Ramsar Information Sheet

Myanmar

Gulf of Mottama

Designation date	24 January 2017
Site number	2299
Coordinates	17°08'55"N 97°00'11"E
Area	42 500,00 ha

https://rsis.ramsar.org/ris/2299
Created by RSIS V.1.6 on - 7 May 2017

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 Gulf of Mottama Ramsar Site in Myanmar is part of the overall Gulf of Mottama (GoM) which is a large and mostly undisturbed cone-shaped estuary with extensive tidal mudflats. The Ramsar Site covers 42,500 hectares of the core area of the GoM at the mouth of the Sittaung River along the eastern shores of the estuary, within the townships of Kyaitho and Bilin in Mon State.
This Site meets six out of the nine Ramsar criteria. Its tidal cycle is extremely pronounced in speed and amplitude whichcauses a powerful bore phenomenon which is highly unusual in the region and makes this one of the most dynamic estuaries in the world, with constant sediment redistribution, channel-shifts, erosion and accretion on a large scale. This dynamic estuaries result in the occurrence of very large tidal mud flats in the Site, among the largest mudflats areas in the world making it of international importance for the conservation in Asia and globally where it is facing much degradation.
The high productivity of the Site supports a rich biota including abundant invertebrates, important nursery areas for marine fish and up to 90,000 migratory water birds in the non-breeding season. Among these migratory birds is the critically endangered spoon-billed sandpiper (Eurynorhynchus pygmeus). The Site is one of the world's most important wintering areas for the Spoon-billed Sandpiper, hosting probably more than half of the remaining global population. In addition it supports the livelihoods of thousands of people through fisheries, important at local, national and regional level.
Consultations with local government and communities have been held to support the designation of the Site. The Site is receiving support from various projects supporting the development of local governance mechanism from the Site, including local authorities and communities, as well as the development and future implementation of a management plan covering the Ramsar Site and a buffer zone or "management area".

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Compiler 1

Name	Mr. Win Naing Thaw
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2.1.2 - Period of collection of data and information used to compile the RIS

From year	2008
To year	2016

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Gulf of Mottama
Unofficial name (optional)	Burmese Name= Mottama Pin Lae Gwae

2.2 - Site location

2.2.1 - Defining the Site boundaries

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

Former maps	0

Boundaries description

The coordinates of the site are the following:
Centroid: 16 deg 69 mins N; 97 deg 03 mins E
Aproximate bounding : 16°55'38.91"N-17°21'15.66"N; 96°52'48.75"E-97° 6'20.63"E

The site is situated on the coast of the Gulf of Mottama, in central Myanmar, at the mouth of the Sittaung River and includes the entire coast of Kyaikto township and most of the coast of Bilin township, both in Mon state.

The site was delineated based on geophysical features and administrative boundaries. The landward boundary of the Ramsar Site is based on mudflat extent, topography (elevation), hydrology, and bird roosting sites. The seaward side was delineated to include mudflat areas, plus a margin of error to account for the highly dynamic nature of the Gulf of Mottama and changing sediment flows and mudflat locations. This seaward boundary follows straight-line coordinate geometry to allow for easier identification of the boundary from maps and navigational equipment. This boundary delineation process has been carefully negotiated with all local stakeholders and in consultation with all townships involved. The southern seaward boundary reflects a pragmatic compromise between the various stakeholders using the central Gulf area for different purposes. From an ecological perspective the entire Gulf would be included. However, from a political standpoint this is not practical yet. .

(In addition of the Ramsar Site boundary, a management area has been delineated based on an approximately 2 km landward buffer along coastal areas of Bago Region and Mon State. This area is not subject to designation but is indicative. This management area extends southward to cover Paung and Chaungzon townships in Mon State, and the Salween River estuary near the city of Mawlamyine. To the west, the management area extends from the boundary with the proposed Ramsar Site to the administrative boundary with Yangon Region. The management area was delineated based on mudflat extent, significant streams and tidal sloughs, and coastal roads in some areas. As currently delineated the management area encompasses an additional 285,456 ha.

