

**Environmental Impact Assessment
and
Physical Cultural Resources Plan**

2 October 2018

CEPF Grant 096

Community Observer Association (COA)

*Mainstreaming Karst Biodiversity Conservation into policies, plans and business practices in
Kayin State*

Yat Thet Pyan Cave, Sadan Cave (Kayin state), Myanmar

Grant Summary

1. **Grantee organization:** Community Observer Association
2. **Grant title:** Mainstreaming Karst Biodiversity Conservation into policies, plans and business practices in Kayin State
3. **Grant number:** CEPF-096
4. **Grant amount (US dollars):** 20,000
5. **Proposed dates of grant:** 1 October 2018 to 30 September 2019
6. **Countries or territories where project will be undertaken:** Kayin state, Myanmar

7. Summary of the project:

Pilgrimage tourism in show caves in Kayin state currently has a significant environmental impact on bat roosts and cave invertebrates. This project will develop cave management plans and provide advice of how to adjust the visitor flow and reduce the impact on the cave biodiversity in two pilot caves. In at least one of the caves the project will develop improved lighting to reduce the impact on bat roosts and cave invertebrates

8. Date of preparation of this document: 2 October 2018

9. Status of area to be impacted: This section should describe the applicant's understanding of the site.

Both Sadan and Yat Thet Pyan cave are pilgrimage caves with significant cave infrastructure (concrete pathways) and temples inside the caves. Lighting is unfortunately not only targeting the pathways and the temples, but also lights up the still 'wild' undeveloped areas with cave invertebrates and bat roosts.

10. Approach: This section will describe proposed actions during the project. Specifically, what do you intend to do and how will you do it?

The project will facilitate local cave management committees to develop and adopt biodiversity and cultural heritage sensitive cave management plans with recommendations to change/ reduce lighting and adjust cave infrastructure to ensure that there is no environmental and cultural impacts.

Please note that there are no formal owners, but there are joint cave management committees set up by the monks and representatives of the local villages. Based on the local Buddhist religion and culture villagers support the local monasteries through voluntary work

11. Anticipated impact: this section will describe the impact and how this impact has been determined.

The anticipated impact is positive; since in full consultation with local cave management committee based on free and prior informed consent project will support environmental sensitive cave management planning, improve biodiversity conservation in the cave.

Currently undeveloped high biodiversity cave areas can be accessed and are well lit. The project interventions will not build any new pathways, but ensure that lighting is targeted only on the pathways and temples/ or any other cultural features, as well as already lit speleo themes (stalagmites/ stalactites) to avoid any lighting and pathways to currently undeveloped parts of the cave to protect bat roosts and cave floor habitat with high cave invertebrate biodiversity, based on previous detailed FFI cave biodiversity surveys and distribution maps developed in October 2016.

12. **Mitigation measures**: Describe measures that will be taken to mitigate negative impacts.

- The project will not alter any cultural features in the cave (e.g. temples), nor restrict any access to the cultural sites for pilgrims and tourist.
- The project will adjust current lighting system and make recommendations for an adjustment of pathways to reduce impacts on cave biodiversity and cultural heritage and restrict movements in biological sensitive areas not by physical boundaries but by smart lighting, securing 'dark zones' for bat roosts and cave invertebrate rich cave floor.

13. **Actions to ensure health and safety**: Describe actions that will be taken to ensure the health and safety of workers as well as the site. Include a description of waste management and/or disposal.

The current situation is that cave visitors leave a lot of waste in the cave. With the adoption of the cave management plan the cave management committee will also adopt an improved waste management system.

The current lighting system is not very safe, because it is not shedding light at the existing concrete pathway, but lights up the whole cave. The improved lighting system will not only reduce the light in areas of high biodiversity values, but improve the lighting directed at the pathway for improved health and safety.

14. **Monitoring and Evaluation**: This section aims to outline what steps the proponent will take to monitor and evaluate the impact of the proposed intervention.

FFI's Myanmar cave and karst expert team will provide technical backstopping and quarterly monitoring. Monitoring will specifically focus on cave infrastructure. The FFI team will be present during cave management planning consultations and also during the installation of environmental sensitive lighting.

COA will monitor the adoption of improved waste collection in the caves together with the cave management committee.

15. **Permission of the landowner**: Please verify permission of the landowner to undertake actions on the site, and verify that you have the required permits to undertake this work.

The project will support the cave management committee Ya of the local monk and local village community. All activities will be based on the decision of the cave owner/ Cave management committee.

15. **Consultation**: This section aims to outline the range of informed consultations that the grantee has had both with experts to optimize the potential for success, and with stakeholders, particularly local communities, who are potentially affected by the proposed actions. Include dates of consultations.

FFI and COA already had multiple consultations of the local stakeholders (cave management committee, local monk/ village community) in the preparation of this project in November 2016 and January 2017. All stakeholders and the cave owner of both pilot caves have agreed to the cave management planning and the adjustment of cave lighting/ cave infrastructure to be more biodiversity friendly, avoiding the current disturbance of cave invertebrates and cave roosts with the existing infrastructure and lighting.

17. **Disclosure:** CEPF requires that safeguard documents are disclosed to affected local communities and stakeholders prior to project implementation. Please describe efforts to disclose this impact assessment and environmental management plan and provide dates.

During the first month of project implementation COA will hold stakeholder meetings, including local monks, local villagers and the cave management committees for the two target caves and disclose the impact assessment and environmental management plan and share the grievance mechanisms. COA will document the meetings through written minutes of meetings to be shared with CEPF and the cave management committee and other local stakeholders.

18. **Grievance mechanism:** All projects that trigger a safeguard must provide local communities and other relevant stakeholders with a means to raise a grievance with the grantee, the relevant Regional Implementation Team, the CEPF Secretariat or the World Bank.

This grievance mechanism must include, at a minimum, the following elements.

- Email and telephone contact information for the grantee organization.
- Email and telephone contact information for the CEPF Regional Implementation Team.
- The email of the CEPF Executive Director: cepfexecutive@conservation.org
- Email and telephone contact information for the local World Bank office.
- A statement describing how you will inform stakeholders of the objectives of the project and the existence of the grievance mechanism (e.g., posters, signboards, public notices, public announcements, use of local languages).
- You should include the following text, exactly, in any grievance mechanism: “We will share all grievances – and a proposed response – with the Regional Implementation Team and the CEPF Grant Director within 15 days. If the claimant is not satisfied following the response, they may submit the grievance directly to the CEPF Executive Director at cepfexecutive@conservation.org or by surface mail. If the claimant is not satisfied with the response from the CEPF Executive Director, they may submit the grievance to the World Bank at the local World Bank office.”

Following the guidance above, describe the grievance mechanism that you will use:

The project will place a signboard at each of the two cave entrances, with grievance procedure text, CEPF, COA and FFI phone numbers and email contacts. The email/ phone contacts for CEPF (CEPF Myanmar coordinator and RIT manager) will be provided by CEPF.

The project team will also include the grievance procedures and contacts in power point presentations during stakeholder meetings and make verbal announcements during any meetings with stakeholders, the cave management committee and the local head monk.