

2021 March 24

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## CONSERVATION THE BAER'S POCHARD AT TWO KEY WINTERING SITES IN CENTRAL MYANMAR

DATE OF SUBMISSION (24/03/2021)

BIODIVERSITY AND NATURE CONSERVATION ASSOCIATION (BANCA)  
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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:

Baer's Pochard (*Aythya baeri*) has declined drastically in recent years. The global population is now estimated at less than 1,000 individuals and the current IUCN Red List status is Critically Endangered. In the 1990s Thailand and Bangladesh had hundreds of wintering birds, but in recent years the number has dropped to only a few birds wintering annually.

Myanmar is another country with a good wintering population of Baer's Pochard in the past but limited information available between 2004 and 2016. During past censuses of waterbirds in Myanmar, Baer's Pochard was recorded at Kyee ne Inn, Taung Kan – Se daw gyi and Myitthar Lake (Myanma Wetland Inventory 2004).

In early 2016, Biodiversity And Nature Conservation Association (BANCA, BirdLife in Myanmar) conducted an extensive survey at 25 inland lakes in central Myanmar (the Ayeyarwaddy River Basin) including eight KBAs - Yemyet, Inle Lake, Taung Kan Sedawgyi, Paleik Inn, Myittha Lake, Nyaung Yan Min Hla Kam, Kyee Ni Inn and Taung ta man Inn. It was found there are still sites with good potential as important wintering grounds for Baer's Pochard, particularly at the lake Pyu Kan, where at least 12 Baer's Pochards were observed, and Paleik Inn near Mandalay City where two Baer's Pochard were observed with over 5,000 other waterbirds in late January 2016. Apart from the number and species of bird present, human activities, threats and impacts, and environmental parameters were also noted. Human activities at Pyu Lake are very low due to belief of spirit in the lake. The lake is also good for other globally threatened and rare bird species of conservation concern such as Ferruginous Pochard (*Aythya nyroca*) and Falcated Duck (*Mareca falcata*).

Pyu Lake and Paleik Inn have rich diversity and are important for wildlife; particularly for migratory and resident waterbirds. Over 30 species of waterbird have been observed, with large congregations of migrants present during the northern winter. This includes especially high numbers of Northern Shoveler, Eurasian Wigeon and Falcated Duck and globally threatened and near threatened species; Baer's Pochard, Ferruginous Pochard, Common Pochard and Oriental Darter.

In Wetland Inventory 2004, Pyu Lake does not include as important wetland site. However, internationally important numbers, *i.e.*, exceeding 1% of the flyway population estimate (Wetlands International 2016), were recorded for Baer's Pochard (12,1% = 5). Pyu meet the 1% criterion for sites of international importance (Ramsar criterion 6 and IBA criterion A4 (i) and recording a small community of globally threatened species (Ramsar Criterion 2 and IBA criterion A1).

Central Myanmar is a dry region and consequently small ponds sometimes become totally dry as water is drained for agriculture and other uses. In 2019, the Mandalay government formed the Mandalay Wetlands Conservation Committee, chaired by the Minister (Ministry of Natural Resources and Environmental Conservation), and secretaries by Director of Forest Department and relative government departments and NGOs/INGOs (BANCA, MBNS, IUCN and WCS) as members. This committee will focus on the sustainable management and long-term conservation and wise use of wetlands in central Myanmar.

Waterbird surveys by BANCA from 2016 to 2019 have confirmed that central Myanmar is still an important wintering ground for Baer's Pochard, but there are lots more things to be done, including law enforcement to stop illegal hunting, involving local communities in conservation, livelihood projects to support people living by wetlands important to Baer's Pochard, and establishing some protection system.



