

**Environmental Impact Assessment
and
Environmental Management Plan**

20/04/2021

CEPF Grant 111960

Grantee: Asian Arks

Conservation of Annamite Biodiversity through a Social Business Model

**Khoun Xe Nong Ma National Protected Area, Boualapha District, Khammouane Province,
Lao PDR**

Grant Summary

1. Grantee organization: Asian Arks
2. Grant title: Conservation of Annamite Biodiversity through a Social Business Model
3. Grant number: 111960
4. Grant amount (US dollars): 150,000
5. Proposed dates of grant: 01/07/2021 – 12/12/2022
6. Countries or territories where project will be undertaken: Lao PDR
7. Summary of the project

Kong Xe Nong Ma National Protected Area (KXNP NPA), in Central Laos, is recognised by experts to be one of the most important remaining sites within the Greater Annamites, due to its comparatively intact assemblage of Annamite endemics and relatively undisturbed wet evergreen Annamite forest habitat. KXNM NPA holds what are likely some of the most regionally or globally significant remaining populations of a number of species of conservation concern, including multiple CEPF-identified priority species. Healthily populations of Large-antlered Muntjac *Muntiacus vuquangensis* (CR) and Annamite Striped Rabbit *Nesolagus timminsi* (EN) are known to be present, and KXNM is thought to have one of the highest probabilities of any protected area of retaining a population of Saola *Pseudoryx nghetinhensis* (CR). Also known to persist in KXNM are Red-shanked Douc Langur *Pygathrix nemaeus* (CR), Southern White-cheeked Gibbon *Nomascus siki* (CR), Gaur *Bos gaurus* (VU), Sun Bear *Helarctos malayanus* (VU), Asiatic Black Bear *Ursus thibetanus* (VU), Crested Argus *Rheinardia ocellata* (EN), Oriental Pied Hornbill *Antracoceros albirostris* (LC), Brown Hornbill *Anorrhinus austeni* (NT), and Bourret's box turtle *Cuora bourreti* (CR). Clouded Leopard *Neofelis nebulosa* (VU) and Marbled Cat *Pardofelis marmorata* (NT) are believed to be present but not yet confirmed.

Like all forested areas in Indochina, wildlife populations in KXNM NPA are facing an exceptionally high level of threat from illegal hunting. Although KXNM PPA has so far been spared from the waves of extremely intensive, 'industrial-scale' snaring that are pervasive throughout the Annamites, under the current management regime it is simply a matter of time before these practises take hold in the area. In the past three-four years, new settlements in the adjacent province (Savannakhet Province, Lavene Laverne NPA) have increased hunting pressure in the southern sector of the NPA, and hunting pressure from neighbouring Vietnam remains ongoing and is likely to increase. Without measures which can effectively reduce this pressure, the populations described above will undoubtedly undergo severe declines, and eventual local extirpation, as has been observed in multiple other PAs throughout the Annamites.

KXNM NPA has recently been upgraded from a provincial to a national park (PM Decree 05 06.01.2021) and since 2015 it has received PA management support through the KfW-funded Integrated Conservation of Biodiversity Project (ICBF) project. However, this support will end in 2022, and even with this support resources are limited, and technical and management capacity remains low. Although patrol teams are ostensibly in operation, law enforcement capacity remains low, and wildlife populations are not adequately protected. Given current and predicted future threat scenarios, the level of investment and management intensity required to maintain and increase these populations far exceeds the resources available for any PA in Laos currently, even those in which large international conservation organizations are working.

