

Ramsar Information Sheet

Published on 2 September 2024

Nigeria

International Institute of Tropical Agriculture (IITA)



Designation date 1 March 2024

Site number 2551

Coordinates 07°29'35"N 03°54'15"E

Area 53,03 ha

RIS for Site no. 2551, International Institute of Tropical Agriculture (IITA), Nigeria

Created by RSIS V.1.6 on - 2 September 2024

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

IITA Lake is situated in the Akinyele Local Government Area of Oyo State, Nigeria. Geographically, it is located between latitudes 7°30' 8" and 7°28'55.52" North and longitudes 3° 54'47.50" and 3°52'44.49" East, within the city of Ibadan. The region experiences a humid tropical climate characterized by distinct wet and dry seasons. The wet season typically runs from March to October, while the dry season lasts from November to February. Average daily temperatures range from approximately 21°C to 23°C, with maximum temperatures reaching 28°C to 34°C. The area receives an annual rainfall of 1,300 to 1,500 mm, concentrated between May and September.

IITA Lake is located within a 1,000-hectare concession owned by the International Institute for Tropical Agriculture (IITA). The region was originally a secondary forest that has been protected since 1965. As a result of this conservation effort, the forest has regenerated and now resembles mature Guinea-Congo lowland rainforest. The forest features scattered emergent trees, including species like Ceiba, Milicia, and Terminalia. Additionally, bamboo (Bambusa vulgaris) and Raphia vinifera can be found along watercourses, and scattered oil-palm trees (Elaeis guineensis) grow in both low-lying areas and relatively better-drained upland regions. Thickets of climbers are common in openings, highlighting the secondary nature of the forest.

Beyond the forested area, there is an extensive expanse of derived savanna, which supports fallow fields and experimental agricultural plots. The wet season, as mentioned earlier, prevails from March to October, providing the necessary conditions for farming and agriculture.

In summary, ITA Lake is a unique ecological area located on the outskirts of Ibadan, Nigeria, within the premises of the International Institute for Tropical Agriculture. It features a well-preserved secondary forest, a humid tropical climate with distinct wet and dry seasons, and an annual rainfall pattern concentrated between May and September. This environment is essential for research and agricultural activities conducted by the institute.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Responsible compiler

Postal address Federal Ministry of Environment, Department of Forestry

Postal address Plot 393/394, Augustus Aikhomu Way, Utako District, P.M.B 468, GArki, Abuja, Nigeria

National Ramsar Administrative Authority

Institution/agency Federal Department of Forestry

Postal address Plot 393/394, Augustus Aikhomu Way, Utako District, P.M.B 468 GArki, Abuja, Nigeria

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

From year 1995

To year 2023

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish) International Institute of Tropical Agriculture (IITA)

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image

Former maps 0

Boundaries description

The International Institute of Tropical Agriculture (IITA) in Ibadan, Nigeria, spans between latitudes 7°30'8" N and 7°28'55.52" N and longitudes 3°54'47.50" E and 3°52'44.49" E, within the Akinyele Local Government Area of Oyo State. The site extends from its northernmost point at approximately latitude 7°30'8" N to its southernmost point at latitude 7°28'55.52" N, and from its easternmost point at longitude 3°52'44.49" E to its westernmost point at longitude 3°54'47.50" E.

Topographically, the IITA site is situated in a humid tropical climate zone, with a well-defined wet season from March to October, characterized by bimodal rainfall totaling between 1300 to 1500 mm annually, concentrated from May to September. The average daily temperature during the wet season ranges from 21°C to 23°C, with maximum temperatures reaching 28°C to 34°C.

The IITA site does not fall within any legally defined national, regional, or international boundaries specific to protected areas. It is not part of any Ramsar Site or other existing protected areas. As an inland site, there are no coastal features such as low or high watermarks that apply to this location.