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

|   |                 |
|---|-----------------|
| <b>Type of the organization - Government/NGO/Private Sector/Other</b>   | NGO             |
| <b>Name(s) of the division and/or position</b>  | Yangon, Myanmar |
| <p><b>List any contributions that your organizations or yourself might have been involved for the preservation of the migratory water birds, their habitats and East – Asian Australasian Flyway below.</b></p> <ul style="list-style-type: none"> <li>• Monitoring of migratory water bird species, shore bird species at the Ramsar site, EAAF sites Indawgyi Wetland Wildlife Sanctuary, Moeyungyi Wetland Wildlife Sanctuary, Nanthar Island, Gulf of Mottama and other wetlands area in Myanmar;</li> <li>• Organizing the regular Asian Water Bird Census (AWC) in Ramsar sites, EAAFP survey in Gulf of Mottama regularly and throughout Myanmar;</li> <li>• Community outreach in the villages who are depending on the wetland areas;</li> <li>• Assessment on ecosystem services and vulnerability assessment in freshwater and coastal wetlands area in Myanmar;</li> <li>• Participation in process of designation of Ramsar sites in Myanmar;</li> <li>• Community involving conservation of wetland and migratory water bird species through forming Local Conservation Groups (LCGs) in Gulf of Mottama, Nanthar Island, Pyu Lake and Paleik Inn. And then initiating the community guards by doing the patrolling with local villagers, ToT training of Communication, Education, Participation and Awareness (CEPA) to local villagers and LCGs/VCGs (Village Conservation Groups).</li> <li>• Assessing the current protection of and management at all sites supporting Baer’s Pochard and enhance where necessary.</li> <li>• Promoting status and conservation needs of Baer’s Pochard and Spoon-billed Sandpiper among relevant governments and other decision makers.</li> </ul> |                 |

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.

The project was conducted for conservation of Baer’s Pochard, critically endangered bird species in two key sites Pyu Lake and Paleik Inn in central Myanmar from December 2020 to February 2021. The project aimed to develop conservation activities and EAAFP Flyway Network Site status at Paleik Inn and Pyu Lake, central Myanmar. The period when the project was being implemented were under the covid-19 transmission in Myanmar. The travel restriction were challenges in Baer’s Pochard and other migratory bird species in Myanmar. At that time, the Forest Department, Mandalay Region has agreed to support and lead in communities outreaches and patrolling in these wetland areas and jointly conducted patrolling with local conservation organization “ Shwe Kan thayar Nature Conservation Association” in Pyu Lake and Paleik Bird Lover Association in Paleik Inn. At that time, the villagers were facing the economic crises due to the covid-19 and increasing the illegal bird killing in Pyu lake, Paleik Inn and Banaw Inn. The supporting and leading by Forest Department was significantly



controlled for reduction the bird hunting and poisoning in wetlands area not only two wetlands sites: Pyu Lake and Paleik Inn but also other important wetlands in central Myanmar 2021.

## 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)

### Project Progress:

Biodiversity And Nature Conservation Association was going to implement the Baer's Pochard and other migratory water bird species at priorities wintering sites are Pyu Lake, Paleik Inn and Banaw Inn in central Myanmar in January 2021. When we travelled in Mandalay, we had been kept in Hotel quarantine for seven days since we have abided by the rule of Ministry of Health and Sport in Myanmar. After we finished the quarantine, we have collaborated with the local conservation group is namely the Shwe Kanthayar Nature Conservation Association. The survey members made the social distancing or so three persons for counting the migratory water bird population in February. We conducted the population of migratory water bird species by using with the core count method and Birds of South East Asia Field Guide and Field Guide to the Water birds of ASEAN books.

Table -1: Trip Itinerary for population survey on migratory water bird species in central Myanmar

| No. | Date             | Activities description  |
|-----|------------------|---|
| 1   | 25-01-2021       | Travelled from Yangon to Mandalay by flight   |
| 2   | 26 to 01-02-2021 | Joined the Hotel Quarantine with 7 days   |
| 3   | 2 - 2 - 2021     | Travelled from Hotel to Pyu village   |
| 4   | 3 - 2 - 2021     | Surveyed the water bird population at Pyu Lake  |
| 5   | 4 - 2 - 2021     | Surveyed the water bird population at Pyu Lake  |
| 6   | 5 - 2 - 2021     | Surveyed the water bird population at Paleik Lake                                       |
| 7   | 6 - 2 - 2021     | Surveyed the water bird population at Paleik Lake                                       |
| 8   | 7 - 2 - 2021     | Surveyed the water bird population at Banaw Inn   |
| 9   | 8 - 2 - 2021     | Discussed with the members of Shwekanthayar Nature Conservation Association at Pyu Lake |
| 10  | 9 - 2 - 2021     | Calculated the budget and collected the field photos                                    |



Fig 1: Photos on bird watching activities for counting the population of bird species

Furthermore, BANCA met with the members of Shwe Kantharyar Nature Conservation Association to update the local conservation group with the true members who are interested in research and conservation activities for wetland and migratory water bird species and discuss to strength the member capacities and its organization.



