

2023 EAAFP Small Grant Fund (WG/TF) Report Template



Monitoring the Migratory Shorebirds in West Gulf of Mottama Ramsar Site

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BIODIVERSITY AND NATURE CONSERVATION ASSOCIATION

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Section 1. Project Overview – This report will be shared on EAAFP website.

1.1 BACKGROUND

Please give a brief and background of your project:

A. Describe about your organization by filling out the table below:

Type of the organization - Government/NGO/Private Sector/Other	Local NGO
Name(s) of the division and/or position	Program Officer (Operations)
<p>List any contributions that your organizations or yourself might have been involved for the preservation of the migratory waterbirds, their habitats and East – Asian Australasian Flyway below.</p> <ul style="list-style-type: none"> - Enhanced the knowledge and capacity of the members of LCGs about the importance of conserving migratory birds and their habitats. - Promoted community engagement in conservation efforts. - Monitored migratory shorebirds, and waterbirds in the Gulf of Mottama including key species of the EAAF. - Identified threats such as illegal fishing, illegal bird hunting and pollution in the Gulf of Mottama. - Identified gaps in current conservation practices for further improvement in the Gulf. 	

B. Provide a brief abstract summary of your project. In the summary, please include its objective and its location (Name of Place, City and Country), and explain the significance and relations of the species and its location (in link with [EAAF Key Species](#) and [Flyway Network Site](#)) for your project.

Summary

The Gulf of Mottama extends along the Sittaung River in Mon State, Bago Region, and Yangon Region. This site supports a rich biota including abundant invertebrates, important nursery areas for marine fish and up to 150,000 migratory waterbirds in the non-breeding season, including Critically Endangered Spoon-billed Sandpiper *Calidris pygmaea*, with fewer than 500 individuals remaining in the world. Approximately half of the global population migrates annually to the Gulf of Mottama. The site is also vital for other key species of East Asian-Australasian Flyway (EAAF), includes Great Knot *Calidris tenuirostris* (EN), and Spotted Greenshank *Tringa guttifer* (EN), Bar-tailed Godwit *Limosa lapponica*, Curlew Sandpiper *Calidris ferruginea*, Asian Dowitcher *Limnodromus semipalmatus*, Eurasian Curlew *Numenius arquata*, Black-tailed Godwit *Limosa limosa*.



Additionally, the Gulf supports the livelihoods of thousands of people through fisheries, important at local, national and regional level.

Due to its significant ecological values, the Gulf of Mottama has received international recognition as Ramsar Site (ID 2299) under the Convention on Wetlands of International Importance. It has been also designated as Flyway Network Site (EAAF-117) by the East Asian-Australasian Flyway Partnership.

For the long-term sustainable conservation of the Gulf of Mottama, BANCA has been working to strength Local Conservation Groups (LCGs) by providing capacity building training and promoted their involvement in conservation. This project included training on shorebird conservation, bird hunting survey, SMART patrolling to monitor the illegal activities in the Gulf, assessing illegal bird hunting in the surrounding villages. These initiatives aimed to strengthen LCG members and coastal communities in sustainable conservation efforts in the Gulf of Mottama in Myanmar.

1.2 DETAILS

Please provide a project description of the following:

- A. **Detailed Project Progress:** Describe about process of your project, including methodologies, field work, interview, conference, etc. Please include analysis of your process, if applicable. (Any visual data, including maps, graphs, tables, photos, etc. are strongly preferred)

Activity (1) Training on Shorebird Conservation and Methodology of Illegal Bird Hunting and Taking of Birds Survey

The training was conducted for 4 days from 18th to 21st January 2024 with attendance 16 trainees of Local Conservation Groups (LCGs) representing six project villages in Kawa and Thanatpin Townships in Bago Region. This training was aimed to improve their capacity in community outreach and shorebirds monitoring in the Gulf of Mottama. The training consisted of 3 days indoors at Oak Thar Kyaw Hotel, focusing on theoretical aspects on bird watching to identify shorebirds, basic Spatial Monitoring And Reporting Tool (SMART) patrolling mainly focus on data entry level, and survey techniques of illegal bird hunting and taking of birds in markets and 1 day outdoor for practical exercise such as birdwatching and patrolling by using Global Positioning System (GPS) and SMART data forms at Moeyun Gyi Wildlife Sanctuary in Bago Region.



Training Strategy

During the training, a diverse methodology was utilized to ensure effective learning and engagement. The approach included the use of PowerPoint Presentations accompanied by educational videos to illustrate concepts visually. Interactive elements included questions and answer sessions on each topic covered fostering mutual discussion among participants. Group activities involved dividing participants into smaller groups for discussion, with leaders rotating to present their discussions. Moreover, educational pamphlets, leaflets and books were distributed to enrich the educational experience. During the training days, participants were given approximately 30 minutes break to engage in educational games to maintain an active and focused learning environment.

In the subject of SMART patrolling and birdwatching, practical works were emphasized through filling SMART data form by using GPS and bird watching in the surrounding area of the venue to enhance the better understanding of the subjects.

