



# Ramsar Information Sheet

Published on 8 May 2024

Update version, previously published on : 14 August 2015

## Ghana

### Sakumo Ramsar Site



Designation date	14 August 1992
Site number	565
Coordinates	05°38'23"N 00°02'27"W
Area	1 364,35 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

<p>The site is located between the cities of Tema and Accra and is bordered to the south by the shoreline of the sea (Gulf of Guinea), to the north by the International N1 Highway linking to Togo and city road from Ashaiman to the Tema Beach Road. Being an urban wetland it is surrounded and filled with heavy urban development and bordered to the east by the Industrial city of Tema. The total catchment area is about 27,634 ha. Land use in the catchment was predominantly used for rice, cassava and vegetable cultivation but has now seen rapid urban development due to its proximity to the industrial zone.</p>
<p>The Site itself is about 1,365 ha and consists of brackish lagoon water with a narrow connection to the sea. The lagoon is fed mainly by two rivers; Gbagbla-Ankonu and Mamahuma and has a surface area of about 350 ha and a surrounding flood plain of about 700 ha and is separated from the sea by a narrow dune, on which the Accra–Tema road is built, and is connected to the sea by a small, non-functional (permanently open) sluice, constructed to prevent flooding of the coastal road.</p>
<p>There are also areas of freshwater marsh and coastal savanna grassland, the latter composed mainly of <i>Sesuvium portulacastrum</i> with various grass species associations including; <i>Blutaparon vermiculare</i>, <i>Cyperus articulatus</i>, <i>Paspalum vaginatum</i> and <i>Typha domingensis</i>. A commonly known invasive species <i>Eichhornia crassipes</i>, has taken over parts of the lagoon. Other species of herpetofauna including <i>Eichhornia crassipes</i>, <i>Bitis arietans arietans</i> and <i>Varanus niloticus</i>. More than sixty bird species have also been identified including six internationally important species.</p>
<p>The Site is rated the third most important for seashore birds on the Ghana coast and provides habitat support as nesting and breeding grounds for several birds. The lagoon serves as a source of fish for the local community fishermen and water for vegetable crop farming. The site also provides fuelwood. Other ecosystem services including; Flood hazard regulation, Storm hazard regulation, Water purification and Salinity regulation among others.</p>
<p>The need for management interventions arises from the degradation effects of rapid urbanization in the catchment area.</p>

## 2 - Data & location

### 2.1 - Formal data

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

##### Responsible compiler

Institution/agency	Wildlife Division (Forestry Commission)
Postal address	Ministries Post Office P. O. Box MB.239, Accra

##### National Ramsar Administrative Authority

Institution/agency	Wildlife Division, Forestry Commission
Postal address	Ministries Post Office P. O. Box MB.239, Accra

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

From year	1990
To year	2023

#### 2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Sakumo Ramsar Site
Unofficial name (optional)	Sakumo Lagoon

#### 2.1.4 - Changes to the boundaries and area of the Site since its designation or earlier update

(Update) A. Changes to Site boundary	Yes <input type="radio"/> No <input checked="" type="radio"/>
(Update) B. Changes to Site area	No change to area
(Update) For secretariat only: This update is an extension	<input type="checkbox"/>

#### 2.1.5 - Changes to the ecological character of the Site

(Update) 6b i. Has the ecological character of the Ramsar Site (including applicable Criteria) changed since the previous RIS?	No
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## 2.2 - Site location

### 2.2.1 - Defining the Site boundaries

#### b) Digital map/image

<3 file(s) uploaded>

Former maps	0
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#### Boundaries description

The Site boundary is delineated, surveyed, pillared and map out as a nature (wetland) conservation area in fulfillment of Ghana's commitment to the ratification of the Ramsar Convention on Wetlands. The southern boundary follows the shoreline of the sea (Gulf of Guinea). The rest of the boundary line follows a catchment boundary and limits defined by planning scheme of the Planning Authority. The northern boundary is bordered by the International N1 Highway linking to Togo and city road from Ashaiman to the Tema Beach Road. Being an urban wetland it is surrounded and filled with heavy urban development and bordered to the east by the Industrial city of Tema.

