## 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

The Arinta Waterfall at Ipole-Iloro is located about 6km North-West of Ikogosi. it could be reached only through a secondary road from Ikogosi. the road leading to the fall passesthrough the Ikogosi Tourist Center. Visit this resort center and Marvell at the work of nature. Tourist fell the chilly effect of this fall about 10 meters away. it has three pronounced escarpments.This resort center is naturally endowed with thick and evergreen forest. The Arinta waterfalls are a wonder spectacle to behold, cascading down rocky hills from a great height to form a flowing pool of spring water amidst natural forest vegetation. They are located in Ipole-Iloro Ekiti and are popular tourist site that draws local and foreign tourists to the State. Arinta waterfalls is an ever wet flowing , the obsession of Ipole people, ever plunging ever splashing. The most prominent tree species found in the site are Oeiba pentandra, Sterculiar tragacantha, Brachystelgia eurycoma, Alstonei boonei, Danieli orgea, Funtumia Africana, Garcinia kola, Albizia zygia, Glyphaea brevis,Piptadeniastrum africanum, Zanthoxylum leprieurim among others which shows it is very diverse in flora. Cercopithecus mona, Cercocebes torquatus, Xerous erythropus, Tragelaphus scriptus, Cephalopusrufilatus,Cercocebes torquatus are dominant fauna within the location. The steep slopes of the overawing ridge, panoramas of a beautiful valley trapped between two ridges meet the eyes. The landscape features a sprawling expanse of plush vegetation set with a patchwork of rust-brown 'tabs' at a distance, and a sky-line bedecked with gently undulating ridge tops on the other side. The noon-day sun energized the verdural flavor of the valley below, casting it in a harmonious romance of bright and dark shades of leaf green. The tarred road descends down the other side of the ridge to meet the sleepy enclave of Ipole-Iloro. a small stream meets the road at the village entrance. It is called Oluwa stream, and being highly-revered by the people, it is said that the water can cure any kind of diseases.The enclave holds a total human population of about eight hundred people. Ayo springcan be seen winding its ways across the village, dividing the village into two parts. The first part towards the south, holds the area where the ancestors of Ipole-Iloro people first dwelt before expansion took the boundaries of the village beyond the river to the other side. this cultural land mark constitutes a major landmark in the encla

# 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, 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: 2022

To year: 2023

### 2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish): Arinta Waterfall

Unofficial name (optional): Arinta Waterfall

## 2.2 - Site location

### 2.2.1 - Defining the Site boundaries

b) Digital map/image
<1 file(s) uploaded>

Former maps: 0

Boundaries description

Arinta Waterfall, located in Ipole-Iloro, Ekiti State, Nigeria, is a natural marvel within the lush forest and rugged hills of Ekiti West Local Government Area. It lies approximately 6 km northwest of the Ikogosi Warm Springs, accessible by a secondary road from the main route to Ikogosi. Geographically, it is situated at latitude 7.5172 N and longitude 4.926444 E.

The site is bounded by distinct neighboring regions and landmarks. To the east, it is bordered by Erin-Ijesa, while Ikeji-Ile lies to the southeast. Efon Alaaye is located to the north, with Ikogosi and Erijiyan to the east, and Ogutun Ekiti to the southwest. These topographical boundaries are defined based on both natural landforms and legally recognized regional boundaries.

Arinta Waterfall does not overlap with any other formally protected areas, such as national parks or nature reserves.

The waterfall cascades down a steep escarpment in three distinct stages, forming clear pools at the base. The surrounding landscape includes steep ridges, flowing streams, and a dense, evergreen forest, providing habitat for diverse flora and fauna. Defining features also include these natural watercourses and the high and low watermarks observed seasonally within the stream beds.

The waterfall holds cultural and historical significance for the local community and is a vital water source, supported by the nearby Ipole-Iloro Water Treatment Plant.