Activity (2) Shorebirds Monitoring Survey and Patrolling in the Gulf of Mottama

Prior conducting the survey, we conducted a thorough review of previous studies for possible mudflats condition in the Gulf of Mottama which are crucial habitats for wintering birds. Local fishermen and local communities were engaged in discussion to gather information. The survey team across the Gulf of Mottama by local fishing boats during the high tide periods and recorded threats impacted on birds while shorebirds survey was carried out on the mudflats by using flock count method during the low tide periods. The survey was carried out over a four-month period from November 2023 to February 2024 with expeditions spanning five day for each month by using four boats with members of LCGs by leading BANCA team. Daily discussions were conducted to review the observations and plan surveys for the next day.

Equipment utilized during the survey included telescopes, binoculars, field bird guide books, Global Positioning System (GPS) and the Spatial Monitoring and Reporting Tool (SMART) data forms. Photos and information were recorded for facilitate follow-up investigations at the sites of illegal hunting and fishing.



Activities Timeline

The surveys were conducted one time per monthly with the members of LCGs for four months from November 2023 to February 2024 in the west Gulf (Bago Region). The detailed duration and survey stations are as follows:

Survey Dates	Survey Stations
25 November 2023 to 1 December 2023	Aung Naing Gyi village, Thanatpin Township
24 December 2023 to 30 December 2023	Aung Naing Gyi village, Thanatpin Township
24 January 2023 to 30 January 2023	Aung Naing Gyi village, Thanatpin Township
24 February 2024 to 1 March 2024	Khae Nan Ah Thin village, Thanatpin Township

Activity (3) To assess and identify the illegal birds hunting in villages and local markets

Two members of LCGs from each of the six villages, conducted survey around their villages and the west Gulf for a day per month between January and February. Before conducted the survey, LCGs members asked and discussed about the situation of illegal bird hunting so that to effective the survey activities. The survey was conducted by using two kinds of structured questionnaire for shops or markets and hunters that prepared by BANCA.



B. **Problems Encountered/Adjustments:** If there were some changes made, please indicate them and explain (ex. unexpected circumstances, sudden cancellation, etc.)

The problems we encountered during the project activities are described below.

Sr. No.	Problems Encountered	Adaptive Management
1	<ul style="list-style-type: none"> ● Unable to reach to desired locations when conducting survey activities in the Gulf due to weather conditions 	<ul style="list-style-type: none"> ● Conducted safe travel practices ● Regular monitor the situation of weather forecast ● Identified the alternative routes and modes of transportation
2	<ul style="list-style-type: none"> ● Faced with health issues due to heavy shower 	<ul style="list-style-type: none"> ● Ensured all survey team had access to medication ● Reduced the workload for ill person
3	<ul style="list-style-type: none"> ● Some of the Members of Local Conservation Groups were unable to join the training as they had no available timeslots to attend. 	<ul style="list-style-type: none"> ● Invited local communities who are interested in conservation.

C. Details on any community education and public awareness activities associated with your project.

With the project, training on shorebird conservation and methodology of illegal bird hunting and taking of birds survey was provided to the members of LCGs to improve their capacity in community outreach and shorebirds monitoring in the Gulf of Mottama. The training was focused on theoretical aspects on bird watching to identify shorebirds, basic Spatial Monitoring And Reporting Tool (SMART) patrolling mainly focus on data entry level, and survey techniques of illegal bird hunting and taking of birds in markets and practical exercise such as birdwatching and patrolling by using Global Positioning System (GPS) and SMART data forms.

During the training, a diverse methodology was utilized to ensure effective learning and engagement. Interactive elements included questions and answer sessions on each topic covered fostering mutual discussion among participants. Group activities involved dividing participants into smaller groups for



discussion, with leaders rotating to present their discussions. Moreover, to reinforce the information shared during the training, educational pamphlets, leaflets and books were distributed. In the training days, participants were given approximately 30 minutes break to engage in educational games to maintain an active and focused learning environment.

Trainees engaged in practical works through filling SMART data forms by using GPS and bird watching to enhance the better understanding of the subjects. The proactive participation and requests for further trainings from trainees indicated a growing support for conservation initiatives and sustainable future for shorebird conservation in the Gulf of Mottama.

D. Please include any additional supporters of this project

- Helvetas Myanmar
- World Wildlife Fund (WWF) Myanmar

1.3 RESULT

Explain and evaluate the outcomes and findings of your project (Any visual data, including maps, graphs, tables, photos, etc. are highly preferred).

Results

Activity (1) Training on Shorebird Conservation and Methodology of Illegal Bird Hunting and Taking of Birds Survey

- All trainees already a basic knowledge of conservation so they interested to the training sessions.
- Trainees interested in the training subjects and actively involved in group works.
- Trainees shared their knowledge and experiences to other trainees.
- During the training, gender equal balance was found in the participants mixed with young and elder people and actively participated the training.
- After training, most of the participants developed on the training contents and pleased to participate in the conservation project activities.
- During the outdoor at Moe Yun Gyi Wildlife Sanctuary, they had keen on bird watching and species identification, and also improved in patrolling by using GPS and SMART data form.
- After the training, they requested to conduct the training to other members and local communities in their villages, with an emphasis to reaching out young people.