An additional area of interest continues to the southeast and covers parts of coastal Kayan, Thongwa, and Kyauktan townships (Yangon region). The area of interest follows mudflat and coastal roads on the landward side and includes 36,561 ha of mainly mudflat and near coastal open water. This is where potential boundaries extension of the Ramsar Site.

2.2.2 - General location

a) In which large administrative region does the site lie? Mon State

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

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): 42500

Area, in hectares (ha) as calculated from GIS boundaries 42554.46

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Marine Ecoregions of the World (MEOW)	Andaman Sea Coral Coast (MEOW region 110).

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

Other ecosystem services provided	The Gulf of Mottama (GoM) Ramsar Site is likely to provide a wide range of important ecosystem services for the biogeographic region. These are difficult to precisely quantify without site-specific scientific studies, but according to local information and known data on the value of mudflats and inter-tidal habitats in the region (BANCA, unpublished reports), potential services can be described as followed: Provisioning services: The GoM provides fish and marine products for local village fisheries and thereby support coastal livelihoods. Intertidal zones often play a key role as spawning grounds and nurseries for a wide range of fish species which can be then caught by capture fisheries outside this area. The GoM also potentially provides other edible non-timber products such as plants and seaweeds. Regulating services: The large mud flats of the GoM likely act as biological filters by helping to remove pollutants from water. Mud, gravel and their fauna of worms, molluscs and crustaceans are known to remove pollutants from water. Mud flats are also an important carbon sink and participate in climate change mitigation. They play a key role in coastal protection by breaking tidal action. Supporting services: The estuary is a highly productive system, supporting high densities of invertebrates which in turn support large and diverse populations of waterbirds including threatened and charismatic species like the Spoon-billed Sandpiper (Calidris pygmea) as well as numerous fish species. The site, as well as the entire GoM, serves as a huge sink for nutrients deriving from the rivers discharge and providing the basis for the huge productive plankton and benthos communities. The main concentrations of these move around the upper estuary in the Ramsar Site, in response to shifts in substrate, water conditions and food supply with the dynamic pattern of erosion and accretion, as well as the monthly tidal cycle and the wet and dry seasons. Considering the important nutrients and primary production provided by the site it is likely that it provides supporting services for ecosystems way beyond its boundaries, at regional level, including the entire Bay of Bengal by nourishing plankton and fish populations.
Other reasons	The Site exhibits a tidal cycle which is extremely pronounced in speed and volume, gathering from a width of around 100km and concentrating in a funnel-shaped bay to produce a powerful bore phenomenon, which can reach heights of over 1m on spring tides in the upper estuary and is unique for the biogeographic region. The tide drops by over 6 m and can reach in places up to 7m, exposing areas of tidal flats whose extent, sediment composition and undisturbed character are increasingly rare and important in the region. The tides and currents constantly redistribute sediments on a large scale, producing shifting channels and a mix of erosion and accretion, and making this one of the most dynamic estuaries in the world. Marked seasonal variations in temperature, pH, salinity, and dissolved oxygen levels are also produced by monsoon rainfall. At the Sittaung River inflow at the northern end of the Gulf, the water is brackish. Direct hydrological services provided by the Ramsar Site have to be further explored but it is likely that it support ground water recharge through the permeability of the mudflats.

☑ Criterion 2 : Rare species and threatened ecological communities

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

☑ Criterion 5 : >20,000 waterbirds

Overall waterbird numbers	90000
Start year	2008
Source of data:	Zöckler et al 2014 and Clark et al unpubl. 2015

☑ Criterion 6 : >1% waterbird population

☑ Criterion 8 : Fish spawning grounds, etc.

Justification	The Site is of high importance as a food source, breeding area and nursery area for fish and crustacean populations in the wider Gulf of Mottama and the transboundary Bay of Bengal beyond. A survey in 2014 (Tint, W. et al 2014) found a total of 39 fish species, which is based on sample sites and is not representing a complete list of fish species in the site. The most abundant species Burmese mullet Sicamugil hamiltonii, Giant Sea Perch Lates calcarifer , Indian threadfin Leptomelanosoma indicum, Pama croaker Otholitoides pama , Four finger Threadfin Eleuthero nema tetradactylum , Engraved catfish Nemapteryx caelata and Silver Whitling Sillago spp. as well as commercially important species include Hilsa Shad Tenualosa ilisha and Toli Shad T. toil which migrate through the site to breed in the rivers upstream (Tint, W. et al 2014) , and the Giant Freshwater Prawn Macrobrachium rosenbergii for which the inner part of the Gulf is an important nursery and breeding area.

