegetation is purely a fresh water swamp forest with clusters of Raffia palms (Raffia hookeri), economic tree species and other aquatic herb species. However, the noteworthy flora species in the wetlands include tree species such as Mitragyna ciliata, Alstonia boonei, Nauclea diderrichii. Rhizophira mangle, Harungana madagascariensis, Arthocleista vogelii and pycnanthus angolensis. The most abundant palm species on the site were Raffia hookeri, Nypa fruticans and Elaeis guineensis. While the common herb species in the landscape were Cyperus papyrus, Cyperus involucratus, Eichhornea crassipes, Pistia stratiotes, Elodea canadensis, Impomea involucrata and Panicum repens among others

### 4.3.2 - Animal species

Other noteworthy animal species

| Phylum | Scientific name | Pop. size | Period of pop. est. | % occurrence | Position in range /endemism/other |
|---|---|---|---|---|---|
| CHORDATA/MAMMALIA | *Crocidura olivieri* | | 2023 | 5.26 | endemic |
| CHORDATA/REPTILIA | *Crocodylus niloticus niloticus* | | | | |
| CHORDATA/MAMMALIA | *Felis silvestris* | | 2023 | 2.63 | Endemic |
| CHORDATA/MAMMALIA | *Phacochoerus africanus* | | 2023 | 2.63 | endemic |
| CHORDATA/MAMMALIA | *Phoca vitulina* | | 2023 | 2.63 | migratory |
| CHORDATA/MAMMALIA | *Sciurus vulgaris* | | 2023 | 7.89 | |
| CHORDATA/MAMMALIA | *Thryonomys swinderianus* | | 2023 | 3.95 | Endemic |
| CHORDATA/MAMMALIA | *Tragelaphus scriptus sylvaticus* | | 2023 | 5.26 | Endemic |

Optional text box to provide further information

The assumed extinct fauna species commonly called Sea cow (Hydrodamalis gigas) is abundant in this wetlands. Other common species in the site are Sea otter (Enhydra lutris), Mona monkey (Cercopithecus mona), Monitor lizard (Varanus niloticus), water turtle (Chelonia mydas), Eels (Anguilia anguilia), Crabs (Potamonautes sidneyi), Frogs (Rana tigrina), water snail (Lymnaea stagnalis), water fowl such as Grey heron (Ardea cinerea), Pelican (Pelecanusonocrotalus, Pelecanusrufescens), Yellow billed stork (Mycteria ibis), Dove (Columba livia), Knobbilled goose (Sarkidiornis melanotos), African Grey Hornbill (Tockus nasutus), Egret (Bubulous ibis), Black kite (Milvus migrans), African pygmy Kingfisher (Ispidina picta), Sedge warbler (Acrocephalus schoenobaemus), African reed warbler (Acrocephalus baoticatus), Yellow wagtail (Motacilla flava) and White faced whistling duck (Dendrocygna viduata). Other animals common in the landscape includes Grass cutter (Thryonomys swindarinus), Crocodiles (Crocodylus niloticus), African giant shrew (Crocidura elivieri), Forest warthog (Phacochoerus africanus), Python (Python sebae),and Cobra (Naja melanoleuca) are readily found in this wetlands (Appendix 2).

## 4.4 - Physical components

### 4.4.1 - Climate

| Climatic region | Subregion |
|---|---|
| A: Tropical humid climate | Am: Tropical monsoonal (Short dry season; heavy monsoonal rains in other months) |

No changing climatic conditions are affecting the site

### 4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres): 2

a) Maximum elevation above sea level (in metres): 8

- [ ] 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
- [x] 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.

The site has a coastline on the bight of Benin and also borders Lagos in the coastal area of the Lagos Lagoon which lies between the Atlantic ocean and Lagos state.