Activity (2) Shorebirds Survey and SMART Patrolling in the Gulf of Mottama

Shorebirds Survey

In November, a total of 35 species, with approximately 3500 individuals of 18 shorebirds species, 445 individuals of 10 waterbirds, and 581 individuals of 7 terns and gulls species were recorded. Among these, Endangered Spotted Greenshank *Tringa guttifer* and three Near Threatened species such as Curlew Sandpiper *Calidris ferruginea*, Spotted Redshank *Tringa erythropus* and Eurasian Curlew *Numenius arquata* were observed. Among the recorded species, the highest population are 820 individuals of Kentish Plover, 760 individuals of White-winged Tern, 650 individuals of Tibetan Sand Plover, 640 individuals of Black-tailed Godwit, and 470 individuals of Common Redshank were observed.

In December, a total of 41 species were recorded, with approximately 6700 individuals of 21 shorebird species were recorded in the west Gulf of Mottama survey. The survey identified four Near Threatened Species such as Asian Dowitcher *Limnodromus semipalmatus*, Black-tailed Godwit *Limosa limosa*, Eurasian Curlew *Numenius arquata*, and Black-headed Ibis *Threskiornis melanocephalus*. Among the recorded species, the highest population are 1560 individuals of Tibetan Sand Plover, 1320 individuals of Black-tailed Godwit, 1300 individuals of Kentish Plover, 1085 individuals of Common Redshank, and 1000 individuals of Whiskered Tern were observed.

In January, a total of 38 bird species were recorded during the survey, including approximately 6900 individuals of 19 shorebirds and 415 individuals of 12 waterbirds and 1376 individuals of 7 Gulls and Terns species. Among these, four Near Threatened species such as Curlew Sandpiper *Calidris ferruginea*, Black-tailed Godwit *Limosa limosa*, Eurasian Curlew *Numenius arquata*, and Black-headed Ibis *Threskiornis melanocephalus* were observed. Among the recorded species, the highest population are 2240 individuals of Tibetan Sand Plover, 1722 individuals of Black-tailed Godwit, 737 individuals of White-winged Tern, 708 individuals of Common Redshank, and 590 individuals of Kentish Plover were observed.

In February, a total of 35 species were recorded with approximately 2700 individuals of 22 shorebird species were recorded in the west Gulf of Mottama. The survey identified 2 individuals of Endangered Great Knot *Calidris tenuirostris*, 7 individuals of Endangered Spotted Greenshank *Tringa guttifer* and six Near Threatened Species such as Curlew Sandpiper *Calidris ferruginea*, Red-necked Stint *Calidris ruficollis*, Black-tailed Godwit



Limosa limosa, Bar-tailed Godwit *Limosa lapponica*, Eurasian Curlew *Numenius arquata*, and Black-headed Ibis *Threskiornis melanocephalus*. Among the recorded species, the highest population are 2240 individuals of Tibetan Sand Plover, and 1722 individuals of Black-tailed Godwit were observed.

In January, and February, fewer bird species and populations were observed in both sites due to heavy showers and fog presence in the Gulf that made the boats travel difficult under bad weather conditions.

The detailed findings of the bird species from November 2023 to February 2024 are presented below the tables (3), (4), (5), and (6) respectively.

Table (3) Result of birds survey in the Gulf Mottama 25th November to 1st December 2023

No.	Name	Genus	Species	IUCN Status	Count
Shorebirds					
1	Common Sandpiper	<i>Actitis</i>	<i>hypoleucos</i>	LC	22
2	Long-billed Plover	<i>Charadrius</i>	<i>placidus</i>	LC	15
3	Kentish Plover	<i>Charadrius</i>	<i>alexandrinus</i>	LC	820
4	Tebetan Sand Plover	<i>Charadrius</i>	<i>mongolus</i>	LC	650
5	Little Stint	<i>Calidris</i>	<i>minuta</i>	LC	28
6	Greater Sand Plover	<i>Charadrius</i>	<i>leschenaultii</i>	LC	70
7	Grey Plover	<i>Pluvialis</i>	<i>squatarola</i>	LC	3
8	Pacific Golden Plover	<i>Pluvialis</i>	<i>fulva</i>	LC	4
9	Terek Sandpiper	<i>Xenus</i>	<i>cinereus</i>	LC	51
10	Curlew Sandpiper	<i>Calidris</i>	<i>ferruginea</i>	NT	430
11	Broad-billed Sandpiper	<i>Limicola</i>	<i>falcinellus</i>	LC	470
12	Common Redshank	<i>Tringa</i>	<i>totanus</i>	LC	160
13	Spotted Redshank	<i>Tringa</i>	<i>erythropus</i>	LC	22
14	Black-tailed Godwit	<i>Limosa</i>	<i>limosa</i>	NT	640
15	Whimbrel	<i>Numenius</i>	<i>phaeopus</i>	LC	130
16	Eurasian Curlew	<i>Numenius</i>	<i>arquata</i>	NT	72
17	Nordmann's Greenshank	<i>Tringa</i>	<i>guttifer</i>	EN	1
18	Common Greenshank	<i>Tringa</i>	<i>nebularia</i>	LC	3
Total Shore Birds					3591
Water Birds					
1	Pond Heron	<i>Ardeola</i>	<i>sp</i>	LC	55
2	Great Egret	<i>Ardea</i>	<i>alba</i>	LC	18
3	Little Egret	<i>Egretta</i>	<i>garzetta</i>	LC	8



