



IUCN SSC PSG SGA/SSA¹ ARRC Task Force

ARRC Task Force review of the Baoma 1 Chimpanzee Assessment for the Phase 1 of the Baoma Solar project in Sierra Leone

April 24th, 2025

We received from RSK on the 5th of April 2025 the following document:

- 2040295_Baoma 1 Chimpanzee Assessment_Final_Clean combined' which aimed to: "
 - *determine historic and current Chimpanzee activity around the Project site;*
 - *improve our understanding of Human-Chimpanzee interactions around the Project site;*
 - *conclude if Chimpanzees have been adversely affected by the Project; and*
 - *determine the appropriateness of, and need for, enhancement measures proposed in 2018.*"

The ARRC Task Force panel for this project has emitted the following recommendations and feedback on this report:

General comments

- This report provides past and current insights into chimpanzee presence, habitat use, as well as background on people's attitudes towards and perceptions of chimpanzees, and anthropogenic activities within the area of influence of the project; however, there is insufficient information to firmly support some of the conclusions emitted herein and we therefore would recommend a more precautionary approach when interpreting reported results and affirming that there was 'no discernible' residual impacts on chimpanzees from Phase 1. Some of the results would suggest otherwise, please see below for further details.
- It is disappointing to hear that the project did not implement all the actions listed in their ESMP for Phase 1 of the project. Considering the future proposal to expand the project to Phase 2, we would highly recommend an analysis of why these were not implemented and how this can be redressed in the future.
- Please note, that all habitats used by chimpanzees should be considered Critical Habitat (CH) (Map 3.6 potentially underestimates CH for chimpanzees; only further detailed surveys will more firmly establish CH for chimpanzees in the landscape).

¹ International Union for the Conservation of Nature (IUCN) Species Survival Commission (SSC) Primate Specialist Group (PSG) Section on Great Apes (SGA) and Section on Small Apes (SSA)

- The report would benefit from highlighting knowledge uncertainties or gaps which would help inform Terms of Reference for future detailed surveys for chimpanzees for Phase 2 of the project.
- Moving forth, it will be essential for the project to 1) develop an offset for residual impacts of Phase 1 on chimpanzees; 2) define the area of influence of the project for Phase 2 (=survey area) accounting for the projects' direct, indirect and cumulative impacts on chimpanzees; 3) conduct more in-depth chimpanzee surveys across the landscape within the area of influence for Phase 1 & 2; 4) use this data to develop appropriate mitigation measures (e.g. identify potential chimpanzee crossing sites along the main road to ensure that no new infrastructure or construction activity or increase in human presence would impede crossing by chimpanzees) and 5) develop a Biodiversity Monitoring and Evaluation Plan to ensure effectiveness of implemented mitigation measures and to monitor the chimpanzee population in the landscape.

Specific comments

METHODS

- The report needs to define what is meant by historic; what period precisely is targeted? We suggest highlighting that clearly at the start.
- There is repeated mention of the Area of Influence for the Project; however, it is not defined. The report should provide definition and rationale for its delimitation.
- 1.3: *'Assessing habitats around the PV plant on their suitability for Chimpanzees, and comparing this to baseline survey data, can allow assumptions to be made about how Chimpanzees might have, and do, use the landscape (if present at any time). In turn, any changes to land-use/habitat composition can allow impacts on Chimpanzees to be inferred.'* Considering how adaptable chimpanzee are, this approach presents limitations as chimpanzees can also use and range in degraded habitats.
- The report relies on the results of the previous 2017/2018 survey without assessing if the methods and survey effort were adequate and unbiased. Considering that chimpanzee have large home ranges and can be selective in habitat use based on food availability, threats, and seasons, the duration of camera trapping – 2 camera traps for three nights in the field in 2018 at two locations - was too short to confirm chimpanzee presence or absence and yield firm conclusions about habitat use (the results of the social surveys demonstrate that quite well). A cautionary note should be made to that effect, especially as habitat use is also very much influenced by season and crop availability.
- 3.1: *'These habitats are conducive to Chimpanzee movements through the landscape, with some limited opportunistic (possibly seasonal depending on the regenerating vegetation), but unlikely sustained or substantial, feeding opportunities (see Halloran et al, 2014).'* [Rosa Garriga's PhD dissertation](#) would suggest otherwise; chimpanzees in highly degraded landscapes in Sierra Leone can survive as long as oil palm and crops are available; fallow areas also provide key food resources utilised by chimpanzees.
- Figure 2.1 Map: would be useful to highlight villages which were targeted for social survey and the project area of influence that is mentioned in the text. There is mention of Buman and Komende, but where are these actually located? Please add to map any areas or localities mentioned in the report.

