

Environmental Impact Assessment

and

Environmental Management Plan

Date

September 11, 2018

CEPF Grant 102089

Grantee

Biodiversity Preservation Center

Project Title

Determining distribution, density and connectivity of threatened tortoises in Nigeria

Project Location

Nigeria

Grant Summary

1. Grantee organization. Biodiversity Preservation Center (BPC) Nigeria
2. Grant title. Determining distribution, density and connectivity of threatened tortoises in Nigeria
3. Grant number. 102089
4. Grant amount (US dollars). 32,362.00
5. Proposed dates of grant. Start date: 1st June, 2017 End date: 31st March, 2019
6. Countries or territories where project will be undertaken. Nigeria
7. Summary of the project.

This project focuses on the conservation of two endangered species of forest tortoises (genus *Kinixys*: Testudinidae), i.e. *Kinixys homeana* and *Kinixys erosa*. Hinged tortoises (genus *Kinixys*) are endemic to tropical Africa, and are characterized by having hinged carapace (Branch, 2008, Tortoises Terrapins and Turtles of Africa. New Holland Publishers, Cape Town). *Kinixys homeana* and *K. erosa*, are typically associated to tropical forests, and, especially *K. homeana*, are endemic to the Guinean coastal forests. The conservation situation of these species is understood to have been considerably deteriorated in the last two decades, due to rampant forest habitat loss and massive harvesting for domestic consumption in West Africa (Luiselli 2003a, Acta Oecologica 24: 157-163; Luiselli 2003b, Chelonian Conservation and Biology 4: 735-738; Luiselli et al. 2006, Chelonian Conservation and Biology 5: 130-139). In addition, these species are also heavily exploited for the international pet trade.

This project aimed at working with local communities to ensure the sustainable conservation of the species using the results of field surveys and analyzing local distribution and population density in relation to habitat types in the remnant forest patches of southern Nigeria.



Picture showing; *Kinixys homeana*, *Kinixys erosa* and *Pelusius adansoni*

8. Date of preparation of this document. September, 3 2018
9. **Status of area to be impacted:** This section should describe the applicant's understanding of the site.

The areas to be impacted are the exhausted abandoned farmlands all around Esu Mbat community. Over the years the shifting cultivation practice of the community members have degraded the area leaving regenerating bush fallows with very few trees except oil palm trees and a few fruit trees that they deliberately allowed to stand for obvious benefits.

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

This section is where the project is trying to help the community plant trees that will provide them with wood in the future. Currently, the only semblance of a natural forest within the area remains the swamp forest and which they have started intensive logging of the few trees still standing. Therefore, our project specifically identified the urgent need to plant indigenous multipurpose trees spiced with some fast growing trees aimed at providing and meeting the people's year wood needs.

Based on the foregoing we carried out the following activities;

- i. Establishment of a community nursery: The nursery is managed in a participatory basis where BPC provides all the technical and managerial skills and expertise in conjunction with the community members who are working under the project and others who are playing host to the nursery. Based on the fact that the nursery is located in their community, they provide year round security and maintenance e.g. weeding and watering and it is a common property of the community where community members are free to request species of their choice to plant in their private property and as avenue or boundary trees. Endemic species of the area have been identified and mother trees already located with a view to collecting their viable seeds in due season for incorporation into the sanctuaries core conservation zone.
- ii. Establishing a conservation area (Sanctuary). The role of the sanctuary is to enable the community conserve a representative portion of their rainforest which is at the brink of being decimated. The community having lost all natural forests in the area except for the swamp forests which the terrain has been the only factor keeping it from being totally degraded requires urgent conservation action. Being that the same portion of land contains some relic populations of wildlife of global importance, BPC in their tortoise project deem it extremely necessary and urgent to intensify the conservation of this landscape as the last hope of securing our Nigeria endangered tortoises and turtles among other eminent species of conservation importance such as manatees, crocodiles, birds and endangered primates. Therefore the teak seedlings raised are not intended for planting in the core conservation zone of the sanctuary but in the community use zones. The zonation of the sanctuary was done by the community with technical support from BPC. This areas are clearly marked.
- iii. Enrichment planting of the core zone with indigenous species raised in both BPC nursery and community nursery.
- iv. Land rehabilitation: using species such as the teak and other commercially viable species to rehabilitate already damaged forest owned by the community and devoid of trees, as desired by the communities towards providing wood and other resources for them in the future as well as help build the resilience of their environment against erosion and climate change.

This is because the entire selected areas are devoid of trees and are succumbing to gully erosion and bush fires. It is also not suitable for crop production hence the continuous devastation of new forest areas for farms.

The buffer zone is expected to regenerate naturally by itself and also enriched by planting indigenous species (provenances). The buffer zone is left for the benefit of protecting the core conservation zone which in both cases are swamp forests which all merchantable timber species had been logged by the people but having realize the need for conservation of their forest and wildlife, the people in both cases have agreed to set aside such representative plots for sustainable conservation at the long term.