Asian Arks has chosen a conservation concession and social business model as the project model for ensuring long-term protection for key species and addressing threats in KXNM NPA for the following reasons:

- (1) a concession is a long-term commitment (50 years proposed), which is necessary to achieve viable species protection by reducing the risks and inefficiencies normally experienced with shorter-term, 2-7-year development project cycles;

- (2) provides greater ownership to the project to do what is necessary for protection, especially in regards to decision making on law enforcement strategies and personnel and by freeing protection efforts from the bureaucratic inefficiencies and institutional gaps that hamper typical development projects that focus on building government capacity;
- (3) provides long-term, tangible employment and revenue generation opportunities to local communities, which are ordinarily promised but not realized through typical development project models that focus more on training rather than tangible outcomes; and
- (4) provides clear economic incentives to the government and additional legal securities to protect KXNM against future extractive businesses such as mines and logging, which are now threatening conservation projects across Lao PDR and the region, regardless of protected area status.

The CEPF project will support initial activities of preparing and securing the conservation concession including:

- law enforcement activities to protect species in the proposed conservation concession area during the negotiation process;
- a longer-term enforcement strategy including stakeholder engagement with cross-border actors on the Viet Nam side;
- FPIC process with affected communities of the conservation concession, including an assessment of development needs in target communities;
- improvement of the research and training center plan including EIA in order to improve employment opportunities and minimize negative environmental impacts of infrastructure;
- market analysis of local product promotion in order to generate long-term benefits for local people

8. Date of preparation of this document: 20/04/2021

9. **Status of area to be impacted:** The area of the proposed conservation concession is within Khoun Xe Nong Ma National Protected Area boundaries. The proposed location for the Research & Training Center is just outside the boundary of the totally protected zone (TPZ) of the protected area, in order to follow national protected area regulations that do not allow any large infrastructure inside the TPZ. A proposed research station that is basically a campsite with a toilet, kitchen, eating and working area and tent platforms is located inside the TPZ. Architectural designs for the structures have been drafted already and were created with minimizing environmental impacts and minimizing resource use during and after construction.

10. **Approach:** During the CEPF project, Asian Arks will hire an expert to review the draft plan for the proposed research and training center to assess potential environmental impacts and make any specific recommendations on how to minimize impacts. No construction will be implemented by the CEPF project. The EIA supported (partially) by CEPF will be used as one of the steps to acquiring the conservation concession and will ensure that national and international environmental safeguards are met before starting any construction. The Specifically, what do you intend to do and how will you do it?

11. **Anticipated impact:** The proposed infrastructure has been designed with minimal impact in mind by (1) using natural materials; (2) minimizing the number of structures (e.g. focusing on tents instead of bungalows, combining rooms into one structure; (4) basing designs on local architecture; (5) reducing the use of wood; (6) designing structures to reduce the need for cooling and heating; and (7) locating the structures in appropriate areas of the protected area. Some of the anticipated impacts from the research and training center and research station are as follows:

12. this section will describe the impact and how this impact has been determined.

An EIA has not yet been conducted, so potential impacts have not been quantified or described in detail. This work will be part of the CEPF grant, which will support an EIA of the proposed infrastructure of the conservation concession. However, here is a preliminary description of potential impacts of the conservation concession infrastructure:

Potential Impact	Impact / Determinants
Pollution from visitors: includes solid waste, grey water, noise pollution	High potential <ul style="list-style-type: none"> • Number of visitors • Visitor management practices • Trained personnel • Policies on food packaging, waste disposal, etc.
Illegal removal of plants or animal products from KXNM by visitors	Medium <ul style="list-style-type: none"> • Visitor management practices • Trained personnel • Orientation materials for visitors • Policies and contracts with researchers on what they can and cannot take from the area
Increased hunting as a result of improved access to the research station	High <ul style="list-style-type: none"> • Extent of law enforcement and monitoring activities • Awareness of villages • Buy-in from villages in conservation and inclusion in benefit sharing • Size, quantity and quality of access trail(s) to the research station(s)
Impacts on water resources including over-use of water, pollution, and fishing	Medium <ul style="list-style-type: none"> • Number of visitors • Technology used for extracting and using water • Use of sustainable sources of water (ground water, rain water) • Grey water management systems put in place
Other impacts on the landscape and wildlife from the existence of infrastructure	Medium <ul style="list-style-type: none"> • Number of buildings • Selection of building materials • Distance to areas with key species
Forest destruction from infrastructure and hunting by workers	Medium/Low <ul style="list-style-type: none"> • Planning for construction • Building design • Contracts with construction company • Worker awareness • Monitoring