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	Common 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								
Birds																		
CHORDATA / AVES	*Calidris ferruginea*	Curlew Sandpiper	☐	☐	☑	☐	☐	☑	☐	☐	9000	2008-2016	6.5	NT	☐	☐		E, SE Asia & Australia (non-breeding)
CHORDATA / AVES	*Calidris minuta*	Little Stint	☐	☐	☑	☐	☐	☑	☐	☐	5000	2008-2016	2	LC	☐	☐		S Asia (Non-breeding)
CHORDATA / AVES	*Calidris ruficollis*	Red-necked Stint	☐	☐	☑	☐	☐	☑	☐	☐	6000	2008-2016	2	NT	☐	☐		NE Siberia (Non-breeding)
CHORDATA / AVES	*Charadrius alexandrinus*	Kentish Plover; Snowy Plover	☐	☐	☑	☐	☐	☑	☐	☐	20000	2008-2016	20	LC	☐	☐		alexandrinus, S Asia (non-breeding)
CHORDATA / AVES	*Charadrius mongolus*	Lesser Sand Plover; Lesser Sand-Plover	☐	☐	☑	☐	☐	☑	☐	☐	25000	2008-2016	12.4	LC	☐	☐		mongolus, atrifrons and stegmanii populations non-breeding
CHORDATA / AVES	*Chlidonias leucopterus*	White-winged Tern	☐	☐	☑	☐	☐	☑	☐	☐	12000	2008-2016	2.4	LC	☐	☐		Asia, Australasia Non-breeding
CHORDATA / AVES	*Eurynorhynchus pygmeus*	Spoon-billed Sandpiper	☑	☑	☑	☐	☐	☐	☐	☐	220	2008-2016	50	CR	☐	☑		The global population estimates of the Critically Endangered Spoon-billed Sandpiper Calidris pygmaeus have been revised downwards several times, owing to the rapid decline of the species. There are now (2014) believed to be 450-500 birds remaining in the wild, including a breeding cohort of 120 pairs (Zöckler et al. 2016). The importance of the Ramsar site as a wintering area has been appreciated only in recent years, and even over this period its proportional importance and critical nature for this bird has been reassessed as even greater than originally thought. Myanmar as a whole hosts more than half of the world population at only two sites, of which the Ramsar site has the majority,
CHORDATA / AVES	*Limicola falcinellus*	Broad-billed Sandpiper	☐	☐	☑	☐	☐	☑	☐	☐	5000	2008-2016	20		☐	☐		
CHORDATA / AVES	*Limosa limosa*	Black-tailed Godwit	☐	☐	☑	☐	☐	☑	☐	☐	8400	2008-2016	6	NT	☐	☐		Melanuroides Non-breeding
CHORDATA / AVES	*Mycteria leucocephala*	Painted Stork	☐	☐	☑	☐	☐	☐	☐	☐	140	2009-2016	1.4	NT	☐	☐		SE Asia Local migrant, breeding in region
CHORDATA / AVES	*Pluvialis fulva*	Pacific Golden Plover; Pacific Golden-Plover	☐	☐	☑	☐	☐	☑	☐	☐	2000	2008-2016	2	LC	☐	☐		E, SE Asia Australia & Oceania (non-breeding)
CHORDATA / AVES	*Threskiornis melanocephalus*	Black-headed Ibis	☐	☐	☑	☐	☐	☐	☐	☐	150	2008-2012	1.5	NT	☐	☐		SE Asia, Non-breeding
CHORDATA / AVES	*Tringa totanus*	Common Redshank	☐	☐	☑	☐	☐	☑	☐	☐	4000	2008-2016	2	LC	☐	☐		S & SE Asia (non-breeding)

