





Mainstreaming Freshwater Invertebrates Biodiversity Data into Government Decision-Making (BID-AF2020-169)

Installment 2: FIMC Data mobilization, Database and distribution maps development

Technical Report

March, 2022

Introduction

The project was supposed to receive second installment of funds on early October 2021 but unfortunately there was a delay and therefore the project received second installment of funds on 30/11/2012 which delayed/affected early implementation of the project activities. The intended activities to be conducted during this phase were (i) FIMC data mobilization (ii) formulation of an infrastructure within TanBIF that will allow direct linking of existing FIMC databases from different institutions' databases (iii) formulation of the FIMC data module within TanBIF portal and (iv) Geo-codding data/GIS data for FIMC map development following the identified user-needs.

The Projects' activities status

For the purpose of mobilizing FIMC data the project team conducted two meetings both consisting fifteen (15) participants;

1. The first meeting (Plate 1) was a seven (7) days meeting for FIMC data mining, mobilization, identification and mapping of key FIMC biodiversity areas and prioritization of FIMC in Babati- Manyara from 14/12/2021 to 20/12/2021. The meeting involved FIMC data holders from: Lake Victoria Water Basin, Pangani Water Basin, PhD and MSc students who are researching on FIMC and independent researchers. During this meeting sources of FIMC data other than institutions were identified. These included basin reports, PhD and MSc. theses and environmental flow reports. During this meeting every data holder contributed FIMC data that he/ she possess. Data contained in grey literatures for Kilimanjaro, Arusha, Manyara, Mwanza (water basins), PhD and MSc. thesis were also extracted by the team. It was agreed at the end of the meeting that each data holder should continue sending data to the project Principal Investigator for compilation even after the meeting. The mobilized data were different in nature; there were those that were in moderate form (easy to process) and those that were difficult to process depending on their sampling procedure. This resulted into several go and return communication with data holders and involved compiling them post the meeting (Plate 2).



Plate 1: Project meeting participants for FIMC data mining, mobilization, identification and mapping of key FIMC biodiversity areas and prioritization of FIMC in Babati- Manyara



Plate 2: Post first project's FIMC data mobilization meeting further processing of mobilized FIMC data

2. The second meeting (Plate 3) was conducted after completion of compiling data that were obtained from meeting one. The meeting was an eight (8) days meeting for FIMC data processing/validation/ review and preparation of first FIMC data sets for publication from 18/3/2022 to 25/3/2022. During this meeting stakeholders/ data holders further contributed FMC data which were at their disposal. Some data were easy to process and therefore were processed and published few days after the meeting.

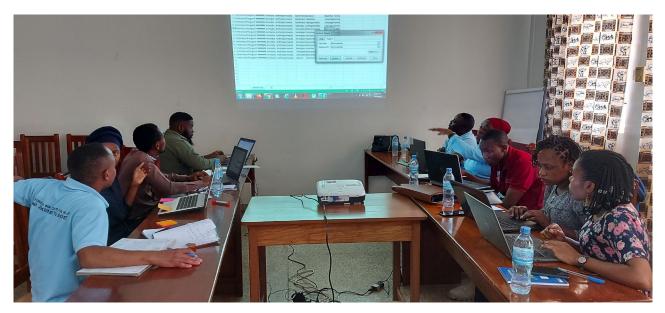


Plate 3: Project meeting participants for FIMC data processing/validation/review and preparation of first FIMC data sets for publication in Babati - Manyara

For the purpose of formulating FIMC module in TanBIF for ensuring easy access of FIMC information by stakeholders and an architecture linking existing FIMC database from different institutions with the portal, the team members convened several virtual meetings with GBIF-TanBIF Node manager and the TanBIF (technical arm) prior to actual visit to COSTECH/TanBIF (Node manager) and DIT (the technical arm) in Dar es Salaam to discuss about the project's intention. It was agreed that TanBIF will allow for formulation of a project's module that will be integrated within its portal and the project will also allow for a formulation of an infrastructure within TanBIF that will allow direct linking of existing FIMC databases from different institutions' databases based on the GBIF standards.

Projects' activities outcomes

1. More than 10,000 FIMC records have been mobilized

- 2. The project has succeeded to publish a first bunch of FIMC data: https://doi.org/10.15468/yfv6qs
- 3. Some FIMC data are still under processing
- 4. The project team and engaged expertise are currently organizing and processing information for maps, monitoring protocol and policy briefs development following the identified user-needs. The geo coded data have been complied and processed and ready for mapping and expertise are working on drafted maps expected to be generated in the coming months
- 5. At present, experts have started developing FIMC module and formulation of an infrastructure within TanBIF that will allow direct linking of existing FIMC databases from different institutions' within TanBIF portal
- 6. To increase the visibility of the published data to the large community, the publication and links to the published data have been shared to the key stakeholders and biodiversity informatics group in Tanzania. The link to the project's page on the GBIF website has also been shared with the stakeholders and data users to increase the visibility of the project
- 7. For capacity building the team have successfully used the trained young scientists to mobilize, prepare and publish the mobilized FIMC data, these will act as train of trainers. The lessons and feedback from this are also expected to build and improve on the FIMC data collection protocols by different stakeholders even after this project phases out.

Conclusion and the way forward

The team still affirmed commitment to collaboratively make sure that this project becomes a great success and a role model in terms of developing data access and format that is easy to adopt and use by decision-making board. To be able to attain this, some milestones were set by the team that included continuing processing the remaining FIMC data to the agreed target of 20,000 records mainly from PhD and MSc theses, individual researches/ projects, linking existing data holding institutions through Tanzania Biodiversity Information Facility.