Fig 2: Photos on meeting with LCG members

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

### Challenges

The COVID-19 pandemic have seriously effective in Myanmar since in August 2020. It has caused the problems and delay to make the education awareness and survey with many people in field. After all, the local people had a few participated because some village has afraid the Covid-19 local transmission. And, we were not able to make the Asian water bird census with many bird watchers in central Myanmar.

In addition, completely ignoring the people’s desire, the Tatmadaw (Military) staged a coup on 1<sup>st</sup> February 2021. That was the day that the Military have detained the State Counsellor Daw Aung Suu Kyi, President U Win Myint and other political leaders and social activists. Since then, people all strata of life have come out on the street well over the country

and expressed their disappointment with the military coup as well as demanded the immediate release of all detainees and return of the state power to the people through the elected government. Therefore, we were able to survey on migratory water bird in short days at the priorities inland wetland in central Myanmar.

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

### Patrolling and awareness raising on conservation of migratory water bird species

The Mandalay Regional Wetland Conservation Committee made a video conference with all of the committee members to express the past conservation activities on wetland environment and water bird species and do the reduction on poisoning and hunting of migratory water bird species in wintering time in November 2020. BANCA discussed to implement the Baer's Pochard and other migratory water bird species conservation activities in covid – 19 pandemics.

As results of discussion, Forest Department from Sintgaing Township and Tada Oo Township, Mandalay region, conducted the patrolling survey on hunting and poisoning the migratory water bird species and education awareness talk program as well as the standing signboards at Pyu Lake, Paleik Lake and important freshwater wetlands in Mandalay region in January 2021. When the staffs from Forest Department made the education awareness talks with the local people, they had abided by the rule of Health and Sport, Myanmar in covid – 19. Therefore, they made the social distancing or so 20 persons and handed out the surgical mask and hand sanitizing to participants. Furthermore, they handed the pamphlets on conservation the inland wetland ecosystem services and migratory water bird species lists at Pyu Lake and Paleik Inn out to participants who are participating in event and recorded the activities photos. (see Fig 3)



Fig 3: Photos on wetland conservation awareness activities in central Myanmar.



Fig 4: Photos on patrolling activities for hunting and poisoning to water bird species in winter.

D. Please include any additional supporters of this project

The project, Darwin Initiative supported for the wise use of wetland conservation in Pyu Lake and Paleik Inn to collect and compilation of biodiversity data, wetland ecosystem services, threats and awareness raising of wetland values in villages. It provided travel costs, communities consultation meeting costs and shared staff and local cost in this project.

### 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).

The Baer's Pochard survey were conducted at three study sites which is namely by Pyu Lake, Paleik Inn and Banaw Inn on 3<sup>rd</sup> to 7<sup>th</sup> February 2021.

#### Observations of Baer's Pochard:

Totally four individuals of Baer's Pochard were observed at Pyu Lake on 3<sup>rd</sup> to 4<sup>th</sup> February 2021. No more Baer's Pochard were not observed at Paleik Lake and Banaw Inn during the survey in February 2021. In this time, the surveyor was limited as the travel restrictions and situation of politic issue. The survey did not cover the whole area of wetlands.

#### Collecting information of Baer's Pochard

We have collated the information on other observations of Baer's Pochard in Myanmar during 2020/21 from bird photographers, bird watchers, other local conservation group and social media with pictures. At least seven individuals of Baer's Pochard were observed at Indawgyi Wildlife Sanctuary from water bird survey by Friend of Wildlife and Innchit Thu Lover is local conservation group of Indawgyi Lake on 24<sup>th</sup> January 2021.