To keep the people out of the core conservation zone, the project carefully avoids the planting of indigenous species that will attract community members to violet the core conservation zone by giving them reason to harvest resources e.g Irvingia. Thus, the project specifically allows the

sanctuary to regenerate itself especially as many of the indigenous timber species in their sapling, juvenile and seedlings stages are allowed to grow on their own but where the people specifically for e.g in Mbiakong where the people demanded especially the regeneration of iron wood, camwood and iroko, the same are being raised for them. So it must be understood that the management of the sanctuary is strictly on the above zoning criteria. Therefore, the core conservation zone will remain no use zone except for regulated scientific research (strict nature reserve). The buffer zones will be managed as a protected shield for the core conservation zone to cushion the impact of the community who are using the immediate community –use zone which includes their farmlands, orchards etc.

The bulk of the teak will be planted in the highly degraded areas which the community themselves are looking for a way to utilize it as their woodlot for future timber and forest needs. The remaining teak is to be used as avenue trees, for trials, streets, avenues and as boundary demarcation. The teak was specifically selected following overwhelming demand of communities for staking sticks, propwood ,building frames for thatched houses among others and ultimately high quality timber for poles sawnwood and round wood in the long term.

The environmental impact assessment and forest safe guards of the project were triggered particularly as its affects the ecology of the area and the overwhelming needs of the communities. If this is not done, the area already designated as sanctuary will be lost in the nearest /foreseeable future.



Indigenous multipurpose trees at BPC nursery site



Esuk Mbat chief (Chief Joseph Okon) planting *Irvingia gabonensis* at his farm



Fruit trees given to Esuk Mbat community members

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

The impact expected is basically the probable invasion of the area by an exotic species of tree and also the probable disruption of the local vegetation and ecology. Furthermore, the wood needs of the community has expanded so much so that all forests are bound to disappear in the area within the next decade as their population increases and village expanding.

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

Our project noted these potential impacts and in its efforts to mitigate the impact, we decided to select teak (*Tectona grandis*) to crop in the marginal areas to provide the people with saplings for building frames of thatch houses, props, staking sticks for yams and other climbers, poles amongst others. At

the rate of consumption currently going on in the community the teak successfully grown for the people would be the only sure way to stop further logging of the remnant forest. The teak itself might not be enough for them but it will surely allow the new indigenous multipurpose trees chance to grow and fill the gap.

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.

BPC maintains a strict safety code in its operations. In all field activities, we ensure that all operatives are well kitted in their safety /protective wears (Hard hats, coveralls, steel toed boots, Hand gloves, eye protection among others. Our WHO standard First Aid Kit for field operations are fully equipped and retained till the end of field operation. The assigned officer is also required to carry out the preoperational interaction giving basic safety /security briefing before commencement of the field work. No waste will be generated given the activities involved.

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.

The following steps will be taken to monitor and evaluate the proposed intervention.

- Periodic/quarterly site visit to determine survival rate of seedling in the field.
- Carry out review meetings with community to ensure adherence to laws governing the sanctuary and ensure punitive measures for offenders according to the established by-laws

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.

An MOU was signed *ap initio* with Esuk Mbat community. The community jointly assigned the land area earmarked for the tree planting aspects. The community demarcated the boundary of the Community Conserved Area (CCA) and mounted the sign post provided by the project. The community is very conscious of the need to rescue their environment and endangered species through the tree planting exercise.



Picture showing community youth mounting the Mbiakong Wildlife sanctuary sign posts at Mbiakong Uraun

16. **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.

The following consultations/meetings were conducted:

- a. 5th August, 2017 meeting at Esuk Mbat with the village council
- b. 11th August, 2017 meeting at Esuk Mbat with the village council
- c. 14th August, 2017 meeting at Esuk mbat with the village council
- d. 16th August, 2017 meeting at Mbiakong Uraun with the village council and the community members
- e. 30th August, 2017 meeting at Esuk mbat with village council and the community members
- f. 31st August, 2017 meeting with the Esuk Mbak village council
- g. 4th November, 2017 meeting with Mbiakong Uraun village council
- h. 5th November, 2017 meeting with Mbiakong Uraun village council
- i. 25th January, 2018 meeting with Mbiakong village/ council.



Picture showing meetings with Mbiakong Uraun village council

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.

In each of the project inaugurations 16th August, 2017 and 30th August, 2017, Dr. Eniang gave an elaborate lecture to all stakeholders on the potentials and impacts of the projects. Opportunities were given to members and communities to air their views. These are all documented in video and print for ease of reference.



Group photograph with SPRO after the Inauguration of Tortoise Project at Esuk Mbat

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.
- Email and telephone contact information for the local World Bank office.
- 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. 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.

BPC has produced project flyers, jotters, exercise, books, etc which are freely distributed to affected communities and stakeholders whereby the information pertaining to the RIT, the CEPF, World Bank as well as the local authorities are listed for all sundry to channel any grievances or positive suggestions that may help to boost the outcome of our project. It is such a mechanism that has enabled us to derive the by – in of other interested parties who are all coming into partner with us on the tortoise project. Provision is also made on the BPC website www.biopreservationcenteruyo.org to channel any complain or information to the project operators.