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 Gulf of Mottoma is a large and generally undisturbed funnel-shaped estuary with extensive tidal flats. Its tidal cycle is extremely pronounced in speed and amplitude, causing a powerful bore phenomenon which is highly unusual in the region and which makes this one of the most dynamic estuaries and last remaining wild coastal zones in the world, with constant sediment redistribution, channel-shifts, erosion and accretion on a large scale. The high productivity of the system supports a rich biota including abundant invertebrates, important nursery areas for marine fish and up to 90,000 migratory waterbirds in the non-breeding season. These include three globally threatened species and internationally important numbers of 12 species, and the Gulf is one of the world's most important wintering areas for the critically endangered Spoon-billed Sandpiper, hosting probably more than half of the remaining global population. Due to its high productivity the Gulf of Mottama provides hundreds of local communities with fish and other marine food sources and among many services acts as an important hydrological and sedimentological regulator, offering water purification, waste water treatment and nutrient as well as carbon storage in rich organic soils.

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
G: Intertidal mud, sand or salt flats	Gulf of Mottama	1	30000	Representative

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
Saline, brackish or alkaline water > Marshes & pools >> Sp: Permanent saline/ brackish/ alkaline marshes/ pools		4		

4.3 - Biological components

4.3.1 - Plant species

<no data available>

4.3.2 - Animal species

Other noteworthy animal species

Phylum	Scientific name	Common name	Pop. size	Period of pop. est.	%occurrence	Position in range /endemism/other
CHORDATA/AVES	Anastomus oscitans	Asian Openbill	300	2008-2016	0.1	
CHORDATA/AVES	Ardea alba	Great Egret		2008-2016		
CHORDATA/AVES	Ardea cinerea	Gray Heron;Grey Heron	500	2008-2016	0.1	
CHORDATA/AVES	Ardeola grayii	Indian Pond Heron		2008-2016		
CHORDATA/AVES	Calidris alba	Sanderling		2008-2016		
CHORDATA/AVES	Calidris canutus	Red Knot		2008-2016		
CHORDATA/AVES	Calidris subminuta	Long-toed Stint	25000	2008-2016	0.4	
CHORDATA/AVES	Calidris temminckii	Temminck's Stint		2008-2016		
CHORDATA/AVES	Charadrius dubius	Little Ringed Plover		2008-2016		
CHORDATA/AVES	Chroicocephalus brunnicephalus	Brown-headed Gull	1400	2008-2016	0.9	
CHORDATA/AVES	Egretta garzetta	Little Egret	500	2008-2016	0.1	
CHORDATA/AVES	Egretta intermedia	Intermediate Egret;Plumed Egret	500	2008-2016	0.1	
CHORDATA/AVES	Gallinago gallinago	Common Snipe		2008-2016		
CHORDATA/AVES	Gelochelidon nilotica	Gull-billed Tern		2008-2016		
CHORDATA/AVES	Glareola lactea	Small Pratincole		2008-2016		
CHORDATA/AVES	Hydroprogne caspia	Caspian Tern		2008-2016		
CHORDATA/AVES	Ichthyaetus ichthyaetus	Pallas's Gull		2008-2016		
CHORDATA/AVES	Limosa lapponica	Bar-tailed Godwit		2008-2016		
CHORDATA/AVES	Numenius arquata	Eurasian Curlew	900	2008-2016	0.9	
CHORDATA/AVES	Numenius phaeopus	Whimbrel	500	2008-2016	0.9	
CHORDATA/AVES	Nycticorax nycticorax	Black-crowned Night Heron;Black-crowned Night-Heron		2008-2016		
CHORDATA/AVES	Pluvialis squatarola	Grey Plover		2008-2016		
CHORDATA/AVES	Recurvirostra avosetta	Pied Avocet		2008-2016		
CHORDATA/AVES	Sternula albifrons	Little Tern		2008-2016		
CHORDATA/AVES	Tadorna ferruginea	Ruddy Shelduck		2008-2016		
CHORDATA/AVES	Tringa erythropus	Spotted Redshank	120	2008-2016	0.5	
CHORDATA/AVES	Tringa glareola	Wood Sandpiper		2008-2016		
CHORDATA/AVES	Tringa nebularia	Common Greenshank		200802016		
CHORDATA/AVES	Tringa ochropus	Green Sandpiper				
CHORDATA/AVES	Tringa stagnatilis	Marsh Sandpiper		2008-2016		

