

**IUCN SSC PSG ARRC Task Force comments on:
“Primate Survey Summary and Management Plan for the Betmai Hydropower Project”**

23 November 2021

Thank you for sending the ‘Primate Survey Summary and Management Plan’ for the Betmai Hydropower Project dated September 2021 (hereafter Report). The run-of-river project design appears less harmful to the environment than larger hydroelectric projects that have permanent reservoir and larger footprint. However, it was not clear to us where the inundation areas would be, and if there would be permanent inundation that could create a barrier to chimpanzee movement, and thus these points should be clarified in the Report and further investigated with field surveys. This Report include rapid surveys to assess chimpanzee presence in the area, however, as acknowledged in the report, more surveys are needed to obtain a better picture of chimpanzee distribution and abundance in the area of influence of the Project to guide mitigation. In addition, the management plan should be presented in a separate document and include more details to ensure its proper implementation. Please find below more detailed comments on the Report.

General comments:

- The Report could have been improved with additional maps that show rivers and their tributaries, locations of villages, include a scale, etc. A map showing where recces were conducted and villages in which interviews have been conducted would also have been helpful, as well the different habitat types (including their definitions, as for example it is not clear how riverine forest was differentiated from gallery forest).
- The Report doesn’t adequately define the habitat present in and around the project footprint. For example, it needs to describe the greater landscape (as per GN27) and include any protected areas or intact habitat features in proximity to the project. Additionally, an analysis of the landscape level dynamics is needed. For example, an analysis of the land use and land cover dynamics at play across the landscape where the hydropower project is located.
- Chimpanzee studies should not be considered in isolation, and it would have been beneficial to frame this report within the broader context of the ESIA and all social studies to date, including the in-depth community work. Since the project will be implementing interventions to protect the chimpanzee population, it is important to understand its relationship with local communities in order to inform feasible interventions. If the relationship is poor, for example, a program focused on protecting chimpanzees is likely to be counterproductive and received poorly, and an approach focused on people receiving benefits from ecosystem services may be more effective. This is in essence what GN 19 refers to as the ecosystem or social-ecological approach.
- Road construction is expected to be minimized by the Project which is good, but the extent to which new roads will increase access to hunting and natural resource exploitation will largely

depend on the road design, its location and length, as well as its management, details which have not been presented in the report.

- Many aspects of the report discussing baseline threats to chimpanzees and conservation education are likely oversimplified. The report explicitly states that chimpanzees are threatened by hunting, habitat degradation and attitudes. However, information in the report reveals a more complex situation. For example, another distinct threat is human-chimpanzee conflict on farms. Attitudes towards chimpanzees are usually the product of many factors including poverty, lack of opportunity, negative interactions with wildlife, etc. It would help to have more details on the causes of the negative attitude of people towards chimpanzees. The root of this attitude would be better understood through a social survey. However, it is the behaviors generated from attitudes that are normally identified as threats, not the attitudes themselves. Conducting a situational analysis and a Theory of Change process (see: www.wildteam.org.uk) is a good way to identify multiple threats and contributing factors and the subsequent interventions to effectively mitigate these threats. For example, poor law enforcement and existing bushmeat markets contribute to hunting and these therefore represent potential pathways upon which conservation interventions can focus.
- The report states that the potential increase in people coming to the area looking for work may increase the number of local hunters. Further exploration into the likelihood of in-migration as a direct result of the Project and how the company is planning to tackle the issue is necessary. The lack of control over in-migration makes it one of the most pressing threats to great apes.
- The report includes terms such as ‘pests’, ‘human-wildlife conflict’ or ‘crop-raiding’: such terms are potentially loaded and could bias or even modify local people’s perceptions of wildlife. We recommend best to avoid these terms in the future, not only in report, but during interviews or in questionnaires.
- Conservation education programs are a primary focus of the proposed mitigation measures, yet good education programs are not very easy to put in place and should have greater scope than chimpanzees. A focus on ecosystem services during such programs, with an emphasis on benefits to humans rather than chimpanzees, might be a more effective approach to protecting the latter.
- It is too early to implement activities from the management plan, as these activities require more thought and details, as well as more information on chimpanzee’s distribution and abundance, and information from social surveys, to increase their relevance to the specific Project’s context. Once these activities have been developed, they will require KPI (Key Performance Indicator), and a monitoring and evaluation program to ensure their proper implementation and use of adaptive management if necessary.
- The management plan should be a separate document, and further surveys could be imbedded in a Biodiversity Action Plan (BAP), which provide the status of biodiversity features triggering Critical Habitat, as well as indicating how the mitigation hierarchy will be implemented. Both a BAP and BMP are required for Project located in Critical Habitat as per GN91 that states: *“BAP describes (i) the composite of actions and a rationale for how the project’s mitigation strategy will achieve net gain (or no net loss), (ii) the approach for how the mitigation hierarchy will be*

followed, and (iii) the roles and responsibilities for internal staff and external partners... A BAP differs from a BMP in that the latter is an operational document developed largely for site managers and contractors (see paragraph GN50); whereas the BAP will almost always include actions for off-site areas (for example, offsets and additional actions) and involve external partners (for example, implementing partners, reviewers, or advisors). "