### 2.2.2 - General location

a) In which large administrative region does the site lie?	Greater Accra Region
b) What is the nearest town or population centre?	Tema

### 2.2.3 - For wetlands on national boundaries only

a) Does the wetland extend onto the territory of one or more other countries?	Yes <input type="radio"/> No <input checked="" type="radio"/>
b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party?	Yes <input type="radio"/> No <input checked="" type="radio"/>

2.2.4 - Area of the Site

Official area, in hectares (ha):	1364.35
Area, in hectares (ha) as calculated from GIS boundaries	1366.801

2.2.5 - Biogeography

Biogeographic regions	
Regionalisation scheme(s)	Biogeographic region
Udvardy's Biogeographical Provinces	Afrotropical

### 3 - Why is the Site important?

#### 3.1 - Ramsar Criteria and their justification

<no data available>

<no data available>

##### ☒ Criterion 3 : Biological diversity

Justification

This site qualifies as a Key Biodiversity Area (KBA) of international significance that meets the thresholds for at least one criterion described in the Global Standard for the Identification of KBAs. It is situated north of the coastal road linking Accra and Tema, approximately 3 km west of Tema township. The size of the open lagoon varies from 100–350 ha depending on the season. The lagoon is separated from the sea by a narrow sand-dune, on which the Accra–Tema road is built, and is connected to the sea by a small, non-functional (permanently open) sluice, constructed to prevent flooding of the coastal road. Large portions of the lagoon dry up in the dry season, resulting in hyper-saline conditions. The flood-plain is periodically inundated during the rainy season and serve as reservoir for flood prevention. There are also areas of freshwater marsh and coastal savanna grassland, the latter composed mainly of *Sesuvium portulacastrum* with various grass species associations. Land-use in the catchment includes rice, cassava and vegetable cultivation. Over 80% of the seashore bird species recorded at Sakumo is accounted for by palaeartic migrants. Migrant birds are most abundant on the site during September to March/April . Resident birds recorded breeding on the site include Kittlitz's sand plover, collared pratincole, little tern, pied kingfisher, yellow throated longclaw, plain-backed pipit and black winged red bishop.

##### ☒ Criterion 4 : Support during critical life cycle stage or in adverse conditions

Optional text box to provide further information

This site provides habitat support as nesting and breeding grounds for several birds including; Kittlitz's sand plover, collared pratincole, little tern, pied kingfisher, spur-winged lapwing, Senegal thicknee, yellow throated longclaw, plain-backed pipit and black winged red bishop. Also serve as wintering grounds for several migratory waterbirds.