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): 0

a) Maximum elevation above sea level (in metres): 5

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 Ramsar site is situated at the mouth of the Sittaung river and in the Gulf of Mottama which is an arm of the Andaman sea

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

Source of water that maintains character of the site

Presence?	Predominant water source
Marine water	☑

Water destination

Presence?
Marine

Stability of water regime

Presence?
Water levels fluctuating (including tidal)

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

The site exhibits a tidal cycle which is extremely pronounced in speed and volume, gathering from a width of around 100 km and concentrating in a funnel-shaped bay to produce a powerful bore phenomenon, which can reach heights of over 1 m on spring tides in the upper estuary and is highly unusual in the region. The tide drops by over 6 m and can reach in places up to 7 m, exposing areas of tidal flats whose extent, sediment composition and undisturbed character are increasingly rare and important in the region.

The water flow from the Sittaung river fluctuates according to the season resulting in changes in salinity in the site.

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):

The tides and currents constantly redistribute sediments on a large scale, producing shifting channels and a mix of erosion and accretion, and making this one of the most dynamic estuaries in the world. The Ramsar site is also one of the least impacted large intertidal estuarine systems in the world.

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 ☐

Please provide further information on salinity (optional):

The water flow from the Sittaung river fluctuates according to the season resulting in changes in salinity in the site.

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 ☐

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
Pollution control and detoxification	Water purification/waste treatment or dilution	High

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Nature observation and nature-based tourism	Low
Spiritual and inspirational	Spiritual and religious values	Low

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Biodiversity	Supports a variety of all life forms including plants, animals and microorganizms, the genes they contain, and the ecosystems of which they form a part	High
Nutrient cycling	Storage, recycling, processing and acquisition of nutrients	High
Nutrient cycling	Carbon storage/sequestration	Medium

Within the site: 10000s

Outside the site: 100000s

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 ☐

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	☑	☑
Provincial/region/state government	☑	☑

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

The Government of Myanmar owns all land.

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site: Local governance and integrated coastal zone management (ICZM) mechanisms will be developed after designation and will involve the Mon state relevant Ministries. The RIS will be updated once the local focal point for management has been nominated.

Provide the name and title of the person or people with responsibility for the wetland: Dr. Min Kyi Win, Minister of Ministry of Natural Resources and Environmental Conservation, Mon State

Postal address: Mon State Government Office, Mawlamyine

E-mail address: minkyiwin2013@gmail.com

5.2 - Ecological character threats and responses (Management)

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

Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Annual and perennial non-timber crops	Medium impact	Medium impact	☑	☑

Transportation and service corridors

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Shipping lanes	Low impact	Medium impact	☑	☐

Biological resource use

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

Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Dams and water management/use	Low impact	High impact	☐	☑

Pollution

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

Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Storms and flooding	Low impact	Low impact	☑	☑

5.2.2 - Legal conservation status

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Gulf of Mottama	http://www.birdlife.org/datazone/sitefactsheet.php?id=31525 http://www.eaaflyway.net/wordpress/new/theflyway/flywaysitenetwork/EAAF-SIS117_Gulf%20of%20Mottama.pdf	
Other non-statutory designation	Gulf of Mottama (EAAFP flyway site)	http://www.eaaflyway.net/wordpress/new/theflyway/flywaysitenetwork/EAAF-SIS117_Gulf%20of%20Mottama.pdf	partly

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

Legal protection

Measures	Status
Legal protection	Proposed

Species

Measures	Status
Threatened/rare species management programmes	Partially implemented

Human Activities

Measures	Status
Fisheries management/regulation	Partially implemented
Harvest controls/poaching enforcement	Implemented
Communication, education, and participation and awareness activities	Partially implemented

Other:

The NGO BANCA (see above) has undertaken community awareness activities in villages around the shore of the Gulf, concerning the importance of the area for Spoon-billed Sandpipers and the legal position concerning hunting of this species.