Fig 5: Recorded photo of Baer’s Pochard at Indaygyi Wildlife Sanctuary

**Status of resident and migratory waterbirds species**

Analyzing the data, a total of 17 families and 47 species of waterbird species were recorded at the three surveyed wetlands (Pyu Lake, Paleik Inn and Banaw Inn). As a survey result, the highest number of diving duck and waterbird species were recorded at Pyu Lake, with 5068 individuals of 38 species. At Paleik Inn, we recorded 4426 individuals of 37 species and at Banaw (Lattaung) Inn 1311 individuals of 33 species (Figure 6 and table 2). In this survey, only two globally threatened of waterbird species such as one critically endangered species (Baer’s Pochard) and one vulnerable species (Common Pochard, 50 individuals in Pyu Lake and two individuals in Banaw Inn) were recorded in 2021.

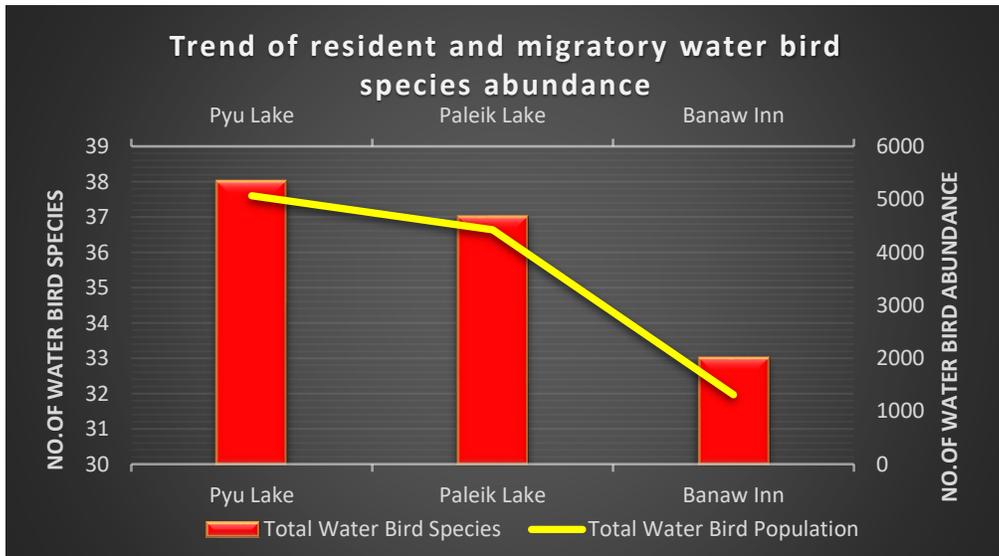


Fig 6: The observation of resident and migratory water bird species in three study sites (2021).