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

- An EIA will be conducted with support by CEPF (and other donors if needed).
- The EIA will address potential impacts and propose mitigation measures.
- As part of the preparation of the conservation concession proposal, key mitigation measures will be included, such as:
 - Carrying capacity of visitors at the research station (already included in the draft proposal)

- Code of conduct for visitors to reduce impacts such as waste, noise, removal of plants (already included in the draft proposal)
- Managing access to the protected area along improved trails that lead to the research station to reduce potential impacts to wildlife from opportunistic hunting (this will be part of the law enforcement strategy and the EIA)
- Limiting impacts on water resources from the research and training center and research station (as part of the EIA)
- Minimizing impacts on wildlife and landscape from the structures (this has already been considered in the architectural designs, but will be reviewed again during the EIA)
- Limiting impacts from workers during the infrastructure construction (a code of conduct for workers will be part of the construction contract and will be enforced by Asian Arks staff assigned to monitoring the construction)
- Damage to the forest by construction (this will be part of the EIA with the aim of no trees being felled for construction unless absolutely necessary for safety and approved by the government)

14. **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.

No construction will be done using CEPF funds. However, Asian Arks will take the following actions to ensure health and safety of workers once the construction of the proposed research and training center and research station begins:

- Adequate food and accommodation will be provided (to be stipulated in the construction contract)
- Proper construction equipment will be provided including helmets (to be stipulated in the construction contract)
- Medical first aid kit will be available (to be stipulated in the construction contract and also provided by Asian Arks staff monitoring the construction)
- Emergency protocol will be put in place before construction begins (to be stipulated in the construction contract and also followed up by Asian Arks staff who are assigned to monitor the construction)

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

A monitoring system will be recommended through the EIA process that will be supported by CEPF.

16. **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.

Asian Arks has not yet received permission to construct any infrastructure. Permission will be received as part of the conservation concession approval process.

17. **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.

Asian Arks has presented the concept for the research and training center and architectural designs to government stakeholders at district, provincial and national levels. During the consultations, some issues were raised on carrying capacity, and as a result Asian Arks updated the proposal to include a limit of visitors at the research station and a code of conduct for visitors.

The designs themselves were done by an international architectural expert who based the concept on limiting environmental impacts. As part of the CEPF, an EIA will be conducted (with supporting funding from other donor(s)) to gather more expert opinion on how to minimize environmental impacts from the infrastructure and the operations.

18. **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.

All rules regarding managing and minimizing environmental impacts will be shared with community members. This will be extremely important to ensure that such mitigation measures are followed. Workshops will be held in villages and trainings will be given to villagers employed by Asian Arks.

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 or the CEPF Secretariat.

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
- 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.”

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

In addition to the ICBF Project grievance mechanism, Asian Arks will propose to government counterparts to add an additional Asian Arks grievance complaint system, which will include the following details:

If you have a complaint about Asian Arks

For problems with any Asian Arks advisors or staff or any activities that they are involved with, please contact the following:

- Contact Ms. Phet at Tel/Fax +856(0)21253601
- Or send email to: hannahokelly@asianarks.org and
- Or contact or send email to the CEPF Regional Implementation Team: Vithaya Xindavong, (020) 28 953 608, vithaya.xindavong@iucn.org
- Or send directly to the CEPF Executive Director: cepfexecutive@conservation.org
- 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.

Once getting agreement from the government to implement the Asian Arks grievance, all stakeholders will be informed of the objectives of the project and the existence of the Asian Arks grievance mechanism by having a meeting in each village and posting the grievance system details in a public location(s) in the village.