RESULTS

- The results presented herein are rather text heavy and we would therefore recommend additional maps and/or tables summarising the results which would allow for a more balanced interpretation of the social survey results.
- Page 4: would be useful to map out '*Historical and current presence/distribution/activity of wildlife (including Chimpanzees)*' with dates when chimpanzees were last reported to be seen. A summary table would also be useful to supplement such a map.
- Page 1: '*These activities are discussed further in Section 3.2 although it was reported during the surveys that these activities had all been underway before the Project started. All these activities, including the general presence of people in the Forest, reduce its suitability for Chimpanzees*'. But the intensity of these activities may have increased, and this report has failed to ascertain their scale pre- and post-project (of course intensification of anthropogenic activities cannot solely be attributed to the project but the report puts in evidence that the project did lead to some influx and increase in the demography of some villages, hence potentially an increase in ongoing anthropogenic activities). In addition, the impact of such activities also depends on people's tolerance then towards chimpanzees; capture has been mentioned and is typically always associated with killing.
- Page 2: '*The most suitable area in the landscape for nesting Chimpanzees is a small fragment of forest at the southern tip of Singima Forest.*' Although chimpanzees favour forested areas, including riverine/gallery forest areas, please note that chimpanzees in Sierra Leone are also known to nest in oil palms and other species outside forested areas.
- The social surveys clearly highlight that initial surveys were inadequate and also failed to identify road crossing areas by chimpanzees. There were several instances reported that chimpanzees were recently seen crossing the main road. One such site was close to the project site - "*Chimpanzee crossing the highway from Ndoborguma via a bridge near the solar farm heading to Singima. This was last year in July/August*". It is possible that the project site previously acted as a safe crossing point for chimpanzee as it is located in the middle of a straight stretch of the road, but this point was not considered in the report.
- *Yamandu: The number of buildings in the village increased, with the expectation that they could receive electricity from the Project.* Chimpanzee presence was also noted in the recent past, so this potentially implies that Phase 1 of the project did attract an influx of people into the area and that the road also increased human activities potentially impacting chimpanzee presence, especially as several localities expressed negative perceptions and capture was also practiced.
- '*Construction of the Project has had no perceived adverse effects on the local environment by the communities interviewed.*' Careful as local people, albeit having some knowledge of chimpanzees, are not experts in being able to understand or appreciate impacts on the species. Such reports are therefore rather subjective and cannot be considered as conclusive or evidence, especially if some people already did not readily tolerate their presence and/or fear(ed) them.
- *Table 3.2: Which approach or rating criteria or basis for evidence was used to reach the conclusions presented in the table?* Details should be presented in the report in the methods' section. For instance, Chimpanzee nesting/resting within the landscape is

reported as Negligible outside of Singima Forest and connected riparian areas. However, in the last part of the table, it is stated that “*Habitats linking Singima Forest with riparian corridors likely facilitate some Chimpanzee movements through the landscape*”. Have any surveys been conducted in ‘habitats linking Singima Forest with riparian corridors’ to support the assertion that chimpanzee nesting/resting within the landscape is reported as Negligible outside of Singima Forest? Chimpanzee nests for example in oil palm trees may not be obvious to non-experts.