4	Cattle Egret	<i>Bubulcus</i>	<i>coromandus</i>	LC	20
5	Glossy Ibis	<i>Plegadis</i>	<i>falcinellus</i>	LC	260
6	Black-headed Ibis	<i>Threskiornis</i>	<i>melanocephalus</i>	NT	21
7	Painted Stock	<i>Mycteria</i>	<i>leucocephala</i>	LC	59
8	White-throated Kingfisher	<i>Halcyon</i>	<i>smyrnensis</i>	LC	1
9	Common Kingfisher	<i>Alcedo</i>	<i>atthis</i>	LC	2
10	White-breasted Waterhen	<i>Amaurornis</i>	<i>phoenicurus</i>	LC	1
Total Waterbirds					445
Gull & Tern					
1	White-winged Tern	<i>Chlidonias</i>	<i>leucopterus</i>	LC	360
2	Whiskered Tern	<i>Chlidonias</i>	<i>hybrida</i>	LC	74
3	Gull-billed Tern	<i>Gelochelidon</i>	<i>nilotica</i>	LC	8
4	Caspian Tern	<i>Hydroprogne</i>	<i>caspia</i>	LC	6
5	Brown-headed Gull	<i>Chroicocephalus</i>	<i>brunnicephalus</i>	LC	106
6	Black-headed Gull	<i>Chroicocephalus</i>	<i>ridibundus</i>	LC	25
7	Palla's Gull	<i>Larus</i>	<i>ichthyaetus</i>	LC	2
Total Gull & Tern					581

Table (4) Result of birds survey in the Gulf Mottama 26th to 31st December 2023

No.	Species	Genus	Species	IUCN Status	Total Count
Shorebirds					
1	Common Sandpiper	<i>Actitis</i>	<i>hypoleucos</i>	LC	20
2	Great Knot	<i>Calidris</i>	<i>tenuirostris</i>	EN	0
3	Red-necked Stint	<i>Calidris</i>	<i>ruficollis</i>	LC	30
4	Curlew Sandpiper	<i>Calidris</i>	<i>ferruginea</i>	LC	141
5	Spoon-billed Sandpiper	<i>Calidris</i>	<i>pygmeus</i>	CR	0
7	Dunlin	<i>Calidris</i>	<i>alpina</i>	LC	0
8	Greater Sand-Plover	<i>Charadrius</i>	<i>leschenaultii</i>	LC	280
9	Kentish Plover	<i>Charadrius</i>	<i>alexandrinus</i>	LC	1300
10	Tibetan Sand Plover	<i>Charadrius</i>	<i>mongolus</i>	LC	1560
11	Little Ringed Plover	<i>Charadrius</i>	<i>dubius</i>	LC	0
12	Broad-billed Sandpiper	<i>Limicola</i>	<i>falcinellus</i>	LC	85
13	Terek Sandpiper	<i>Xenus</i>	<i>cinereus</i>	LC	7
14	Asian Dowitcher	<i>Limnodromus</i>	<i>semipalmatus</i>	NT	10