Table - 2: Recorded the water bird species and population Lists in February 2021

| No. | Family   | Common Name               | Scientific Name                    | IUCN 2020 | Pyu Lake | Paleik Inn | Banaw Inn |
|-----|--|---------------------------|------------------------------------|-----------|----------|------------|-----------|
| 1   | ANATIDAE:<br>DENDROCYGNINAE:<br>Whistling-ducks        | Lesser Whistling-Duck     | <i>Dendrocygna javanica</i>        | LC        | 550      | 580        | 85        |
| 2   | ANATIDAE: ANSERINAE:<br>Geese & allies                 | Greylag Goose             | <i>Anser anser</i>                 | LC        |          | 935        | 52        |
| 3   | ANATIDAE: TADORNINAE:<br>Comb Duck, shelducks & allies | Comb Duck                 | <i>Sarkidiornis melanotos</i>      | LC        |          | 20         |           |
|     |  | Ruddy Shelduck            | <i>Tadorna ferruginea</i>          | LC        | 15       | 35         | 12        |
| 4   | ANATIDAE: ANATINAE:<br>Typical ducks and pygmy-geese   | Cotton Pygmy-Goose        | <i>Nettapus coromandelianus</i>    | LC        | 50       | 26         |           |
|     |  | Gadwall                   | <i>Anas strepera</i>               | LC        | 64       | 85         | 43        |
|     |  | Flacated Duck             | <i>Anas falcata</i>                | NT        | 2        |            |           |
|     |  | Eurasian Wigeon           | <i>Anas penelope</i>               | LC        | 136      | 45         | 12        |
|     |  | Indian Spot-billed Duck   | <i>Anas poecilorhyncha</i>         | LC        | 30       | 17         | 15        |
|     |  | Northern Shoveler         | <i>Anas clypeata</i>               | LC        | 87       |            | 28        |
|     |  | Northern Pintail          | <i>Anas acuta</i>                  | LC        | 30       | 875        | 450       |
|     |  | Garganey                  | <i>Anas querquedula</i>            | LC        | 120      | 36         | 21        |
|     |  | Red-crested Pochard       | <i>Netta rufina</i>                | LC        | 16       |            |           |
|     |  | Eurasian Teal             | <i>Anas crecca</i>                 | LC        | 55       | 24         | 32        |
|     |  | Common Pochard            | <i>Aythya ferina</i>               | VU        | 50       |            | 2         |
|     |  | Baer's Pochard            | <i>Aythya baeri</i>                | CR        | 4        |            |           |
|     |  | Ferruginous Pochard       | <i>Aythya nyrcya</i>               | NT        | 87       | 17         | 48        |
|     |  | Tufted Duck               | <i>Aythya fuligula</i>             | LC        | 130      |            | 22        |
| 5   | PODICIPEDIDAE: Grebes                                  | Little Grebe              | <i>Tachybaptus ruficollis</i>      | LC        | 215      | 28         | 10        |
|     |  | Great Crested Grebe       | <i>Podiceps cristatus</i>          | LC        | 5        |            |           |
| 6   | CICONIIDAE: Storks                                     | Asian Openbill            | <i>Anastomus oscitans</i>          | LC        | 38       | 261        | 21        |
| 7   | THRESKIORNITHIDAE:<br>THRESKIOGNITHINAE:<br>Ibises     | Black-headed Ibis         | <i>Threskiornis melanocephalus</i> | NT        | 15       | 90         | 32        |
|     |  | Glossy Ibis               | <i>Plegadis falcinellus</i>        | LC        | 130      | 245        | 58        |
|     |  | Eurasian Spoonbill        | <i>Platalea leucorodia</i>         | LC        |          |            |           |
|     |  | Black-crowned Night-Heron | <i>Nycticorax nycticorax</i>       | LC        |          | 125        | 71        |
| 8   | ARDEIDAE: ARIDEINAE:<br>Herons & egrets                | Indian Pond-Heron         | <i>Ardeola grayii</i>              | LC        | 15       | 18         | 6         |
|     |  | Pond-heron                | <i>Ardeola sp.</i>                 | LC        |          |            | 8         |
|     |  | Eastern Cattle Egret      | <i>Bubulcus coromandus</i>         | LC        | 32       | 65         | 35        |