- **Table 3.3:**
 - It sounds like the area of influence that has been used for this assessment is the fenced project area, although the area of influence is larger than that, e.g. some influx was noted and this could have led to increase timber and charcoal exploitation, which could have contributed to enhancing deforestation.
 - It is not possible to ascertain that there was no killing or injury as a result of the project.
 - Changes to movement patterns: noise and light disturbance is not accounted for and could have affected movement, especially during the construction phase, which could also have led to shifts in habitat use and loss of foraging resources-clearly chimpanzees in the locality seemed to have always been wary of people so this is a fair assumption to make.

CONCLUSIONS & RECOMMENDATIONS

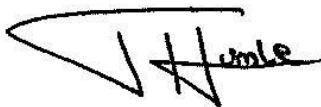
- *In the absence of any discernible residual impacts, a ‘gain’ still needs to be delivered in recognition of the conservation importance of the habitat a project is operating in. However, as noted in paragraph GN90 of the guidance note for PS6, this gain can potentially be more qualitative (e.g. an increase in understanding of a trigger species, education programmes aimed at raising awareness of the trigger species etc.). These can be deemed ‘Additional Conservation Actions.’ These latter ‘actions’ are relevant for the Baoma 1 Project and will need to be developed as part of this exercise. Please note that we consider this project to have had impacts on chimpanzees. What is being proposed exactly for the project to achieve Net Gain?*
- What is the rationale for arguing that the initial planned \$15,000 would suffice to compensate for any Phase 1 impacts on chimpanzees? Was such a sum even sufficient to implement the initial proposed actions that were never implemented? Please note that these initial funds were allocated for reducing the impacts not compensating them, and we would expect a more significant sum to be allocated for compensating residual impacts to chimpanzees for Phase 1.
- **Section 4.2:**
 - *Similarly, it shouldn’t be used as an excuse to divert funds already committed to a conservation project to another, non-conservation endeavour, with the expectation that the Project will pay (for example when a government authority diverts funds set aside to establish a protected area, to a non-conservation effort, whilst the Project pays for the establishment of the protected area). Would recommend deleting as somewhat misplaced. The focus should be on devising a sustainable funding and governance mechanism with the appropriate identified partners so that any actions can be effectively implemented, monitored and evaluated.*

- Additional conservation actions do not typically contribute directly to net gains' approach based on the mitigation hierarchy. However, it is not clear whether the entire Singima forest is sacred, so there is scope there for reducing pressures, especially if the main threats are timber and charcoal exploitation. Further detailed surveys are required to better understand chimpanzee's distribution and abundance within the landscape; however, such surveys cannot be considered as gain actions, especially as located within the project's area of influence.
- Compensation for crop damage is not a 'respected' action and would be ill-advised as complex to put in place, monitor and manage and such financial compensation also requires sustainable funding, especially considering that, as a whole, crop foraging seems to be rather limited and not a major issue, although this may require further assessment. To conserve chimpanzees in the landscape, it will be key to promote 1) connectivity between the Singima Forest and the riparian forest and 2) protect the entire Singima forest (potentially allowing some regulated NTFP extraction by local communities) and existing riparian forest areas to promote passive growth of wild foods and nesting trees for chimpanzees (crop foraging is often related to deforestation, since it appears that chimpanzees are wary of people, promoting wild foods could be a good solution to alleviate the risk of crop-foraging).
- The panel highly recommends ongoing and long-term systematic study/monitoring to fully understand how chimpanzees are utilizing the landscape; this will be critical to shed further light on Phase 1 impacts on chimpanzees and most importantly understand potential impacts on chimpanzees for Phase 2. It will also be important in the future to consider developing education and sensitization programs involving schools, as well as involving communities in the designing, planning and implementation of actions around chimpanzee conservation, in addition to the development of sustainable local alternative income strategies to alleviate pressures resulting from timber and charcoal production activities and other threats to forest habitats and chimpanzees. Such actions should aim to improve people's attitudes towards, and perception of chimpanzee in the short and long term.

We look forward to receiving your response as to how you plan to address the above comments and feedback.

Should you have any queries, please do not hesitate to contact us.

Best regards,



Dr Tatyana Humle

On behalf of the ARRC Task Force panel for this project