15	Black-tailed Godwits	<i>Limosa</i>	<i>limosa</i>	NT	1320
16	Eurasian Curlew	<i>Numenius</i>	<i>arquata</i>	NT	83
17	Whimbrel	<i>Numenius</i>	<i>phaeopus</i>	LC	138
18	Ruff	<i>Philomachus</i>	<i>pugnax</i>	LC	0
19	Pacific Golden Plover	<i>Pluvialis</i>	<i>fulva</i>	LC	324
20	Grey Plover	<i>Pluvialis</i>	<i>squatarola</i>	LC	3
21	Common Greenshank	<i>Tringa</i>	<i>nebularia</i>	LC	37
22	Spotted Greenshank	<i>Tringa</i>	<i>guttifer</i>	EN	0
23	Spotted Redshank	<i>Tringa</i>	<i>erythropus</i>	LC	190
24	Common Redshank	<i>Tringa</i>	<i>totanus</i>	LC	1085
25	Marsh Sandpiper	<i>Tringa</i>	<i>stagnatilis</i>	LC	4
26	Little Stint	<i>Calidris</i>	<i>minuta</i>	LC	177
27	Pied Avocet	<i>Recurvirostra</i>	<i>avosetta</i>	LC	2
Total Shore Birds					6796
Waterbirds					
No.	Common Name	Genus	Species	IUCN Status	Count (Bago)
1	Asian Openbill	<i>Anastomus</i>	<i>oscitans</i>	LC	110
2	Common Shelduck	<i>Tadorna</i>	<i>tadorna</i>	LC	0
3	Ruddy Shelduck	<i>Tadorna</i>	<i>ferruginea</i>	LC	13
4	Great Egret	<i>Ardea</i>	<i>alba</i>	LC	134
5	Purple Heron	<i>Ardea</i>	<i>purpurea</i>	LC	0
6	Grey Heron	<i>Ardea</i>	<i>cinerea</i>	LC	22
7	Pond Heron	<i>Ardea</i>	<i>sp.</i>	LC	30
8	Eastern Cattle Egret	<i>Bubulcus</i>	<i>coromandus</i>	LC	0
9	Little Egret	<i>Egretta</i>	<i>garzetta</i>	LC	18
10	Intermediate Egret	<i>Mesophoyx</i>	<i>intermedia</i>	LC	24
11	Painted Stork	<i>Mycteria</i>	<i>leucocephala</i>	LC	64
12	Black-crowned Night-Heron	<i>Nycticorax</i>	<i>nycticorax</i>	LC	14
13	Little Cormorant	<i>Phalacrocorax</i>	<i>niger</i>	LC	8
14	Black-headed Ibis	<i>Threskiornis</i>	<i>melanocephalus</i>	NT	126
15	White-throated Kingfisher	<i>Halcyon</i>	<i>smyrnensis</i>	LC	2
16	Common Kingfisher	<i>Alcedo</i>	<i>atthis</i>	LC	1
Total of waterbird species					566
Gull & Tern					



No.	Common Name	Genus	Species	IUCN Status	Count (Bago)
1	Whiskered Tern	<i>Chlidonias</i>	<i>hybrida</i>	LC	1000
2	White-winged Tern	<i>Chlidonias</i>	<i>leucopterus</i>	LC	1200
3	Black-headed Gull	<i>Chroicocephalus</i>	<i>ridibundus</i>	LC	22
4	Brown-headed Gull	<i>Chroicocephalus</i>	<i>brunnicephalus</i>	LC	35
5	Gull-billed Tern	<i>Gelochelidon</i>	<i>nilotica</i>	LC	30
6	Caspian Tern	<i>Hydroprogne</i>	<i>caspia</i>	LC	0
7	Pallas's Gull	<i>Larus</i>	<i>ichthyaetus</i>	LC	1
8	Heuglin's Gull	<i>Larus</i>	<i>heuglini</i>	LC	0
9	Little Tern	<i>Sternula</i>	<i>albifrons</i>	LC	8
Total of Gull & Tern species					2296

Table (5): Result of birds survey in the Gulf Mottama 26th to 30th January 2024

Shorebirds					
No.	Common Name	Genus	Species	IUCN Status	Total Count
1	Tibetan Sand Plover	<i>Charadrius</i>	<i>mongolus</i>	LC	2240
2	Kentish Plover	<i>Charadrius</i>	<i>alexandrinus</i>	LC	590
3	Greater Sand Plover	<i>Charadrius</i>	<i>leschenaultii</i>	LC	13
4	Little Ringed Plover	<i>Charadrius</i>	<i>dubius</i>	LC	36
5	Little Stint	<i>Calidris</i>	<i>minuta</i>	LC	248
6	Grey Plover	<i>Pluvialis</i>	<i>squatarola</i>	LC	15
7	Pacific Golden Plover	<i>Pluvialis</i>	<i>fulva</i>	LC	417
8	Common Sandpiper	<i>Actitis</i>	<i>hypoleucos</i>	LC	12
9	Terek Sandpiper	<i>Xenus</i>	<i>cinereus</i>	LC	5
10	Curlew Sandpiper	<i>Calidris</i>	<i>ferruginea</i>	NT	352
11	Broad-billed Sandpiper	<i>Limicola</i>	<i>falcinellus</i>	LC	213
12	Marsh Sandpiper	<i>Tringa</i>	<i>stagnatilis</i>	LC	14
13	Common Redshank	<i>Tringa</i>	<i>totanus</i>	LC	708
14	Spotted Redshank	<i>Tringa</i>	<i>erythropus</i>	LC	20
15	Black-tailed Godwit	<i>Limosa</i>	<i>limosa</i>	NT	1722
16	Whimbrel	<i>Numenius</i>	<i>phaeopus</i>	LC	218
17	Eurasian Curlew	<i>Numenius</i>	<i>arquata</i>	NT	68
18	Common Greenshank	<i>Tringa</i>	<i>nebularia</i>	LC	20



19	Ruff	<i>Recurvirostra</i>	<i>avosetta</i>	LC	3
20	Red-necked Stint	<i>Calidris</i>	<i>ruficollis</i>	NT	0
21	Great Knot	<i>Calidris</i>	<i>tenuirostris</i>	EN	0
22	Red Knot	<i>Calidris</i>	<i>canutus</i>	NT	0
23	Spotted Greenshank	<i>Tringa</i>	<i>guttifer</i>	EN	0
Total of Shorebird species					6914