##### ☒ Criterion 6 : >1% waterbird population

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

<no data available>

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

Phylum	Scientific name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
		2	4	6	9	3	5	7	8								
Others																	
CHORDATA/ REPTILIA	<i>Bitis arietans arietans</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ REPTILIA	<i>Varanus niloticus</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		
Birds																	
CHORDATA/ AVES	<i>Actitis hypoleucos</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	36	2020-2023		LC	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ AVES	<i>Actophilornis africanus</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	111	2020-2023		LC	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ AVES	<i>Anthus leucophrys</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		Site serves as nesting and breeding ground for species
CHORDATA/ AVES	<i>Ardea alba</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	72	2020-2023		LC	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ AVES	<i>Ardea cinerea</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15	2020-2023		LC	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ AVES	<i>Ardeola ralloides</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	34	2020-2023		LC	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ AVES	<i>Bubulcus ibis</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	157	2020-2023		LC	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ AVES	<i>Burhinus senegalensis</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		Site serves as nesting and breeding ground for species
CHORDATA/ AVES	<i>Ceryle rudis</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		Site serves as nesting and breeding ground for species
CHORDATA/ AVES	<i>Charadrius hiaticula</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	464	2020-2023		LC	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ AVES	<i>Charadrius pecuarius</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		Site serves as nesting and breeding ground for species
CHORDATA/ AVES	<i>Egretta ardesiaca</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	27	2020-2023		LC	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ AVES	<i>Egretta garzetta</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11	2020-2023		LC	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ AVES	<i>Euplectes hordeaceus</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		Site serves as nesting and breeding ground for species
CHORDATA/ AVES	<i>Glareola pratincola</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	392	2020-2023	1.96	LC	<input type="checkbox"/>	<input type="checkbox"/>		Site serves as nesting and breeding ground for species. Supports at least 1% of the pratincola, Western Europe & NW Africa/West Africa biogeographical population.
CHORDATA/ AVES	<i>Himantopus himantopus</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	195	2020-2023		LC	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ AVES	<i>Macronyx croceus</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		Site serves as nesting and breeding ground for species
CHORDATA/ AVES	<i>Tringa glareola</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	344	2020 - 2023		LC	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ AVES	<i>Vanellus senegallus</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	30	2020-2023		LC	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ AVES	<i>Vanellus spinosus</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	231	2020 - 2023		LC	<input type="checkbox"/>	<input type="checkbox"/>		Site serves as nesting and breeding ground for species

1) Percentage of the total biogeographic population at the site

Migrant birds begin to arrive on the site in late August, and their numbers peak in September-November. The birds start to leave the area at the onset of the dry season, when large sections of the lagoon dry up; by January, the bird population is drastically less than the autumn peak (Piersma & Niamoa-Baidu, 1995). These population estimates of waterbirds are however from IWC bird counts done in January 2020,2021,2022 and 2023.

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
Important Bird Area	<input type="checkbox"/>	Site is known for holding on a regular basis, >1% of a biogeographic population of a congregatory waterbird species. Site is known for holding, on a regular basis, > 20,000 waterbirds or >10,000 pairs of seabirds of one or more species.	IBA A4
Sakumo Ramsar Site	<input type="checkbox"/>	It may include seabird species not covered by Delaney and Scott (2002). Quantitative data are taken from a variety of published and unpublished sources.	

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

### 4.1 - Ecological character

Main habitats are the open lagoon, surrounding flood plains, freshwater marsh, and coastal savanna grasslands. Evidence of original rich mangrove vegetation, which has completely reduced by human interference with seawater-freshwater interchange; site receives heavy flood waters from surrounding catchment area before entry into the sea. The lagoon is fed mainly by two rivers; Gbagbla-Ankonu and Mamahuma and has a surface area of about 350 ha and a surrounding flood plain of about 700 ha and is separated from the sea by a narrow sand-dune, on which the Accra–Tema road is built, and is connected to the sea by a small, non-functional (permanently open) sluice, constructed to prevent flooding of the coastal road.

There are also areas of freshwater marsh and coastal savanna grassland, the latter composed mainly of *Sesuvium portulacastrum* with various grass species associations including: *Blutaparon vermiculare*, *Cyperus articulatus*, *Paspalum vaginatum* and *Typha domingensis*. A commonly known invasive species *Eichhornia crassipes*, has taken over parts of the lagoon. Other species of herpetofauna including *Eichhornia crassipes*, *Bitis arietans arietans* and *Varanus niloticus*. More than sixty bird species have also been identified including six internationally important species.

The Site is rated the third most important for seashore birds in Ghana coast and provides habitat support as nesting and breeding grounds for several birds. The lagoon serves as a source of fish for the local community fishermen and water for vegetable crop farming. Site also provides fuelwood. Other ecosystem services including: Flood hazard regulation, Storm hazard regulation, Water purification and Salinity regulation among others.