| No. | Family  | Common Name                        | Scientific Name                 | IUCN 2020 | Pyu Lake    | Paleik Inn  | Banaw Inn   |
|-----|---|------------------------------------|---------------------------------|-----------|-------------|-------------|-------------|
|     |   | Grey Heron                         | <i>Ardea cinerea</i>            | LC        | 5           | 26          | 16          |
|     |   | Purple Heron                       | <i>Ardea purpurea</i>           | LC        |             | 6           | 8           |
|     |   | Great Egret                        | <i>Ardea alba</i>               | LC        | 23          | 35          | 23          |
|     |   | Intermediate Egret                 | <i>Mesophoyx intermedia</i>     | LC        | 15          | 16          | 18          |
|     |   | Little Egret                       | <i>Egretta garzetta</i>         | LC        | 30          | 18          | 21          |
| 9   | PHALACROCORACIDAE: Cormorants                                     | Little Cormorant                   | <i>Phalacrocorax niger</i>      | LC        | 40          | 233         | 15          |
|     |   | Great Cormorant                    | <i>Phalacrocorax carbo</i>      | LC        | 25          | 64          | 3           |
| 10  | ANHINGIDAE: Darters   | Oriental Darter                    | <i>Anhinga melanogaster</i>     | NT        | 14          | 22          | 9           |
| 11  | RALLIDAE: gallinules & coots                                      | Purple Swamphen                    | <i>Porphyrio poliocephalus</i>  | LC        |             | 56          |             |
|     |   | Common Moorhen                     | <i>Gallinula chloropus</i>      | LC        | 10          | 28          |             |
|     |   | Common Coot                        | <i>Fulica atra</i>              | LC        | 2720        | 125         | 87          |
| 12  | VANELLIDAE: Plover & allies                                       | Little Ringed Plover               | <i>Charadrius dubius</i>        | LC        | 40          | 24          |             |
| 13  | RECURVIROSTRIDAE: Stilts & avocets                                | Black-winged Stilt                 | <i>Himantopus himantopus</i>    | LC        | 150         | 127         | 32          |
| 14  | JACANIDAE: Jacanas  | Pheasant-tailed Jacana             | <i>Hydrophasianus chirurgus</i> | LC        | 40          | 26          |             |
| 15  | SCOLOPACIDAE: GALLINAGININAE: Snipes                              | Common Snipe                       | <i>Gallinago gallinago</i>      | LC        | 15          |             |             |
|     |   | ? Snipe                            | <i>Gallinago spp.</i>           | LC        |             | 25          |             |
| 16  | SCOLOPACIDAE: TRINGINAE: Godwits, dowitchers, curlews, sandpipers | Common Sandpiper                   | <i>Actitis hypoleucos</i>       | LC        | 35          | 36          | 7           |
|     |   | Wood Sandpiper                     | <i>Tringa glareola</i>          | LC        | 30          | 26          | 9           |
| 17  | GLAREOLIDAE: GLAREOLINAE: Pratincoles                             | Oriental Pratincole                | <i>Glareola maldivarum</i>      | LC        |             | 6           |             |
|     |   | <b>Total Water Bird Species</b>    |                                 |           | <b>38</b>   | <b>37</b>   | <b>33</b>   |
|     |   | <b>Total Water Bird Population</b> |                                 |           | <b>5068</b> | <b>4426</b> | <b>1311</b> |

#### 1.4 RECOMMENDATIONS

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

We should more research on other biodiversity and monthly migratory water bird species and support to local conservation group to be strengthen the capacity and its organization as well as to be in harmony with bird species and human on wetland utilization with the relevant government, multiple stakeholders and local people in central Myanmar.



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

This project contributes to the implementation of the EAAFP Strategic Plan 2019-2028 as the follows-

- Key Result Area 1.1: Support the data/information to establishing Paleik Inn and Pyu Lake as new Flyway Network Sites in central Myanmar.
- Key Result Area 1.2: Regular monitoring on population of Baer's Pochard and other migratory bird species and conservation with the participation of Mandalay Region Wetland Conservation Committee and community based organisation i.e. Paleik Lover Association and Shwe Kanthayar Nature Conservation Association)
- Key Result Area 1.3: Planning of management plan with stakeholder participation (Mandalay Wetland Conservation committee and community based organisation i.e. Paleik Lover Association and Shwe Kan Thayar Nature Lover Association)

## Section 2. BUDGET REPORT

Please provide a table for the expenditure breakdown:

|  |                 |
|--|-----------------|
| Car hiring from Yangon-Mandalay and Mandalay- Yangon                                       | 427 USD         |
| Local Transportation (Car & Motorbike) for 6 people from Forest Department                 | 926 USD         |
| Local Transportation (Motorbike) for 4 people for 5 days (Survey team)                     | 373 USD         |
| Food for 6 persons from Forest Department  | 901 USD         |
| Food for 4 person from survey team   | 820 USD         |
| Snacks for Villagers for awareness   | 369 USD         |
| Camera Canon EOS M-50  | 631 USD         |
| Accommodation for 2 people including quarantine days to avoid Covid-19 pandemic ( 12 days) | 553 USD         |
| <b>Total</b>   | <b>5000 USD</b> |

Note:

- It is compulsory that recipients of the 2020 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.