It is our opinion that what you refer to as the management plan should really be the BAP, as this needs expertise to write, and is more likely to be done by an external consultant than the management plan which could be written in-house from the BAP.

Comments specific to the chimpanzee surveys:

The following are comments on chimpanzee survey data collected to date by the Project, and further chimpanzee surveys that would be required to properly plan for the full application of the mitigation hierarchy. These surveys need to be completed BEFORE the start of any construction work by the Project.

- It is unclear what was the exact survey area. Survey area is important to know, as surveyed locations with no chimpanzees recorded also provide very useful information. It seems that part of the area that will be impacted (i.e. to the east) was not surveyed, but information from this area is essential for any future planning.
 - Recommendation: Provide information on past survey areas and define survey areas for future surveys that cover the entire area of Project's impacts, including potential areas of indirect impacts that could extend far beyond the direct footprint.
- It is unclear what the survey effort was, i.e. total recce length. Knowing total length is essential to derive a relative measure of abundance, and also key to planning future surveys. This also applies to the interviews conducted as there is a lack of details on the number of respondents per villages, per different households, etc.
 - Recommendation: Any future survey needs to provide a measure of effort, regardless of the type of survey conducted (recce, line transect, camera trap). Surveys also need to be conducted across seasons.
- As pointed out in the report, camera trap surveys are of great value not only for collecting data on chimpanzees, but also many other species. The camera trap survey conducted was an important exploratory exercise and further, more systematically designed, camera trap surveys can provide much more information on the chimpanzee(s) community (ies) present. The Report mentioned some 'issues with camera trap loss', so the cause of this problem should be identified first and resolved before investing in more equipment.
 - Recommendation: Future surveys in the area should consider more intensive camera trap surveys in addition to other survey methods. A combination of approaches is considered best practice.
- There are a number of good recommendations in the document for future surveys, including line transect and camera trap surveys. However, the need for information on chimpanzee populations goes beyond density and abundance.

- Recommendation: Future surveys need to include a much comprehensive assessment of chimpanzee populations by gathering data on not only density and abundance, but on community, size, age and sex structure, connectivity, and community ranges, as well as tree species used for nesting and feeding. It is also important to assess habitat quality for those communities directly impacted and whether area lost can be compensated for by increasing quality in other areas.
- The list of threats provided (i.e. hunting, habitat degradation and attitude of local people) confounds direct and indirect drivers. Hunting and habitat degradation are likely results of attitudes, as attitudes inform behaviors, but also social and economic challenges faced by the local population. Having a much better understanding of both would help to plan mitigation measures in the area.
 - Recommendation: A more detailed survey of the situation of the local human population and the challenges they face in their daily life and resulting exploitation of resources is important.
- The interviews seem to have included leading questions, and some of the answers may have been influenced by other participants or members of the same household. For reporting on the number of respondents that gave a specific answer, it would be preferable to present results with the percentage of respondents to quantify these answers, instead of using words like ‘many’ or a ‘surprising number’.
 - Recommendation: Further socio-economic surveys should not include leading questions and shouldn’t focus on chimpanzees alone. The goal and objectives of these surveys should be clearly defined first and aimed at a better understanding of the drivers of existing and future threats to chimpanzees. It would be preferable to use open-ended response options.
- The report does not provide information on the dispersal of chimpanzees across the river. A widening of the river and inundation of areas along the river will very likely change dispersal dynamics.
 - Recommendation: Any future surveys need to collect detailed data along the river to assess whether it represents a barrier to dispersal or not. This can be done with a combination of genetics and field surveys (in both wet and dry seasons) monitoring suitable locations for crossing.

It would be helpful for us to review the scope for additional chimpanzee and social surveys before these are undertaken. Similarly, once these surveys have been completed, we would like to review proposed mitigation measures that will be included in the updated version of the management plan.

We remain available for any further questions and clarifications.

Sincerely,

The ARRC Task Force of the IUCN SSC PSG