### 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		4		
J: Coastal brackish / saline lagoons		1	341	

#### Inland wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
Fresh water > Flowing water >> N: Seasonal/ intermittent/ irregular rivers/ streams/ creeks		0		
Fresh water > Lakes and pools >> Tp: Permanent freshwater marshes/ pools		0		

#### Human-made wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type
3: Irrigated land		0	
6: Water storage areas/Reservoirs		0	
8: Wastewater treatment areas		0	

#### Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
Coastal savana grassland with shrubs	682

### 4.3 - Biological components

#### 4.3.1 - Plant species

##### Other noteworthy plant species

Phylum	Scientific name	Position in range / endemism / other
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Avicennia germinans</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Blutaparon vermiculare</i>	
TRACHEOPHYTA/LILIOPSIDA	<i>Cyperus articulatus</i>	
TRACHEOPHYTA/LILIOPSIDA	<i>Paspalum vaginatum</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Sesuvium portulacastrum</i>	
TRACHEOPHYTA/LILIOPSIDA	<i>Typha domingensis</i>	

##### Invasive alien plant species

Phylum	Scientific name	Impacts	Changes at RIS update
TRACHEOPHYTA/LILIOPSIDA	<i>Eichhornia crassipes</i>	Actual (major impacts)	unknown



## 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/REPTILIA	<i>Pelomedusa subrufa</i>				

## 4.4 - Physical components

## 4.4.1 - Climate

Climatic region	Subregion
A: Tropical humid climate	Aw: Tropical savanna (Winter dry season)

## 4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)

a) Maximum elevation above sea level (in metres)

Entire river basin ☐

Upper part of river basin ☐

Middle part of river basin ☐

Lower part of river basin ☒

More than one river basin ☐

Not in river basin ☐

Coastal ☒

Please name the river basin or basins. If the site lies in a sub-basin, please also name the larger river basin. For a coastal/marine site, please name the sea or ocean.

The two main principal sub-drainage basins are the Mamahuma-Onukpawahe(at the western side) and the Dzorwulu-Gblagbla-Ankonu (situated at the northern end) sub basins.

## 4.4.3 - Soil

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?	Changes at RIS update
Usually seasonal, ephemeral or intermittent water present	No change
Usually permanent water present	No change

Source of water that maintains character of the site

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

Water destination

Presence?	Changes at RIS update
To downstream catchment	No change
Marine	No change

Stability of water regime

Presence?	Changes at RIS update
Water levels fluctuating (including tidal)	No change

## 4.4.5 - Sediment regime

Sediment regime unknown ☐

<no data available>

## 4.4.6 - Water pH

Circumneutral (pH: 5.5-7.4 ) ☒(Update) Changes at RIS update No change ☒ Increase ☐ Decrease ☐ Unknown ☐Unknown ☐

## 4.4.7 - Water salinity

Fresh (<0.5 g/l) ☒(Update) Changes at RIS update No change ☒ Increase ☐ Decrease ☐ Unknown ☐Mixohaline (brackish)/Mixosaline (0.5-30 g/l) ☒(Update) Changes at RIS update No change ☒ Increase ☐ Decrease ☐ Unknown ☐Unknown ☐

## 4.4.8 - Dissolved or suspended nutrients in water

Unknown ☐

&lt;no data available&gt;

## 4.4.9 - Features of the surrounding area which may affect the Site

Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar Site differ from the site itself: i) broadly similar ☐ ii) significantly different ☒

Surrounding area has greater urbanisation or development ☒Surrounding area has higher human population density ☒Surrounding area has more intensive agricultural use ☒Surrounding area has significantly different land cover or habitat types ☒

## 4.5 - Ecosystem services

## 4.5.1 - Ecosystem services/benefits

## Provisioning Services

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

## Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Erosion protection	Soil, sediment and nutrient retention	High
Hazard reduction	Coastal shoreline and river bank stabilization and storm protection	High

## Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Nature observation and nature-based tourism	Low
Spiritual and inspirational	Cultural heritage (historical and archaeological)	Medium
Scientific and educational	Educational activities and opportunities	Medium