Awareness activities on Ramsar will be developed as part of the Community-Led Coastal Management in the Gulf of Mottama project, including support to the World Wetland day, translation of key Ramsar documents and awareness events for local stakeholders.

The Community-Led Coastal Management in the Gulf of Mottama project (GoMP) is a 9 year (2015-2024) initiative supported by the Swiss Development Cooperation (SDC) and aims at ensuring that the unique biodiversity of the GoM is conserved and sustainably developed in order to benefit human communities that depend on it . It implemented by a Consortium led by HELVETAS Swiss Inter-cooperation, with core partners Network Activities Group (NAG), a local Myanmar NGO and the International Union for Conservation of Nature (IUCN), in partnership with BANCA and the Malwamyine University.

The project is framed around three interdependent outcomes, focusing on improving the fishery sector, promoting alternative livelihood resources, and supporting more sustainable natural resources and biodiversity management in the coastal areas of the Gulf of Mottama (GoM). The implementation strategy relies on community led, co-management, multi-stakeholder approaches.

The main outcomes of the project, in addition to the support to the Ramsar site designation is to develop local governance mechanisms for the Ramsar site and support a management plan which will cover the entire Ramsar site as well as an extended buffer zone including the coast of Bago Region and of Southern Mon state.

5.2.5 - Management planning

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

5.2.6 - Planning for restoration

Is there a site-specific restoration plan?	No need identified

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Water regime monitoring	Proposed
Water quality	Proposed
Animal community	Implemented
Birds	Implemented

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Lunn, Z, Minoru, K, Tomida, H, Suzuki, T, Han Shein, S, Chan, N, Maung, A, Monn, S, Lin, S M N N (2011). Preliminary study on intertidal macro-zoobenthos distribution in the spoon-billed sandpiper core wintering area of the Gulf of Mottama (Martaban), Myanmar. Unpublished report, BANCA, Yangon.

Spalding, M D et al. (2007) Marine Ecoregions of the World: A Bioregionalization of Coastal and Shelf Areas. BioScience 57(7): 573-583.

Tint, W. Win, K.K., Moe, M.M., Zaw L.H., Thaw, P.S., Tint T. (2014). A Rapid Assessment of Fish and Fisheries Information in a part of East coast of Gulf of Mottama (Mon State). Yangon 26p.

Spoon-billed Sandpiper Task Force (various). News bulletins - accessible at http://www.eaaflyway.net/spoon-billed-sandpiper.php

Wetland Conservation in Myanmar. Presentations given to Symposium for World Wetlands Day, Nay Pyi Taw, Myanmar, 2 February 2012.

Zöckler, C, Htin Hla, T, Clark, N, Syroechkovskiy, E, Yakushev, N, Daengphayon, S and Robinson, R (2010). Hunting in Myanmar is probably the main cause of the decline of the Spoon-billed Sandpiper Calidris pygmeus. Wader Study Group Bulletin 117(1): 1–8

Zöckler, C., T. Zaw Naing, S. Moses, R. Nou Soe & T. Htin Hla (2014): The importance of the Myanmar Coast for Water Birds. Stilt 66: 37-51.

Zöckler, C, et al (2016). The Wintering Distribution of the Spoon-billed Sandpiper . The winter distribution of the Spoon-billed Sandpiper Calidris pygmaeus. Bird Conservation International, Available on CJO 2016 doi:10.1017/S0959270915000295

6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)
<2 file(s) uploaded>

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>

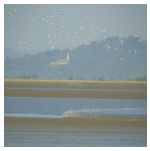
iv. relevant Article 3.2 reports
<no file available>

v. site management plan
<no file available>

vi. other published literature
<no file available>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



Flock of white-winged terns following the rushing tidal bore (*Mr. Christoph Zöckler, 15-01-2017*)

Survey team and boats at dusk (*Mr. Christoph Zöckler, 15-01-2017*)

Coastal wilderness in the Gulf of Mottama (*Mr. Christoph Zöckler, 15-01-2017*)

Tidal marshes (*Mr. Christoph Zöckler, 15-01-2017*)

6.1.4 - Designation letter and related data

Designation letter
<1 file(s) uploaded>

Date of Designation: 2017-01-24