### 2.2.2 - General location

a) In which large administrative region does the site lie? South West Geopolitical Zone

b) What is the nearest town or population centre? Ikogosi

### 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): 181.41

Area, in hectares (ha) as calculated from GIS boundaries: 181.41

### 2.2.5 - Biogeography

Biogeographic regions

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

Other biogeographic regionalisation scheme

Rain Forest Waterfall

# 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 | - Arinta Waterfall is a natural freshwater source, essential for drinking, irrigation, industries, and aquatic habitats. It aids erosion control by redistributing sediment and maintaining soil fertility and water body health.<br>- The waterfall creates unique aquatic habitats vital for diverse flora, fauna, and fish species survival and reproduction.<br>- It has potential for hydropower generation, contributing to renewable energy production and reducing fossil fuel reliance.<br>- Arinta attracts tourists, offering recreational activities like swimming, hiking, and nature appreciation.<br>- It plays a role in local climate regulation, influencing humidity levels and cooling surrounding areas.<br>- The waterfall holds aesthetic and cultural significance, inspiring art, poetry, and local traditions.<br>- Its turbulence and aeration improve water quality, increasing oxygen levels and aiding in pollutant breakdown. |
| Other ecosystem services provided | - Arinta Waterfall supports biodiversity by providing habitats for various plant and animal species.<br>- It contributes to nutrient cycling by influencing the flow of organic matter and nutrients within the ecosystem.<br>- The waterfall promotes soil stability by reducing erosion and sedimentation in surrounding areas.<br>- It enhances the aesthetic value of the landscape, contributing to recreational and tourism opportunities.<br>- Arinta Waterfall helps regulate microclimates, influencing temperature and humidity levels in its vicinity. |
| Other reasons | NA |

☑ Criterion 2 : Rare species and threatened ecological communities

| | |
|---|---|
| Optional text box to provide further information | Plant Species: Ricinodendron heudelotii, Sterculia tragacantha, Albizia zygia, Celtis mildbraedii, Milicia excels, Ceiba pentandra, Brachystelgia eurycoma, Funtumia Africana, Alstonei boonei, Danieli orgeae, Zanthoxylum leprieurii, Piptadeniastrum africanum, Glyphaea brevis, Pycnanthus angolensis, e.t.c<br><br>Animal Species: Snakes, Birds, Butterfly, Fishes, Monkey, Gazel, Antelope, Ungulates.<br>Ecological communities of the waterfall is interdependence Ecological Community interwined |

☑ Criterion 3 : Biological diversity

Justification

Arinta Waterfall, situated within the rich biodiversity of Ekiti State, Nigeria, is a critical habitat that supports a variety of plant and animal species, contributing significantly to the biological diversity of the region. The area surrounding Arinta Waterfall is characterized by a dense, evergreen forest, which is home to numerous species of flora and fauna that are integral to the ecological balance of the region.

The waterfall and its surrounding forest provide a unique microhabitat that supports species adapted to the specific environmental conditions of this biogeographic region. Additionally, the area is a haven for several bird species, insects, and other wildlife that depend on this habitat for survival, making it an important site for maintaining the biological diversity of the region.

Furthermore, the waterfall's pristine water and surrounding forest vegetation play a crucial role in supporting the ecological integrity of the area, contributing to the overall health of the ecosystem. The continuous flow of water and the presence of diverse plant life also help to sustain the local climate, soil quality, and water cycle, all of which are vital for the survival of various species.

Arinta Waterfall meets Criterion 3, as it supports populations of species that are essential for maintaining the biological diversity of this particular biogeographic region.

End year: 2022

☑ Criterion 8 : Fish spawning grounds, etc.

Justification: Arinta waterfall has suitable turbidity, pH and temperature all year round which makes the waterfall a habitable ground for different fish and aquatic animals.