	Waterbird
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No.	Common Name	Genus	Species	IUCN Status	Bago Count
1	Pond Heron	<i>Ardeola</i>	<i>sp</i>	LC	8
2	Black-crowned Night-Heron	<i>Nycticorax</i>	<i>nycticorax</i>	LC	7
3	Grey Heron	<i>Ardea</i>	<i>cinerea</i>	LC	30
4	Great Egret	<i>Ardea</i>	<i>alba</i>	LC	63
5	Intermediate Egret	<i>Mesophoyx</i>	<i>intermedia</i>	LC	5
6	Little Egret	<i>Egretta</i>	<i>garzetta</i>	LC	12
7	Black-headed Ibis	<i>Threskiornis</i>	<i>melanocephalus</i>	NT	228
8	Painted Stock	<i>Mycteria</i>	<i>leucocephala</i>	LC	9
9	Gadwall	<i>Anas</i>	<i>strepera</i>	LC	2
10	Eurasian Wigeon	<i>Anas</i>	<i>penelope</i>	LC	46
11	White-throated Kingfisher	<i>Halcyon</i>	<i>smyrnensis</i>	LC	2
12	Purple Heron	<i>Ardea</i>	<i>purpurea</i>	LC	3
13	Little Cormorant	<i>Phalacrocorax</i>	<i>niger</i>	LC	0
Total of Waterbird species					415

	Gulls & Terns
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No.	Common Name	Genus	Species	IUCN Status	Bago Count
1	Little Tern	<i>Sternula</i>	<i>albifrons</i>	LC	5
2	White-winged Tern	<i>Chlidonias</i>	<i>leucopterus</i>	LC	737
3	Whiskered Tern	<i>Chlidonias</i>	<i>hybrida</i>	LC	561
4	Gull-billed Tern	<i>Gelochelidon</i>	<i>nilotica</i>	LC	2
5	Caspian Tern	<i>Hydroprogne</i>	<i>caspia</i>	LC	2



6	Brown-headed Gull	<i>Chroicocephalus</i>	<i>brunnicephalus</i>	LC	62
7	Pallas's Gull	<i>Larus</i>	<i>ichthyaetus</i>	LC	7
8	Black-headed Gull	<i>Chroicocephalus</i>	<i>ridibundus</i>	LC	0
Total of Gulls & Terns species					1376

Table (6) Result of birds survey in Gulf Mottama 25th to 29th February 2024

Shorebirds					
No.	Common Name	Genus	Species	IUCN Status	Bago Count
1	Kentish Plover	<i>Charadrius</i>	<i>alexandrinus</i>	LC	279
2	Tibetan Sand Plover	<i>Charadrius</i>	<i>mongolus</i>	LC	605
3	Greater Sand Plover	<i>Charadrius</i>	<i>leschenaultii</i>	LC	10
4	Little Ringed Plover	<i>Charadrius</i>	<i>dubius</i>	LC	7
5	Grey Plover	<i>Pluvialis</i>	<i>squatarola</i>	LC	30
6	Pacific Golden Plover	<i>Pluvialis</i>	<i>fulva</i>	LC	284
7	Common Sandpiper	<i>Actitis</i>	<i>hypoleucos</i>	LC	18
8	Curlew Sandpiper	<i>Calidris</i>	<i>ferruginea</i>	NT	26
9	Broad-billed Sandpiper	<i>Limicola</i>	<i>falcinellus</i>	LC	36
10	Marsh Sandpiper	<i>Tringa</i>	<i>stagnatilis</i>	LC	6
11	Dunlin	<i>Calidris</i>	<i>alpina</i>	LC	13
12	Little Stint	<i>Calidris</i>	<i>minuta</i>	LC	90
13	Red-necked Stint	<i>Calidris</i>	<i>ruficollis</i>	NT	3
14	Common Redshank	<i>Tringa</i>	<i>totanus</i>	LC	460
15	Spotted Redshank	<i>Tringa</i>	<i>erythropus</i>	LC	6
16	Great Knot	<i>Calidris</i>	<i>tenuirostris</i>	EN	7
17	Black-tailed Godwit	<i>Limosa</i>	<i>limosa</i>	NT	755
18	Bar-tailed Godwit	<i>Limosa</i>	<i>lapponica</i>	NT	1
19	Whimbrel	<i>Numenius</i>	<i>phaeopus</i>	LC	95
20	Eurasian Curlew	<i>Numenius</i>	<i>arquata</i>	NT	42
21	Common Greenshank	<i>Tringa</i>	<i>nebularia</i>	LC	11
22	Ruff	<i>Recurvirostra</i>	<i>avosetta</i>	LC	2
23	Stint	<i>Calidris</i>	<i>sp</i>	LC	0
24	Asian Dowitcher	<i>Limnodromus</i>	<i>semipalmatus</i>	NT	0
25	Spotted Greenshank	<i>Tringa</i>	<i>guttifer</i>	EN	0