2.2.2 - General location

a) In which large administrative region does the site lie?	Oyo State
b) What is the nearest town or population	lbadan

2.2.3 - For wetlands on national boundaries only

a) Does the wetland extend onto the territory of one or more other countries?

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

2.2.4 - Area of the Site

Official area, in hectares (ha): 53.027

Area, in hectares (ha) as calculated from 53.027 GIS boundaries

2.2.5 - Biogeography

Biogeographic regions

F	Regionalisation scheme(s)	Biogeographic region	
	WWF Terrestrial Ecoregions	Tropical Rainforest	

Other biogeographic regionalisation scheme

Adeyanju, T.A., Ottosson, U., Adeyanju, T.E., Omotoriogun, T.C., Hall, P., Manu,

S.A., & Bown, D. (2014). Birds of the International Institute of Tropical Agriculture campus, a stronghold of avian diversity in the changing Ibadan area (Nigeria) over the last 50 years. Malimbus, 36, 76-105.

Anoliefo, G. O. (2010) Green revolution and its role in solving the problems of global

warming. The Focus, Creativity: The Spring Board of Development, 12:19-20

Demey, R., Dowsett-Lemaire, F. & Dowsett, R.J. (2003) Notable bird observations from

Nigeria, including the first records of Spot-breasted lbis Bostrychia rara and Yellow Longbill Macrosphenus flavicans. Malimbus 25: 85–94.

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

The lake serves as a reservoir, storing water during the wet season and releasing it gradually during the dry season. This regulation helps maintain a consistent water supply for various agricultural activities and research projects conducted by IITA. Water from the lake is used for irrigation purposes, ensuring adequate moisture levels for crops and vegetation within the IITA campus. This irrigation support is crucial for sustaining agricultural experiments, plantations, and gardens. The presence of the lake helps control soil erosion by absorbing excess runoff and reducing the velocity of water flow. This protects the land from erosion damage, particularly during heavy rainfall periods. The lake ecosystem supports diverse aquatic life, including fish, amphibians, and aquatic plants. This biodiversity contributes to the overall ecological balance of the area, promoting natural processes like nutrient cycling and habitat diversity. The lake serves as a valuable research site for studying aquatic ecosystems, water quality, and ecological interactions. It provides opportunities for educational programs and field studies related to hydrology, limnology, and environmental science.

Other ecosystem services provided

The IITA Lake offers recreational benefits, providing a serene environment for relaxation, birdwatching, and nature appreciation. It enhances the quality of life for visitors, staff, and researchers at IITA.

- ☑ Criterion 2 : Rare species and threatened ecological communities
- ☑ Criterion 5:>20,000 waterbirds

Overall waterbird numbers 91770

Start year 1995

End year 2000

Source of data: Demey et al (2003)

Optional text box to provide further information through the regularly supports over 35,000 Palearctic waterbirds.

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 Contributes Cont	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
Birds							
CHORDATA / AVES	nivosa						
CHORDATA / AVES	Eurillas gracilis		LC				
CHORDATA / AVES	Gallinago media		NT				
CHORDATA / AVES	Gypohierax angolensis		LC				
CHORDATA / AVES	Indicator maculatus		LC				
CHORDATA / AVES	Malimbus ibadanensis		EN				
CHORDATA / AVES	Smithornis rufolateralis		LC				

¹⁾ Percentage of the total biogeographic population at the site

A total of over 300 bird species have been recorded in the reserve. There have been several recent observations of Malimbus ibadanensis. Other species include Gallinago media, an infrequent visitor, and diverse assemblage of Palearctic waterbirds winter at the site. Other fauna in IITA Lake are Francolinus bicalcaratus, Indicator maculatus, Campethera nivosa, Smithornis rufolateralis, Andropadus gracilis, Neocossyphus poensis, Macrosphenus kempi, M. concolor and Cinnyris minullus.