### 4.4.3 - Soil

- [ ] Mineral
- [x] 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 | |
|---|---|---|
| Marine water | ☐ | No change |

Water destination

| Presence? | |
|---|---|
| To downstream catchment | No change |
| Marine | No change |

Stability of water regime

| Presence? | |
|---|---|
| Water levels largely stable | No change |

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

Ebute Oni wetlands serve as natural reservoir where most of the rivers in the environment emptied their water contents. The phenomena resulted in the overlapping of river courses which causes the formation of swampy and waterlogged environment with large water bodies. The water borders with the Lagos lagoon which make the water navigable to lagos and other parts that borders the wetlands in the state. The temperature of the wetland water was 25.60±1.23 and Nitrate 0.40±0.03. Other qualities of the wetland water were presented in Table 1. The muldy water is characterized with brown colour and some floating and submerged aquatic weed species. The studies conducted indicated that the wetlands were not seasonal and they sustained the lives of the people by providing water for domestic uses and irrigation activities. It also provides a sustainable landscape which serves as life-support for numerous flora and fauna in the environment. The water quality indicators at Ebute Oni coastal wetlands were found to range within acceptable limits for tropical water bodies. The parameters of the wetland water quality assessed with the results were presented in Table 1.
Table 1: Water quality parameters of Ebute Oni coastal wetlands
Parameters Values
Temperature (oc) 25.60±1.23
Dissolved Oxygen(mg/L) 7.80±1.02
pH 8.50±0.20
Salinity (ppt) 4.55±0.36
Turbidity (NTU) 2.12±1.78
Conductivity (µs/cm) 5.67±2.42
Phosphate (mg/L) 0.34±0.06
Nitrate (mg/L) 0.40±0.03
Nitrite (mg/L) 0.24±0.05
Ammonia (mg/L) 0.08±0.02
Phosphorus (mg/L) 3.02±0.01

### 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 ☑

(ECD) Water temperature: 25.60 +_ 1.23

### 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 ☐

(ECD) Water conductivity: 5.

### 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 ○

## 4.5 - Ecosystem services

### 4.5.1 - Ecosystem services/benefits

Provisioning Services

| Ecosystem service | Examples | Importance/Extent/Significance |
|---|---|---|
| Food for humans | Sustenance for humans (e.g., fish, molluscs, grains) | Medium |

Regulating Services

| Ecosystem service | Examples | Importance/Extent/Significance |
|---|---|---|
| Maintenance of hydrological regimes | Groundwater recharge and discharge | Medium |
| Pollution control and detoxification | Water purification/waste treatment or dilution | Medium |
| Climate regulation | Regulation of greenhouse gases, temperature, precipitation and other climactic processes | Medium |

Cultural Services

| Ecosystem service | Examples | Importance/Extent/Significance |
|---|---|---|
| Recreation and tourism | Picnics, outings, touring | Medium |
| Recreation and tourism | Nature observation and nature-based tourism | Medium |

Within the site: 100s

Outside the site: 1000s

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

### 4.5.2 - Social and cultural values

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

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

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

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

<no data available>

## 4.6 - Ecological processes

<no data available>

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

## 5.1 - Land tenure and responsibilities (Managers)

### 5.1.1 - Land tenure/ownership

Public ownership

| Category | Within the Ramsar Site | In the surrounding area |
|---|---|---|
| National/Federal government | ☑ | ☑ |

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

a) within the Ramsar site:
The pattern of land tenure in the area was a mixture of customary and government holding. All lands belonged to resident communities, under the control of the families and native authority (Council of Chiefs and Oba) with reference to historical annexation and approval of the community leader. However, the Land-use Decree of 1978, vested the ownership of all lands in the nation on the Federal Government. In reality, the government owns all the lands in the country. However, the lands belong to the local community until it is formally expropriated for actual use by the government.
b) in the surrounding area:
The Federal Land Use acts provided that the government has the power and right to dispossess families or individuals of land especially if needed for public use. This is in line with the provisions that all land belongs to the Federal Government. This provisions also apply to exploitation of natural resources such as biodiversity.

