



Ramsar Information Sheet

Published on 2 September 2024

Nigeria

Ado-Awaye (Iyake) Suspended Lake Wetland



Designation date	1 March 2024
Site number	2550
Coordinates	07°49'19"N 03°26'17"E
Area	165,28 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

Ado Awaye suspended lake/ hanging lake lies about 20km West of Iseyin, Iseyin Local Government Area of Oyo State. It is the only suspended lake in Africa. The suspended lake is housed on one of the crests of rocks commonly referred to as the "sleeping lion". Similarly, the 350 steps leading to the top of the hill housing the suspended/ hanging lake take about an hour to climb. The route to the lake contains many shrines and notable historical spots that make it a tourist delight.

The rocky outcrop can be climbed to gain a full view of the whole range of hills lying towards the Benin Republic border. People who have succeeded in climbing to a point called by the inhabitants "Esekan lku" meaning "the verge of death" write their names with pieces of stone on the rock. The inhabitants lived on the hill and the lake remains a source of water to them. The most wonderful thing about this lake is that it never dries and it retains the same volume of water even during the rainy season.

Evidence of past civilization is many in this nature's gift, there are broken crucibles of earthen pots and other archeological remains. The geographical hypothesis of the "higher you go, the cooler it becomes" is manifested on the lake. The beauty of the hill is seen in the thick vegetation which remains evergreen all through the year. The suspended lake is a large slopping rocky plain, which can be developed into a picnic/camping site. On top of the hill, one gets a panoramic view of the area's beautiful scenery. The Ado Awaye suspended lake is a special and lovely place that attracts lots of tourists from all over the world and the majority of them wish to take the lake away; if possible.

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)	Ado-Awaye (Iyake) Suspended Lake Wetland
Unofficial name (optional)	NA

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image

<1 file(s) uploaded>

Former maps	0
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Boundaries description

The Ado-Awaye Suspended Lake, also known as the Iyake Lake, is situated between latitudes 7.82140 N and 7.82340 N and longitudes 3.4330 E and 3.44300 E, at an elevation of 4900 meters above sea level within the Oke-Ado Mountain in Oyo State, Nigeria. The site is a natural wonder of ecological and cultural importance, surrounded by rugged terrain and dense tropical rainforest vegetation. The boundaries of this unique wetland extend from its northernmost point at approximately latitude 7.82340 N to its southernmost point at latitude 7.82140 N, and from its easternmost point at longitude 3.44300 E to its westernmost point at longitude 3.4330 E.

Topographically, the area is characterized by its rocky basin, which primarily collects rainfall, making it the lake's primary water source. The surrounding area supports a rich diversity of flora, including ferns, mosses, and tropical trees, creating habitats for various bird species, insects, and small mammals, highlighting its remarkable biodiversity.

There are no existing legally defined national, regional, or international boundaries that cover this site specifically, nor is it part of any other protected area. However, the natural boundaries defined by the terrain and vegetation provide a clear delineation of the wetland's extent. No coastal features such as low or high watermarks apply to this inland site.

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 centre?	Iseyin

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):	165.28
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Area, in hectares (ha) as calculated from GIS boundaries 165.279

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
WWF Terrestrial Ecoregions	Lowland Rainforest Zone

Other biogeographic regionalisation scheme

Lowland Rainforest Zone

Atlas (2023). Ado Awaye Mountain and the unique lake that sits near its peak are shrouded in ancient legends. Iyake Suspended Lake – Ado Awaiye, Nigeria - Atlas Obscura

Ezealor, A.U. (2002). Critical Site for Biodiversity Conservation in Nigeria, Nigeria Conservation Foundation, Lagos. 97p.

Kar, D. (2013): Wetlands and Lakes of the World. Springer India. 687p.

Nwankwoala, H. (2012): Case Studies on Coastal Wetlands and Water Resources in Nigeria. European Journal of Sustainable Development, 1(2), 113 – 127.

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 natural reservoir, storing water from rainfall and regulating its release downstream. This storage capacity helps mitigate the impacts of seasonal variations in precipitation and ensures a consistent water supply for various needs. Rainwater collected by the lake percolates through the limestone bedrock, recharging underground aquifers. This process replenishes groundwater reserves, which are vital for sustaining wells, springs, and maintaining water levels in surrounding areas. The limestone composition of the lake's basin acts as a natural filter, purifying water by trapping impurities and sediments. As water passes through this filtration system, it emerges cleaner and clearer, suitable for drinking and supporting aquatic life. Evaporation from the lake's surface contributes to local humidity levels, creating a microclimate in the surrounding area. This microclimate can support lush vegetation, enhance soil moisture retention, and contribute to overall environmental health.