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

<no data available>

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

4.1 - Ecological character

In conformity with other rainforest wetlands, the vegetation is mainly tropical semi- deciduous forest with diverse of vegetation types ranging from derived savanna, secondary forest and riparian types The vegetation includes sparse shrubs and dense trees mostly of the species such as Ceiba pentadra, Milicia excelsa, Terminalia spp, Bambusa vulgaris, Raphia vinifera, Elaeis guineensis

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

Inland wetlands

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

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Phylum	Scientific name	Position in range / endemism / other
TRACHEOPHYTA/LILIOPSIDA	Bambusa balcooa	
TRACHEOPHYTA/MAGNOLIOPSIDA	Ceiba pentandra	
TRACHEOPHYTA/MAGNOLIOPSIDA	Celtis zenkeri	
TRACHEOPHYTA/MAGNOLIOPSIDA	Funtumia elastica	
TRACHEOPHYTA/MAGNOLIOPSIDA	Leucaena leucocephala	
TRACHEOPHYTA/MAGNOLIOPSIDA	Maesopsis eminii	
TRACHEOPHYTA/MAGNOLIOPSIDA	Milicia excelsa	
TRACHEOPHYTA/MAGNOLIOPSIDA	Musanga cecropioides	
TRACHEOPHYTA/MAGNOLIOPSIDA	Pycnanthus angolensis angolensis	
TRACHEOPHYTA/LILIOPSIDA	Raphia vinifera	
TRACHEOPHYTA/MAGNOLIOPSIDA	Triplochiton scleroxylon	

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/AVES	Tringa glareola				

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)

IITA Lake has a humid tropical climate with well-known wet and dry seasons, with the wet season commencing from March and ends in October and dry season that lasts from November to February, it has an average daily temperature of about 21°C to 23°C and the maximum temperature ranges from 28°C to 34°C. IITA used to experience bimodal rainfall pattern between 1300 – 1500mm, which falls between the month of May and September.

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres) 243

RIS for Site no. 2551,	International Institute	of Tropical Agriculture	(IITA), Nigeria
a) Maximum elevation al	bove sea level (in metres)		
	En	tire river basin	
	Upper par	rt of river basin 🗹	
	Middle par	rt of river basin	
	Lower par	rt of river basin	
	More than o	one river basin	
	No	ot in river basin	
		Coastal	
Please name the river hasin	n or hasins. If the site lies in a		e the larger river basin. For a coastal/marine site, please name the sea or ocean.
Ogun Osun River Bas			7 are target more beautiful or a coastammatine site, preader name the coast of cocan.
4.4.3 - Soil			
		Mineral 🗹	
		Organic 🗹	
	No availah	ole information	
Are sail tomas aubicet to			
condition	change as a result of changin ons (e.g., increased salinity or	acidification)?	
Please provide further inform	mation on the soil (optional)		
bottom of the valley had matter and silt during recharge occurs betw	as poorly drained clay ar raining season and flood	nd sandy soils. Also, so ding. The water balance r. Wind erosion is parti	nd areas clay, quartz gravel and sand are predominant soil types while the ils in the wetlands are annually enriched through deposition of organic in the driest and northernmost zones (Oke Ogun) is such that soil moisture cularly serious towards the end of the dry season when storms preceding
4.4.4 - Water regime			
Water permanence	1		
Presence? Usually permanent water present	No change		
Source of water that maintain Presence?	s character of the site Predominant water source		
Water inputs from precipitation		No change	
Water inputs from surface water		No change	
Water inputs from groundwater		No change	
Water destination	_		
Presence? To downstream catchment	No change		
To downstream catchinent	No change		
Stability of water regime Presence?	1		
Water levels fluctuating (including tidal)	No change		
			this box to explain sites with complex hydrology:
	ds lie within the river cou gh Oke Ogun area of Oyo		tributary of river Ogun (also known as Odo-Ogun). The river flows down
4.4.5 - Sediment regim	ie		
_	cant erosion of sediments occ	urs on the site	
_	or deposition of sediments occi	_	
	•	_	
	n of sediments occurs on or th	_	
Sediment regime is highl	y variable, either seasonally or Sediment reg	rinter-annually ☑ gime unknown ☐	
4.4.6 - Water pH			