## Supporting Services

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

Within the site: 141,500

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
Public land (unspecified)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
National/Federal government	<input checked="" type="checkbox"/>	<input type="checkbox"/>

##### Private ownership

Category	Within the Ramsar Site	In the surrounding area
Other types of private/individual owner(s)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

##### Other

Category	Within the Ramsar Site	In the surrounding area
Commoners/customary rights	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### 5.1.2 - Management authority

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

Wildlife Division (Forestry Commission) Accra, Ghana & Tema Metropolitan Assembly (TMA) & Tema Development Corporation (TDC)

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

Thomas N.B Acquah - Site Manager

Postal address:

Wildlife Division,  
Forestry Commission  
Ministries Post Office  
P.O Box MB 239  
Accra

E-mail address:

tnbacquah@yahoo.com

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

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

#### Human settlements (non agricultural)

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Housing and urban areas	High impact		<input checked="" type="checkbox"/>	increase	<input checked="" type="checkbox"/>	increase
Commercial and industrial areas	Medium impact		<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	increase

#### Water regulation

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

#### Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Annual and perennial non-timber crops	Medium impact		<input checked="" type="checkbox"/>	unknown	<input checked="" type="checkbox"/>	unknown
Livestock farming and ranching	Medium impact		<input checked="" type="checkbox"/>	unknown	<input checked="" type="checkbox"/>	unknown

#### Transportation and service corridors

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Roads and railroads	Medium impact		<input checked="" type="checkbox"/>	unknown	<input checked="" type="checkbox"/>	unknown
Utility and service lines (e.g., pipelines)	unknown impact		<input checked="" type="checkbox"/>	unknown	<input checked="" type="checkbox"/>	unknown

#### Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Gathering terrestrial plants	Medium impact		<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change
Fishing and harvesting aquatic resources	High impact		<input checked="" type="checkbox"/>	decrease	<input type="checkbox"/>	No change

## Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Recreational and tourism activities	Low impact		<input checked="" type="checkbox"/>	unknown	<input type="checkbox"/>	No change

## Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Dams and water management/use	Medium impact		<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	decrease
Vegetation clearance/land conversion	Medium impact		<input checked="" type="checkbox"/>	increase	<input checked="" type="checkbox"/>	increase

## Invasive and other problematic species and genes

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Invasive non-native/alien species	High impact		<input checked="" type="checkbox"/>	increase	<input type="checkbox"/>	No change
Problematic native species	High impact		<input checked="" type="checkbox"/>	increase	<input type="checkbox"/>	No change

## Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Household sewage, urban waste water	High impact		<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Garbage and solid waste	Medium impact		<input checked="" type="checkbox"/>	unknown	<input checked="" type="checkbox"/>	unknown

## Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Storms and flooding	Medium impact		<input checked="" type="checkbox"/>	unknown	<input type="checkbox"/>	No change

## 5.2.2 - Legal conservation status

## Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Sakumo Lagoon		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

&lt;no data available&gt;

## 5.2.4 - Key conservation measures

## Legal protection

Measures	Status
Legal protection	Implemented

## Habitat

Measures	Status
Re-vegetation	Implemented

## Human Activities

Measures	Status
Communication, education, and participation and awareness activities	Implemented
Research	Implemented

### 5.2.5 - Management planning

Is there a site-specific management plan for the site? Yes

Has a management effectiveness assessment been undertaken for the site? Yes ☐ No ☒