26	Terek Sandpiper	<i>Xenus</i>	cinereus	LC	0
27	Spoon billed Sandpiper	<i>Calidris</i>	pygmaea	CR	0
Total of Shore bird species					2786
No.	Common Name	Genus	Species	IUCN Status	Bago Count
1	Pond Heron	<i>Ardeola</i>	<i>sp</i>	LC	24
2	Great Egret	<i>Ardea</i>	<i>alba</i>	LC	67
3	Little Egret	<i>Egretta</i>	<i>garzetta</i>	LC	8
4	Black-headed Ibis	<i>Threskiornis</i>	<i>melanocephalus</i>	NT	186
5	Painted Stock	<i>Mycteria</i>	<i>leucocephala</i>	LC	4
6	Black-crowned Night-heron	<i>Nycticorax</i>	<i>nycticorax</i>	LC	17
Total of Waterbird species					306
No.	Common Name	Genus	Species	IUCN Status	Bago Count
1	White-winged Tern	<i>Chlidonias</i>	<i>leucopterus</i>	LC	307
2	Whiskered Tern	<i>Chlidonias</i>	<i>hybrida</i>	LC	107
3	Gull-billed Tern	<i>Gelochelidon</i>	<i>nilotica</i>	LC	2
4	Caspian Tern	<i>Hydroprogne</i>	<i>caspia</i>	LC	2
5	Brown-headed Gull	<i>Chroicocephalus</i>	<i>brunnicephalus</i>	LC	36
6	Black-headed Gull	<i>Chroicocephalus</i>	<i>ridibundus</i>	LC	19
7	Pallas's Gull	<i>Larus</i>	<i>ichthyaetus</i>	LC	2
8	Little Tern	<i>Sternula</i>	albifrons	LC	0
Total of Gull & Terns species					475

SMART Patrolling in the West Gulf of Mottama

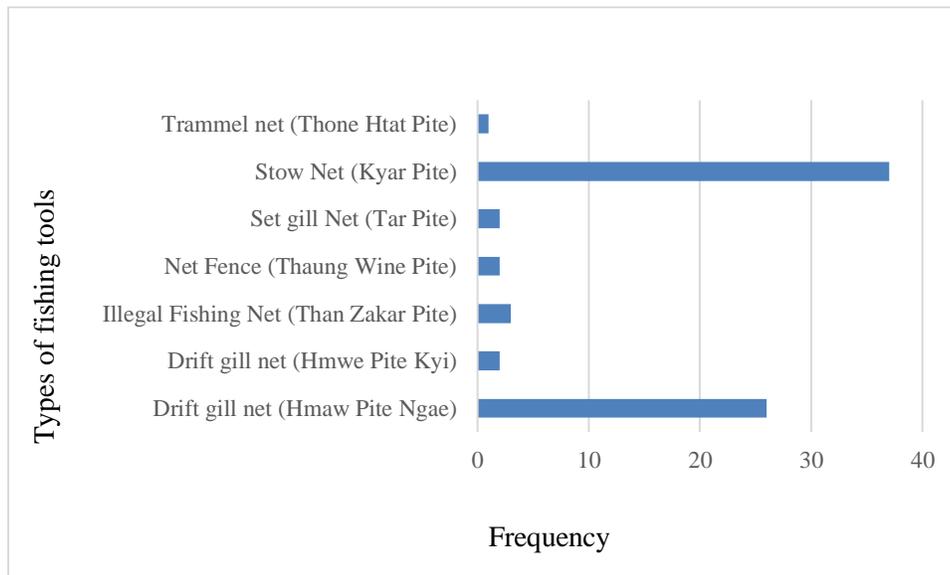
A total of 311 km distance travelled by a fishing boat with the members of LCGs and BANCA team from November 2023 to February 2024 in west of the Gulf of Mottama.



Table (7) Patrol Stations and total patrol coverage area

Date	Station	Number of Patrols	Distance (km)
November 2023	Aung Naing Gyi (Bago)	1	101.866958
December 2023	Aung Naing Gyi (Bago)	1	66.47686
January 2024	Aung Naing Gyi (Bago)	1	62.2836494
February 2024	Khe Nan Ah Thin (Bago)	1	80.6526947
Total		4	311.2801621

Types of Fishing Tools observed in the Gulf of Mottama



This chart shows the types of fishing tools observed in the Gulf of Mottama during the survey period from November 2023 to February 2024. The primary fishing type is observed Stow net, locally called Kyar Pite, followed by Drift gill net (Hmaw Pite Nge). Among them, Trammel net is the least used recorded in the west Gulf during the survey. As for illegal activity, illegal fishing net, locally called Than Zakar Pite and net fence, locally called Thaung Wine Pite are recorded monthly.

Bird populations are slightly declining compared to before and bird hunters were observed to trap birds with poisons and also mist nets during the survey periods. This poses a significant risk to bird populations, potentially leading to further decline or even deaths.