## 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 | *Albizia zygia* | ☐ | ☑ | ☐ | LC | ☐ | | |
| TRACHEOPHYTA / MAGNOLIOPSIDA | *Alstonia boonei* | ☐ | ☑ | ☐ | LC | ☐ | | |
| TRACHEOPHYTA / MAGNOLIOPSIDA | *Brachystegia eurycoma* | ☐ | ☑ | ☐ | LC | ☐ | | |
| TRACHEOPHYTA / MAGNOLIOPSIDA | *Ceiba pentandra* | ☐ | ☑ | ☐ | LC | ☐ | | |
| TRACHEOPHYTA / MAGNOLIOPSIDA | *Celtis mildbraedii* | ☐ | ☑ | ☐ | LC | ☐ | | |
| TRACHEOPHYTA / MAGNOLIOPSIDA | *Funtumia africana* | ☐ | ☑ | ☐ | LC | ☐ | | |
| TRACHEOPHYTA / MAGNOLIOPSIDA | *Milicia excelsa* | ☑ | ☑ | ☐ | NT | ☐ | https://forestcenter.iita.org/index.php/iroko-tree/ | |
| TRACHEOPHYTA / MAGNOLIOPSIDA | *Ricinodendron heudelotii* | ☐ | ☑ | ☐ | LC | ☐ | | |
| TRACHEOPHYTA / MAGNOLIOPSIDA | *Sterculia tragacantha* | ☐ | ☑ | ☐ | LC | ☐ | | |

## 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** | | | | | | | | | | | | | | | | | |
| ARTHROPODA / INSECTA | *Allocnemis vicki* | ☑ | ☐ | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | | | | EN | ☐ | ☐ | | |
| ARTHROPODA / INSECTA | *Chlorocypha centripunctata* | ☑ | ☐ | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | | | | EN | ☐ | ☐ | | |
| **Birds** | | | | | | | | | | | | | | | | | |
| CHORDATA / AVES | *Psittacus erithacus* | ☑ | ☐ | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | | | | EN | ☑ | ☐ | | |

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

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

<no data available>

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

## 4.1 - Ecological character

Arinta Waterfall, situated in Nigeria, possesses critical ecological components, processes, and services that collectively determine its ecological character. The surrounding vegetation, encompassing various plant types and their interactions with the environment, plays a pivotal role in maintaining the ecological balance of the waterfall. Additionally, the quality and purity of the water are crucial for supporting aquatic life, including fish species and amphibians. The biodiversity of species, both flora and fauna, contributes significantly to the ecological character, including endemic and migratory species sensitive to environmental changes. Hydrology, with its flow patterns, water levels, and seasonal variations, influences the overall health of Arinta Waterfall and its ecosystem dynamics. Geological features such as rock formations and soil types interact with ecological processes to create habitats and influence biodiversity. Climate factors like temperature, rainfall patterns, and humidity directly impact the ecological character, alongside providing essential ecosystem services such as water purification and habitat provision.

The natural variability of Arinta Waterfall's ecological character manifests through seasonal changes in water flow, vegetation growth, and wildlife activity, as well as climate fluctuations affecting water availability and temperature regimes. Human impact, including deforestation, pollution, tourism, and land-use changes, significantly alters the ecological balance of the waterfall over time. Natural disturbances like storms, floods, and wildfires can also cause temporary changes in the ecological dynamics. Biological interactions among species, such as predator-prey relationships and competition for resources, contribute to the natural variability observed. Past and current changes in the waterfall's ecological character include habitat degradation, water pollution, invasive species introductions, climate change effects, and human activities such as unregulated tourism and resource exploitation, all of which have collectively influenced the biodiversity and ecological processes of Arinta Waterfall.

## 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 >> M: Permanent rivers/ streams/ creeks | Arinta Waterfall | 3 | 181.41 | Unique |

## 4.3 - Biological components

### 4.3.1 - Plant species

Optional text box to provide further information

they exist for ecosystem balancing, though symbiosis form of association

### 4.3.2 - Animal species

<no data available>

## 4.4 - Physical components

### 4.4.1 - Climate

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

Arinta waterfall enjoys a tropical climate with two distinct seasons - rainy season(April-October) and the dry season(November-March). Temperature ranges between 21C and 28C with high humidity. The southern wind and the northeast tide wind blow in the rainy and dry season respectively. The waterfall is characterized with surrounded large number of hills.

### 4.4.2 - Geomorphic setting

- 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.