RIS for Site no. 2551, International Institute of Tropical	Agriculture (IITA), Nigeria
Acid (pH<5.5)	
Circumneutral (pH: 5.5-7.4)	⊘
Alkaline (pH>7.4)	
Unknown	
4.4.7 - Water salinity	
Fresh (<0.5 g/l)	
Mixohaline (brackish)/Mixosaline (0.5-30 g/l)	
Euhaline/Eusaline (30-40 g/l)	
Hyperhaline/Hypersaline (>40 g/l)	
Unknown	☑
4.4.8 - Dissolved or suspended nutrients in water	
Eutrophic	
Mesotrophic	
Oligotrophic	
Dystrophic	
Unknown	☑
4.4.9 - Features of the surrounding area which may affect the	ne 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	
Please describe other ways in which the surrounding area is different:	
	a once larger forest in southwestern Nigeria. It is now surrounded by the city of

The IITA Forest Reserve is the largest remaining piece of a once larger forest in southwestern Nigeria. It is now surrounded by the city of Ibadan. This forest, along with lakes, farmland, and gardens, is home to various plants and animals that have been declining due to the city's expansion.

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance			
Fresh water	Drinking water for humans and/or livestock	not relevant for site			
Fresh water	Water for irrigated agriculture	not relevant for site			
Genetic materials	Medicinal products	not relevant for site			

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Climate regulation	Regulation of greenhouse gases, temperature, precipitation and other climactic processes	not relevant for site

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Nature observation and nature-based tourism	not relevant for site
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	not relevant for site

Supporting Services

Examples

Supports a variety of all life

Biodiversity	forms including plants, animals and microorganizms, the genes they contain, and the ecosystems of which they form a part	not relevant for site			
Within the site: 1000					
Outside the site: 1000					
Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site? Yes ○ No ○ Unknown ●					

Importance/Extent/Significance

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 wise that maintain the ecological character of the wetland

Description if applicable

Ecosystem service

Grazing and collection of wild resources, particularly fuel wood is prohibited in the area. The wetland is strictly for agricultural irrigation, conservation, research and tourism under the management of ITA. The wetland has a potential for development for world class tourism.

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

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

Description if applicable

The site, through fauna species conservation supports community livelihood and tourism but if community activities (pouching) are not regulated, the ecological character of the Lake may be impaired. Bodies of water are sometimes fished in the early dry season and large scale mechanized cultivation is extensively prohibited. These are activities that were in existence before Government came in with the idea of regulation and conservation and consequent handling over to ITA management.

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

4.6 - Ecological processes

<no data available>

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

5.1 - Land tenure and responsibilities (Managers)

5.1.1 - Land tenure/ownership

Public ownership					
Category Within the Ramsar Site		In the surrounding area			
National/Federal government		✓			
Private ownership					
Category	Within the Ramsar Site				
oategory .	within the Ramsar Site	In the surrounding area			

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

The land tenure in the area was a mixture of customary and institutional holding. All lands belonged to resident communities, under the control of the executive Governor of Oyo State, but presently, the Government has ceded the entire place (1,000ha) to IITA for conservation, teaching and research.

Federal Land Use law has provisions that enable government to dispossess families or individuals of land if it is needed for public use, as in theory all land belongs to the Federal Government. Similar tenure arrangements also apply to fishing rights in water bodies.