Activity (3) To assess and identify the illegal birds hunting in villages and local markets

During the survey period, the significant findings were limited as most of the project villages are situated far from the (west) Gulf thus they conducted around their villages. However, local communities and previous studies indicates, illegal bird hunting activities were observed in and near the Gulf.

Throughout the project, the following challenges on species and habitats were observed.

- The excessive use of pesticides in bean and rice field may cause to degradation for land and water quality. Thus, few birds have been observed near the village border, where a large population of residents while birds predominantly inhabiting remote areas.
- Bird populations are slightly declining compared to before as most of the migrants from other regions engaging in bird trapping when they go fishing.
- Moreover, some fishermen using illegal fishing nets are also poisoning birds to trap them.
- Furthermore, the feeding ground of the birds are disappearing due to the usage of an increasing number of illegal fishing nets and plastic wastes from the villages.
- In some areas, habitat conditions have changed after experiencing landslides.
- Unable to reach to desired locations when conducting survey activities in the Gulf due to weather conditions.
- Faced with health issues due to heavy shower.

1.4 RECOMMENDATIONS

How might the outcome of your project be applied in future research.

- It is importance to have access to rent boats, good weather, navigable waterway, and experienced boat men to conduct surveys in the Gulf.
- Due to unpredictable weather changes, activities may not be proceeded as proposed plan and schedule. Thus, it is advisable to bring extra supplies of food, drinking water and medicine to accommodate potential delays.
- It is important that the members of LCGs conducted field works in the Gulf to be in good health. Moreover, overnight surveys in the Gulf are not suitable for women.



- During the wintering season, capturing wintering birds and illegal fishing are highly observed. Thus, conducting patrolling activities twice a month in the Gulf under the supervisor of project staff can enhance the effectiveness of LCG members and contribute to reducing illegal activities in the Gulf of Mottama.
- Choosing enthusiastic young people actively involved in conservation and providing them the updated training will help in supporting local conservation efforts that can contribute to the achievement of the project's goals.
- If we conduct birdwatching & SMART patrolling separately, additional time can be allocated for birdwatching, thereby increasing the likelihood of more birds in the Gulf.
- By offering additional trainings to the established LCGs, they can effectively engage in long term conservation efforts.
- The Gulf of Mottama is encountered threats with illegal fishing nets, hunting activities and pollutions from wastes. Thus, the urgent action for extensive public awareness program is needed to reduce these threats.
- It would be better if we support the livelihood of local communities, they will be more interested and participate in conservation activities.

Discuss how this project contributes to the implementation of the [EAAFP Strategic Plan 2019-2028](#).

This project with the fund with EAAFP in the Gulf of Mottama significantly contributed to the EAAFP Strategic Plan 2019-2028.

KRA 1.4: Support the livelihoods of local communities by involving the conservation activities

KRA 1.5 Develop the protection of migratory shorebirds and site by sharing the results from monitoring shorebirds and illegal activities to the relevant stakeholders

KRA 2.1 Provide capacity building training to the members of LCGs about the importance of the conserving birds and their habitats.



Section 2. BUDGET REPORT

Please provide a table for the expenditure breakdown:

No.	Description	Budget	Total Expenditure in USD	Balance in USD
1	Consumable items			
1.1	Training - 22 persons*3days* 7USD/ person	1,300	1,257	43
	Sub Total for Consumable items	1,300	1,257	43
2	Travel & Accommodation			
2.1	Accommodation,Transport YGN Bago-Yangon,Local transports for LCGs	2,100	641	1,459
2.2	Hiring boat	700	2,280	(1,580)
	Sub Total for Travel & Accommodation	2,800	2,921	(121)
3	Computing & clerical (details)			
3.1	Printing poster, pamphlets and handouts	300	252	48
	Sub Total for Others	300	252	48
4	Others			
4.1	Daily wages for LCG in training, patrolling, and market survey	600	570	30
	Sub Total for Others	600	570	30
	Total cost	5,000	5,000	0

1 USD = 2105 MMK

18-Sep	Fund Recd	5,000
	Total Expenditure	5,000
	Balance	0
	Outstanding advance	
	Actual Balance	0

Activity Photos

Activity (1) Training on Shorebird Conservation and Methodology of Illegal Bird Hunting and Taking of Birds Survey



Subjects delivered by trainers



Presented the discussion points by trainees



Using GPS and SAMRT data form and birdwatching in practical

Activity (2) Shorebirds Survey and SMART Patrolling in the Gulf of Mottama



Habitats of Gulf of Mottama



Birding in the Gulf of Mottama



Flock of Tibetan Sand Plover



Flock of Whimbrels



Flock of Asian Openbill



Flock of White-winged Tern



Flock of Eurasian Wigeon



Flock of Common Redshank

Activity (3) To assess and identify the illegal birds hunting in villages and local markets



Illegal hunting for consumption

Note:

- It is compulsory that recipients of the 2023 EAAFP Small Grant Fund for WG/TFs submit a final report along with a web article within 3 months of the completion of the project.