Ogun-Osun River Basin

### 4.4.3 - Soil

Mineral ☐

Organic ☐

No available information ☐

Are soil types subject to change as a result of changing hydrological conditions (e.g., increased salinity or acidification)? Yes ○ No ◉

### 4.4.4 - Water regime

Water permanence

| Presence? | |
|---|---|
| Usually permanent water present | No change |

Source of water that maintains character of the site

| Presence? | Predominant water source | |
|---|---|---|
| Water inputs from precipitation | ☐ | No change |
| Water inputs from groundwater | ☑ | No change |

Water destination

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

Stability of water regime

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

### 4.4.5 - Sediment regime

Significant erosion of sediments occurs on the site ☐

Significant accretion or deposition of sediments occurs on the site ☐

Significant transportation of sediments occurs on or through the site ☐

Sediment regime is highly variable, either seasonally or inter-annually ☐

Sediment regime unknown ☑

### 4.4.6 - Water pH

Acid (pH<5.5) ☐

Circumneutral (pH: 5.5-7.4 ) ☐

Alkaline (pH>7.4) ☐

Unknown ☐

<no data available>

### 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 ☐

<no data available>

### 4.4.8 - Dissolved or suspended nutrients in water

Eutrophic ☐

Mesotrophic ☐

Oligotrophic ☐

Dystrophic ☐

Unknown ☐

<no data available>

### 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

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 | ☑ | ☐ |

Private ownership

| Category | Within the Ramsar Site | In the surrounding area |
|---|---|---|
| Commercial (company) | ☑ | ☐ |

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

The place belongs to the Ekiti State Government managed by private sector(Sterling Bank Plc)

### 5.1.2 - Management authority

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

Provide the name and/or title of the person or people with responsibility for the wetland: Ekiti State Government in Partnership with Sterling Bank

Postal address: Ekiti State Bureau of Tourism Development,
Mutual House, 3rd Floor,
Okesa Street, Ado-Ekiti

E-mail address: sologunleko@ekitistate.gov.ng

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

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

<no data available>

### 5.2.2 - Legal conservation status

<no data available>

### 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 ☐

<no data available>

### 5.2.4 - Key conservation measures

<no data available>

### 5.2.5 - Management planning

| | |
|---|---|
| Is there a site-specific management plan for the site? | |
| Has a management effectiveness assessment been undertaken for the site? | Yes ○ No ◉ |
| If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning processes with another Contracting Party? | Yes ○ No ◉ |

### 5.2.6 - Planning for restoration

| | |
|---|---|
| Is there a site-specific restoration plan? | |

<no data available>

### 5.2.7 - Monitoring implemented or proposed

<no data available>

# 6 - Additional material

## 6.1 - Additional reports and documents

### 6.1.1 - Bibliographical references

Ijasan, K.C., Izobo-Martins, O., (2012). Assessing community engagement in tourism planning and development in Nigeria: A case study of Arinta waterfall tourist resort, Ipole Iloro Ekiti State. Transnational Journal of Science and Technology 2, 11-20.

Olaniyi, O., Ogunjemite, B., Isiaka, M., (2015). Woody vegetation status on different altitudinal gradients of an ecotourism destination: Arinta waterfall, Ekiti State, Nigeria. Journal of Research in Forestry, Wildlife and Environment 7, 116-123.

Olajuyigbe, S. O., & Akwarandu, K. E. (2019). Floristic composition and stand structure in a tropical watershed forest: Implications for biodiversity conservation. Environtropica, 15, 79-94.

### 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:

A view of Arinta Waterfall ( *Bada Mutiu, 23-11-2022* )

A view of Arinta Waterfall ( *Federal Department of Forestry, 23-11-2022* )

Entrance to Arinta Waterfall ( *Federal Department of Forestry, 23-11-2022* )

Vegetation around Arinta Waterfall ( *Federal Department of Forestry, 23-11-2022* )

### 6.1.4 - Designation letter and related data

Designation letter
<1 file(s) uploaded>

Date of Designation: 2024-03-01