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for	International Institute of Tropical Agriculture (IITA), Ibadan, Oyo State, Nigeria
managing the site:	
	IITA Headquarters, P.M.B. 5320, Oyo Road, Ibadan 200001, Oyo State, Nigeria. Tel: +234700800IITA, +12016336094, 08034035281, 08034035282, 08034035283 Fax: +442087113786

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

5.2 - Ecological character threats and responses (Management)

E-mail address: iita@cgiar.org

Agriculture and aquaculture Factors adversely **Actual threat** Potential threat Within the site In the surrounding area affecting site Annual and perennial non- \checkmark Medium impact High impact timber crops Marine and freshwater 1 Medium impact Medium impact aquaculture

Transportation and service corridors

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area		
Roads and railroads Low impact		Low impact	✓			

Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Fishing and harvesting aquatic resources	Medium impact	Medium impact		

Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Recreational and tourism activities	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	Medium impact	Medium impact	A	

Please describe any other threats (optional):

The status of the wetland is being threatened. The operation of upstream rivers determines the annual flooding of this Lake/wetland. If a series of dry years were to occur, as it was within the last 30 years, flooding would be controlled to maximize the benefits of river regulation (which do not necessarily include sustainability of downstream wetlands).

Siltation of channels and ponds, and colonization by invasive grass species are also major challenges affecting the water supply into the Lake/wetland.

However, these threats to the integrity of the wetland derive from heightened climatic variability manifested through long-term declining rainfall; building construction/urbanization, and associated extensive irrigation schemes. These have changed the natural flood regime with a massive reduction of flood peaks in the wet season.

Other threats are the frustration of tree regeneration efforts and the compaction of soils by the increased presence of pastoralists and their animals. The increased presence is due to the effects of climatic variability on surrounding pastureland.

5.2.2 - Legal conservation status

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	IITA Forest Reserve Ibadan	http://datazone.birdlife.org/sit e/factsheet/iita-forest-reserve- ibadan- iba-nigeria	partly

5.2.3 - IUCN protected areas categories (2008)

_	Strict	Niet	 Doo	0 10 10	1

Ib Wilderness Area: protected area managed mainly for wilderness

Il 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

Human Activities

Measures	Status			
Research	Proposed			

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?

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning Yes O No

processes with another Contracting Party?

URL of site-related webpage (if relevant): https://forestcenter.iita.org/

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? Please select a value

5.2.7 - Monitoring implemented or proposed

<no data available>

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Adeyanju, T.A., Ottosson, U., Adeyanju, T.E., Omotoriogun, T.C., Hall,

P., Manu, S.A., & Bown, D. (2014). Birds of the International Institute of Tropical Agriculture campus, a stronghold of avian diversity in the changing Ibadan area (Nigeria) over the last 50 years. Malimbus, 36, 76-105.

Anoliefo, G. O. (2010). Green revolution and its role in solving the

problems of global warming. The Focus, Creativity: The Spring Board of Development, 12:19-20

Arowosoge, O.G.E and L. Popoola (2006). Economic Analysis of

Thaumatococcus danielli (Benn.) Benth. (Miraculous Berry) in Ekiti State. Journal of Agriculture, Food and Environment. Vol. 4(1), 264-269. Demey, R., Dowsett-Lemaire, F. & Dowsett, R.J. (2003) Notable bird

observations from Nigeria, including the first records of Spot-breasted Ibis Bostrychia rara and Yellow Longbill Macrosphenus flavicans.

Oluyinka Christopher, A., (2020). Comparative Analyses of Diversity and Similarity Indices of West Bank Forest and Block A Forest of the International Institute of Tropical Agriculture (IITA) Ibadan, Oyo State, Nigeria. International Journal of Forestry Research, 2020.

Ramsar Convention Bureau (2000). Background papers on Wetland values and Function. Gland, Switzerland: Ramsar Convention Bureau, http://www.ramsar.org/info/values.

6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)

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

iv. relevant Article 3.2 reports

v. site management plan

vi. other published literature

<no data available>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



View of the lake (Federa 01-2023)



Cerconithecus mona (ederal Department of orestry, 24-01-2023)



Malimbus ibadanensis (Federal Department of Forestry, 24-01-2023

6.1.4 - Designation letter and related data

Designation letter

Date of Designation 2024-03-01