### 5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site:
Federal Ministry of Environment
Federal Department of Forestry

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

Postal address:
Federal Department of Forestry,
Plot 393/394 Augustus Aikhomu Way,
Utako, Abuja
Nigeria

E-mail address:
labaranahmed@gmail.com

## 5.2 - Ecological character threats and responses (Management)

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

Agriculture and aquaculture

| Factors adversely affecting site | Actual threat | Potential threat | Within the site | In the surrounding area |
|---|---|---|---|---|
| Annual and perennial non-timber crops | High impact | High impact | ☑ | ☐ |
| Marine and freshwater aquaculture | High impact | High impact | ☑ | ☑ |

Biological resource use

| Factors adversely affecting site | Actual threat | Potential threat | Within the site | In the surrounding area |
|---|---|---|---|---|
| Hunting and collecting terrestrial animals | Medium impact | Medium impact | ☑ | ☐ |
| Gathering terrestrial plants | Low impact | Low impact | ☑ | ☑ |
| Fishing and harvesting aquatic resources | High impact | High impact | ☑ | ☐ |

Human intrusions and disturbance

| Factors adversely affecting site | Actual threat | Potential threat | Within the site | In the surrounding area |
|---|---|---|---|---|
| Recreational and tourism activities | High impact | High impact | ☑ | ☑ |

Natural system modifications

| Factors adversely affecting site | Actual threat | Potential threat | Within the site | In the surrounding area |
|---|---|---|---|---|
| Vegetation clearance/ land conversion | Medium impact | 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 | High impact | High impact | ☑ | ☑ |

Pollution

| Factors adversely affecting site | Actual threat | Potential threat | Within the site | In the surrounding area |
|---|---|---|---|---|
| Household sewage, urban waste water | Medium impact | Medium impact | ☐ | ☑ |
| Agricultural and forestry effluents | High impact | High impact | ☐ | ☑ |
| Garbage and solid waste | Medium impact | Medium impact | ☐ | ☑ |

Please describe any other threats (optional):

Only a fractional part of the wetlands site is fished throughout the year. However, other forms of activities include rice farming, skeletal water transportation and wildlife hunting are carried out in the site.
According to 2016 census, there are 43,360 people living in nearby small villages such as Ajelanwa, Alo, Demolu, Ebute Oni, Idata Akila, Igele, Imeki, Itomosafeso, Iwopin and Oribu to mention few. Most of the rural people engage in fishing, while others occupied themselves with rice farming, hunting and water transportation. The rural communities generally use the water for drinking and other domestic purposes. It is presumed that if this wetland could be approved and upgraded to a Ramsar site of international importance, this rich biodiversity site will be preserved and conserved for posterity, research and education, climate change mitigation as well as for the benefit of mankind in perpetuity.

Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

Fishing, animal hunting and collection of natural resources especially fishing and hunting for the endangered species called Sea cow and other wildlife species like mona monkey, forest warthog and monitor lizards are rampant in the site.

## 5.2.2 - Legal conservation status

National legal designations

| Designation type | Name of area | Online information url | Overlap with Ramsar Site |
|---|---|---|---|
| government wetland resource (proposed) | | | 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

Habitat

| Measures | Status |
|---|---|
| Land conversion controls | Proposed |
| Catchment management initiatives/controls | Proposed |

Species

| Measures | Status |
|---|---|
| Threatened/rare species management programmes | Proposed |

Human Activities

| Measures | Status |
|---|---|
| Fisheries management/regulation | Proposed |
| Communication, education, and participation and awareness activities | Proposed |

Other:

The resources in the wetland may become threatened if nothing is done to regulate the rate of exploitation at the site. Hence, management strategies must be applied to conserve the natural resources in the wetlands. It is imperative to develop an action plan and policy for effective management of this wetland to regulate human activities on the site. The wetlands have stable natural status as a coastal wetlands site which covers vast area of land in the area. It is not subject to seasonality and water table in the wetlands is ever high all through the year. However, the gradual colonization of the wetland water ways by the invasive aquatic weed species called water hyacinth (Eichhornea crassipes), Elodea canadensis and other aquatic grass and sedge species like Panicum repens, Cyperus papyrus cannot be over emphasized. The invasion of these plants might have being aggravated by human activities which are on the rise in the site. However, the designation of these wetlands as Ramsar site of international importance will attract and direct the stakeholders' attention to the management and conservation of the site as it has become an island of natural resources in the landscape of the state.