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

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

none

### 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	Implemented

## 6 - Additional material

### 6.1 - Additional reports and documents

#### 6.1.1 - Bibliographical references

- Amatekpor, J.A. 1995. Soil and land-use degradation: Sakumo Ramsar Site. Environmental Baseline Studies Report for the Ghana Coastal Wetlands Management Project Ghana Wildlife Department, Accra-Ghana.
- Biney, C.A. 1995. Limnology: Sakumo Ramsar Site. Environmental Baseline Studies Report for the Ghana Coastal Wetlands Management Project. Ghana Wildlife Department, Accra-Ghana.
- Biney, C.A. (1999). Sakumo Ramsar Site. Management Plan, CWMP, Wildlife Department.
- Dadson, J.A. 1995. Socio-economic status of local communities: Sakumo Ramsar Site. Environmental Baseline Studies Report. Ghana Coastal Wetlands Management Project. Ghana Wildlife Department, Accra-Ghana.
- Gordon, C. 1995. Aquatic ecology: Sakumo Ramsar Site. Environmental Baseline Studies Report for the Ghana Coastal Wetlands Management Project. Ghana Wildlife Department, Accra-Ghana.
- Koranteng, K.A. 1995. Fisheries: Sakumo Ramsar Site. Environmental Baseline Studies Report for the Ghana Coastal Wetlands Management Project Ghana Wildlife Department, Accra-Ghana.
- Kpelle, D.G. 1996. The use of Geographical Information Systems in Coastal Wetlands Management in Ghana. Centre for Tropical Coastal Management Studies; M.Sc. Thesis, University of Newcastle Upon Tyne.
- Ntiemoa-Baidu, Y. & Gordon, C., (1991). Coastal Wetlands Management Plans: Ghana. Report to World Bank, Department of Zoology, University of Ghana, Legon, Accra., Ghana.
- Oteng-Yeboah, A.A. 1994. Plant Ecology: Sakumo Ramsar Site. Environmental Baseline Studies Report for the Ghana Coastal Wetlands Management Project. Ghana Wildlife Department, Accra-Ghana.
- Asmah, R., Dankwa, H., Biney, C. A., Amankwah, C. C., Trends analysis relating to pollution in Sakumo Lagoon, Ghana. African Journal of Aquatic Science 2008, 33(1): 87-93.
- Tumbulto, J.W. and R.R. Bannerman, 1995. Hydrology: Sakumo Ramsar Site. Environmental Baseline Studies for the Ghana Coastal Wetlands Management Project Ghana Wildlife Department, Accra-Ghana.
- World Bank (1997) Towards an Integrated Coastal Management Strategy for Ghana. World Bank, Washington & Environmental Protection Agency, Accra. 137pp.
- [www.gmes.cersgis.org](http://www.gmes.cersgis.org)
- Quartey Jones and Agyeman Dickson, 2020. Ghana: Report on Waterbirds and Wetlands count of the East Atlantic Flyway in January 2020. Report to Wetlands International, Wildlife Division of the Forestry Commission, Centre for African Wetlands

#### 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

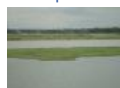
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##### vi. other published literature

<no file available>

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

Please provide at least one photograph of the site:



Sakumo Lagoon ( Wildlife Division (Forestry Commission), 16-01-2015 )




Sakumo Lagoon ( Wildlife Division (Forestry Commission), 16-01-2015 )



Sakumo Lagoon ( Wildlife Division (Forestry Commission), 16-01-2015 )



Sakumo Lagoon ( Wildlife Division (Forestry Commission), 16-01-2015 )




Sakumo Lagoon ( *Wildlife Division (Forestry Commission), 16-01-2015* )



Sakumo Lagoon (around sluice gate) ( *Wildlife Division (Forestry Commission), 04-06-2020* )



Sakumo Lagoon ( *Wildlife Division (Forestry Commission), 03-09-2020* )




Marsh area ( *Wildlife Division (Forestry Commission), 03-09-2019* )




Sakumo Lagoon ( *Wildlife Division (Forestry Commission), 09-10-2019* )




White Faced Whistling Ducks ( *Wildlife Division (Forestry Commission), 09-10-2019* )



Waterbirds ( *Wildlife Division (Forestry Commission), 09-10-2019* )



Collared Pranticole ( *Wildlife Division (Forestry Commission), 09-10-2019* )



Sakumo Lagoon ( *Wildlife Division (Forestry Commission), 09-10-2019* )

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation	1992-08-14
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