Other ecosystem services provided

The lake and its surrounding wetlands provide a habitat for diverse flora and fauna. This biodiversity is essential for maintaining ecosystem balance, supporting pollination, nutrient cycling, and providing habitat for various species, including birds, insects, and aquatic life. The Ado-Awaye Suspended Lake has cultural and recreational significance. It attracts tourists, researchers, and nature enthusiasts, contributing to local economies through eco-tourism. Additionally, it holds spiritual importance for the local community, showcasing the interconnectedness of natural and cultural heritage. Vegetation surrounding the lake's edges helps stabilize soil and control erosion. Plant roots bind soil particles together, preventing erosion caused by runoff and water movement. This erosion control is essential for maintaining soil fertility, preventing sedimentation in the lake, and preserving water quality.

- Criterion 2 : Rare species and threatened ecological communities

End year

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	<i>Afzelia africana</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	VU	<input type="checkbox"/>		

Azelia africana, commonly known as African mahogany or doussié, holds significant international importance due to its valuable attributes and wide-ranging uses. This tree species is native to tropical Africa, found across countries such as Nigeria, Cameroon, Ghana, and Ivory Coast, among others. Its international significance stems from several key factors:

Firstly, *Azelia africana* is renowned for its high-quality timber. The wood is prized for its durability, strength, and attractive reddish-brown color, making it a preferred choice for various woodworking applications. It is commonly used in crafting furniture, cabinetry, flooring, decking, musical instruments, and decorative veneers. The timber's natural resistance to decay and insect infestations further enhances its appeal and longevity, making it a sought-after material in the global timber market.

Additionally, *Azelia africana* possesses medicinal properties that contribute to its international importance. Various parts of the tree, including the bark, leaves, and seeds, are utilized in traditional African medicine for treating ailments such as malaria, dysentery, fever, and skin conditions. The bark, in particular, contains compounds with potential pharmacological benefits, attracting interest from researchers and pharmaceutical industries exploring natural remedies and bioactive compounds.

Furthermore, the ecological significance of *Azelia africana* extends to its role in supporting biodiversity and ecosystem functions. The tree provides habitat and food for wildlife, including birds, mammals, and insects. Its presence contributes to forest ecosystems' resilience and stability, promoting biodiversity conservation and sustainable land management practices.

The international trade of *Azelia africana* timber and non-timber products has economic importance for many African countries. The export of high-quality timber generates revenue and employment opportunities, supporting livelihoods and local economies. However, sustainable management practices and conservation efforts are essential to ensure the species' long-term viability and prevent overexploitation.

In recent years, *Azelia africana* has faced conservation challenges due to habitat loss, illegal logging, and pressures from commercial exploitation. International conservation organizations, governments, and stakeholders are collaborating to promote sustainable forestry practices, combat illegal logging, and protect *Azelia africana* populations through measures such as conservation areas, reforestation projects, and community-based initiatives.

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>Malaclemys terrapin</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU	<input type="checkbox"/>	<input type="checkbox"/>		

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

The key ecological components of the site include the suspended lake itself, the surrounding wetlands and vegetation, the limestone formations, and the diverse flora and fauna inhabiting the area. These components form a complex and interconnected ecosystem.

Critical ecological processes within the site include water storage and regulation by the suspended lake, groundwater recharge through limestone filtration, nutrient cycling facilitated by vegetation and aquatic organisms, habitat provision for biodiversity, and erosion control mechanisms.

The site provides essential ecological services such as water purification, groundwater recharge, biodiversity support, habitat provision, erosion control, and climate regulation. These services are crucial for maintaining ecosystem balance, supporting wildlife, and providing benefits to surrounding communities.

While the site has likely experienced natural changes over time, including fluctuations in water levels, vegetation dynamics, and wildlife populations, human activities can also impact its ecological character. Past or current changes may include alterations in land use patterns, water extraction, pollution inputs, invasive species introductions, and disturbances to natural habitats. Conservation efforts and management strategies are often implemented to mitigate negative impacts and preserve the site's ecological integrity.

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 > Lakes and pools >> O: Permanent freshwater lakes	Ado-Awaye Suspended lake	0	0.0231	Unique

Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
Forest	26.45
Bare Rock	135.91

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Phylum	Scientific name	Position in range / endemism / other
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Albizia zygia</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Antiaris toxicaria</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Azadirachta indica</i>	
TRACHEOPHYTALILIOPSIDA	<i>Brachiaria mutica</i>	
TRACHEOPHYTALILIOPSIDA	<i>Elaeis guineensis</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Ficus lutea</i>	
TRACHEOPHYTALILIOPSIDA	<i>Leersia hexandra</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Parkia biglobosa</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Persicaria senegalensis</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Pouteria alnifolia</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Terminalia leiocarpa</i>	

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	<i>Cercopithecus mona</i>				
CHORDATA/REPTILIA	<i>Crocodylus niloticus</i>				
CHORDATA/MAMMALIA	<i>Hypsignathus monstrosus</i>				
CHORDATA/MAMMALIA	<i>Tragelaphus scriptus</i>				
CHORDATA/REPTILIA	<i>Varanus niloticus</i>				
CHORDATA/AVES	<i>Anas querquedula</i>				
CHORDATA/AVES	<i>Ardea alba</i>				
CHORDATA/AVES	<i>Ciconia episcopus</i>				
CHORDATA/AVES	<i>Egretta ardesiaca</i>				