### 5.2.5 - Management planning

Is there a site-specific management plan for the site? No

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 ◉

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

NA

### 5.2.6 - Planning for restoration

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

### 5.2.7 - Monitoring implemented or proposed

| Monitoring | Status |
|---|---|
| Birds | |
| Animal species (please specify) | |

# 6 - Additional material

## 6.1 - Additional reports and documents

### 6.1.1 - Bibliographical references

Akinyemiju, O.A. (1987). Invasion of Nigerian water by water hyacinth. J. aquat. plant manage. 25: 24-26.
Akinade, S. O and Olisa, O (2014) Geochemical Study of Soils, Road Dust and Stream Sediments around Ijebu-Ode, Southwestern, Nigeria. Journal Environmental Analytical Toxicology 4: 229 - 238. doi: 10.4172/2161-0525.1000229

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Omatsola, M. E and Adegoke, O. S (1980): Tectonic evolution of the Dahomey basin
and its implication on the opening of the north and south Atlantic block. 26th
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Agagu, O. K (1985): A Geological guide to bituminous sediments in southwestern
Nigeria. Unpublished report, Department of Geology, University of Ibadan 18.

Keay, R.W.J. (1959a). An outline of Nigerian vegetation. Lagos: Government Printer
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Nwankwoala, H.O. and Omunguye, M.L. (2012) Geophysical Investigation for Ground Water in Boirikiri and Eastern Bye-Pass Areas of Port Harcourt. The Pacific Journal of Science and Technology, 14, 524-535.
Ringim, A.S. et al. (2017). A comparative study of species diversity of migrant birds between protected and unprotected areas of the Hadeija-Nguru wetlands, Nigeria. Tanz.J.Sci. Vol. 43, Issue 1. pp. 109-120.

Verones, F., Saner, D., Pfster, S, and Baisero, D. (2013). Effect of Consumptive Water Use on Biodiversity in Wetlands of Intrernational Importance. Environmental Science and Technology 47 (21): 116 - 134.

Adotey JP, Adukpo GE, Opoku Boahen Y, Armah FA. A Review of the Ethnobotany and Pharmacological Importance of Alstonia boonei De Wild (Apocynaceae). ISRN Pharmacol. 2012;2012:587160. doi: 10.5402/2012/587160. Epub 2012 Jul 30. PMID: 22900200; PMCID: PMC3413980.

Hamilton, L. S., & Dennis H. Murphy. (1988). Use and Management of Nipa Palm (Nypa fruticans, Arecaceae): A Review. Economic Botany, 42(2), 206–213. http://www.jstor.org/stable/4255066

Adams, Damian C. & Lee, Donna J., 2005. "Bioeconomic Modeling of the Invasive Aquatic Plants Hydrilla verticillata (hydrilla), Eichhornia crassipes (water hyacinth), and Pistia stratiotes (water lettuce) and their impacts on angler effort on," 2005 Annual meeting, July 24-27, Providence, RI 19146, American Agricultural Economics Association (New Name 2008: Agricultural and Applied Economics Association).

### 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
<no file available>

vi. other published literature
<no file available>

<no data available>

### 6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:

Ebute Oni Coastal Wetland ( *Olomo Ayokunle, 26-01-2023* )

Ebute Oni Coastal Wetland ( *Olomo Ayokunle, 26-01-2023* )

Ebute Oni Coastal Wetland ( *Olomo Ayokunle, 26-01-2023* )

Ebute Oni Coastal wetland ( *Dr. Jeminiwa, 26-01-2023* )

### 6.1.4 - Designation letter and related data

Designation letter
<1 file(s) uploaded>

Date of Designation 2024-03-01