

Digitization of collection specimens and mobilization of data through citizen science-based Bhutan Biodiversity Portal and enhancing the functions of portal.

Programme: BIFA
Project ID: BIFA5_008
Project lead organization: National Biodiversity Centre
Project implementation period: 1/7/2020 - 31/12/2021
Report approved: 11/8/2021

Narrative Midterm report

Executive Summary

At least two workshops on awareness on Bhutan Biodiversity Portal has been conducted to the students and trainees. Students were encouraged to add observations in the portal. A portal user manual was developed and will be launched during the 22nd May 2021 coinciding with the International Biodiversity Day. Biodiversity data is under process of collation, upon which the data paper will be published as data paper using GBIF data paper publishing tools. However, three datasets were published in GBIF. In addition, the data will be used for publication of Biodiversity Statistics of Bhutan 2020. Digitization of herbarium specimens is still on-going. Progress of the activities are being monitored through the number of observations in the portal including species page publication in the portal.

Progress against milestones

Has your project published at least one dataset through GBIF.org?: Yes

Dataset published:

Dataset	DOI
Bhutan: Vertebrate species	https://doi.org/10.15468/n6jv4s
Bhutan: Chromista & Eubacteria species checklist	https://doi.org/10.15468/rsvcsf
Bhutan: Fungi checklist	https://doi.org/10.15468/x49n78

Has at least one member of your project team received certification following the BIFA capacity enhancement workshop?: Yes

Name of the workshop participant: Virtual Biodiversity Data Mobilization

Certification obtained: Basic Badge

Report on Activities

Activity progress summary

-Digitizing specimens and uploading onto the portal and GBIF - Digitization of herbarium specimens are on-going.

-Biodiversity Statistics of Bhutan with checklist and species links to the portal and GBIF - Biodiversity data are being currently collated.

-Workshops related to the portal and digitization of specimens and sharing data - Two workshops on the portal completed for trainee of the Ugyen Wangchuck Institute for Conservation and Environmental Research (UWICER) and the students of Panbang region.

-Three checklists: Vertebrates checklist; Fungi checklist; and Chromista and Eubacteria species checklist published in GBIF using IPT.

-Mapping of specimen records - Once the master data collation of completed, mapping will be carried out.

Completed activities

Activity name: Dataset published in GBIF

Description: Following 3 datasets published in GBIF using IPT:

1. Vertebrates
2. Fungi
3. Chromista and Eubacteria

Start Date - End Date: 1/5/2021 - 29/7/2021

- Verification Sources:** 1. <https://doi.org/10.15468/n6jv4s>
2. <https://doi.org/10.15468/rsvcsf>
3. <https://doi.org/10.15468/x49n78>

Report on Deliverables

Deliverables progress summary

- Occurrence dataset: on-going. Three datasets published.
- Workshops (4) - Two workshops completed.
- Data papers - On-going. To be published using GBIF data paper publishing tool.

Progress towards deliverables

Title: Occurrence dataset

Type: Dataset

Status update: Data collation on-going. Also digitization of herbarium specimens on-going. Three datasets published.

Dataset scope: Occurrence }

Expected number of records: 4000

Data holder: National Herbarium (THIM), NBC

Data host institution: National Biodiversity Centre (NBC)

Sampling method: Occurrence

% complete: 40

DOI:

Expected date of publication: 2021-07-31

Title: Workshops

Type: Other

Description: Two workshops completed for students of Panbang region and trainees of Ugyen Wangchuck Institute for Conservation and Environmental Research.

Sources of verification: Documents attached.

Title: Data papers

Type: Data Papers

Description: On-going.

Sources of verification: Draft data is attached.

Events

Portal Workshop

Dates: 2020-12-03 - 2020-12-07

Organizing institution: NBC

Country: Bhutan

Number of participants: 100

Comments: In addition to 20 officials, around 100 students participated.

Website or sources of verification: Workshop Report attached

Events

Portal Workshop

Dates: 2020-12-09 -

Organizing institution: NBC

Country: Bhutan

Number of participants: 20

Comments: In addition to 20 trainees, 10 officials participated.

Website or sources of verification: Workshop Report attached

Communications and visibility

The final project results once completed will be shared through official websites of NBC and the Ministry's website. Also the final result will be shared through the official social media handles of NBC, Portal, and Ministry. The final project results will include dataset, data paper and the digitized specimen feature in the portal.

In the project page we would like to share following documents uploaded in "Reports Attachments":

1. Workshop portal presentation
2. Biodiversity portal user manual

Monitoring and evaluation

Monitoring and evaluation findings

The project management team has received full support from the GBIF Secretariat. The project is extended by two months till 31 August 2021. Due to pandemic restrictions and lockdowns, activities could not be implemented according to the proposed timeline. However, the activities are catching up slowly.

- Digitization of specimens are on the process. Development of new features in the portal for the specimen data has been resumed by the Strand Life Science in India. After the development of new features, the digitized specimens will be uploaded. We plan to complete by 31 August 2021.

- Draft master data worksheet is developed, upon which we plan to refine and add additional data from 2020 and 2021. We plan to complete the activity by 31 October 2021. Three datasets published in GBIF.

- We completed two workshops from our proposed four workshops. We plan to complete before 31 August 2021.

- Data paper has been just initiated, however we hope to complete the draft by the end of the project.

- Mapping of specimens will be conducted only after completing the digitization of specimens as per plan.

A revised timeline is proposed which is attached in the "Reports Attachment" with a file name "Portal activities timeline".

Impact of COVID-19 pandemic on project implementation

COVID-19 pandemic has affected the project activities and has been already extended by two months till 31 August 2021, however we would appreciate to extending till 31st October 2021. Due successive lockdowns numerous planned activities could not be conducted including the activities to be implemented by the Strand Life Sciences in India. However, activities are slowly catching up, and we are expecting full in-country travel restriction to be lifted in coming months. For the last one year, traveling to some parts of the country is restricted or need to spend two weeks in quarantine. We are hoping to complete this project on time, if the restrictions are relaxed gradually.

GBIF leads the Biodiversity Information Fund for Asia (BIFA), a programme funded by the Ministry of the Environment, Government of Japan. The programme provides supplementary support for activities addressing the needs of regional researchers and policymakers through mobilization and use of biodiversity data.