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)

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

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 groundwater	<input type="checkbox"/>	No change
Water inputs from precipitation	<input type="checkbox"/>	No change

Water destination

Presence?	
Unknown	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

Please provide further information on sediment (optional):

Acidic sandy soil with permeable sedimentary rocks underlie this natural wetland, but a film of impervious layer has been formed at the bottom of the water body through successive years of clay deposition. This has significantly impeded percolation with a continuous low-lying plain that slopes gently downwards into plain land. The relief around the site is more mountainous with seven to eight months of rainfall.

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

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

Please describe other ways in which the surrounding area is different:

There are over 25,000 people living in nearby small villages such as Agelu, Akinlabi, Araromi, Gbolasa and Aba paanu. Most of the rural people are farmers. The rural communities use the water for domestic and religious purposes. The wetland falls within the unique or rare coastal line with almost all the activities unregulated. The status of the wetland is threatened. The intense farming and religious activities in the wetland is aggravating biodiversity loss and may gradually lower the ecological potentials of the site.

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	Low

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	High

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Spiritual and inspirational	Spiritual and religious values	High

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Biodiversity	Supports a variety of all life forms including plants, animals and microorganisms, the genes they contain, and the ecosystems of which they form a part	Medium

Within the site:

Outside the site:

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

Description if applicable

Collection of wild resources, cassava and cashew farming are common in Ado Awaye Lake. The wetland has great tourism potentials and little effort have been made to improve the high tourism capacities of the site.

- 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 tourism, farming and harvesting of wild resources supports community livelihood and if community activities are not regulated, the ecological character of the wetland may be impaired. In this regard, the wetland could be subjected under multiple use management. This implies that the local people could make use of the resources under licensed permit. However, activities in the site have little or no regulation as religious activities, tree felling and farming activities continue and unregulated. These trends of uncontrolled activities could aggravate biodiversity loss with some species trending on the path of extinction on the site.

- 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

Description if applicable

The Ishage Rock, perched delicately on the hillside, holds great significance for the local people, steeped in mysticism and tradition. It is believed to possess immense power, and as a result, it draws people from far and wide who come to make wishes. The custom is that when their wishes are granted, they return to the rock to tie a white cloth around it as an expression of gratitude. This rock also plays a pivotal role as a rainmaker in the region. During times of drought, the priestesses invoke Oke Ishage, likely a local rain deity or spirit, in prayer, praying for much-needed rainfall to nourish the land and sustain their farms and families. This practice underlines the deep connection between the people and their environment, where they turn to natural elements and spirits to ensure their well-being and prosperity.

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	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Local authority, municipality, (sub)district, etc.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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 King or the Native Authority, but each component was under the control of families, with this control depending on historical annexation and approval of the community leader. However, current Federal Laws have vested ownership of all lands in the nation to the Federal Government. In reality, Ado Awaye lake ownership is Oyo State government's, but until formally expropriated for actual use, it belongs to the local community. The following compound/family in the community are saddled with monitoring of activities in the site: Iyake, Isage and Olufon families. 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 various activities in the site.

5.1.2 - Management authority

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

Oyo State Government
Ministry of Environment and Natural Resources, Oyo State
Iseyin Local Government

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

Iyake, Isage and Olufon families

Postal address:

Ministry of Environment and Natural Resources,
Along Bodija Road, Secretariat, Ibadan.

E-mail address:

info@oyostate.gov.ng

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	Low impact	Low impact	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Recreational and tourism activities	Low impact	Low impact	<input checked="" type="checkbox"/>	<input type="checkbox"/>

5.2.2 - Legal conservation status

Global legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Other global designation	Suspended Lake	https://www.atlasobscura.com/places/iyake-suspended-lake	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
Habitat manipulation/enhancement	Proposed

Human Activities

Measures	Status
Communication, education, and participation and awareness activities	Proposed
Regulation/management of recreational activities	Partially implemented

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

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

Atlas (2023). Ado Awaye Mountain and the unique lake that sits near its peak are shrouded in ancient legends. Iyake Suspended Lake – Ado Awaye, Nigeria - Atlas Obscura

Ezealor, A.U. (2002). Critical Site for Biodiversity Conservation in Nigeria, Nigeria Conservation Foundation, Lagos. 97p.

Kar, D. (2013): Wetlands and Lakes of the World. Springer India. 687p.

Nwankwoala, H. (2012): Case Studies on Coastal Wetlands and Water Resources in Nigeria. European Journal of Sustainable Development, 1(2), 113 – 127.

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:



Entrance of Ado hill (Federal Department of Forestry, Abuja, 23-01-2023)



A view of Iyake Lake (Federal Department of Forestry, Abuja, 23-01-2023)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 2024-03-01