HCS Peer Review Panel Report for Palm Bay Estate - LIBINCO, Liberia

July 20ᵗʰ, 2016

Background information:

a)   Did a Registered Practitioner Organization lead the HCS assessment? Yes, Ata Marie led the HCS assessment and is a Registered Practitioner.
b)   Was the HCS Team Leader a Registered Practitioner? Yes, Alex Thorp from Ata Marie is a Registered Practitioner.
c)   Were at least 2 HCS team members Registered Practitioners? Yes, George Kuru and Alex Thorp are Registered Practitioners.
d)   Was the HCV assessment judged 'satisfactory' by the HCV Resource Network (HCVRN) Assessor Licensing Scheme (ALS)? No, the study was done before the ALS was launched but it is recommended that the HCV assessment is retroactively submitted to the ALS.

Questions for peer reviewers
(Peer Reviewers: Grant Rosoman (Lead), Bimo Argo, Silas Kpanan' Ayoung Siakor, Nana Darko Cobbina)

1.   Lead Reviewer
1.1.   *What are the major findings and recommendations from the peer review?*

Social issues:
Questions remain on whether there is adequate land available for communities in phase one area for their own use and food security. For phase 2 areas the communities appear opposed so a different process would need to be followed that respects their rights and wishes. No full review was made on the quality of FPIC as this would require field verification, other than to note the recommendation that TFT assessment FPIC issues made and should be addressed, and the detailed guidance in the HCSA toolkit could have been used for an SOP and been reported on in the summary report.

Ecological and Conservation Issues:
HCV assessment and the summary of it the report was only partially adequate. There were questions around the decisions and justification for presence or absence of HCVs, and the lack of detailed maps of the different individual HCVs and thus conservation and management decisions that would flow from them. It would appear the riparian zones need to be identified and protected or restored.

_____

Image analysis, forest inventory and HCS forest patch Decision Tree
Considered mostly ok, with some points suggested (see below). With questions on the quality of the community land use and future farmland data, the Decision Tree would not be able to be properly completed. Also it appears that final field verification has not yet been carried out.

1.2. *Did the HCS assessment team include or have adequate access to relevant expertise to undertake the HCS assessment?*
Yes, for the HCS assessment but given the HCS Approach outputs rely on quality social assessments and processes as well as HCV assessments, attention should be placed on ensuring the assessors for those components are also suitably qualified and experienced.

1.3. *What elements of the HCS Approach still need to be completed or re-done in order to create a final land use and conservation plan?*
Revision of participatory mapping with phase 1 communities to ensure there is sufficient land for community use and food security (minimum of 0.5ha pp – if insufficient then areas proposed for development or plantation areas may need to be returned to the community). HCV assessment should be revised to improve quality and to map the separate HCVs for analysis. Riparian zones identified and protected or restored, and also included in the patch analysis. Low and medium priority patches that overlap with riparian areas should be considered for conservation. Patch analysis Decision Tree can then re-done with revised PM, riparian and HCV data, along with the required field verification and FPIC for a proposed conservation and land use plan, to complete the HCSA.

1.4. *If the recommendations in this peer review report are followed, will the HCS forests in the area of interest be conserved?*
Identifying the HCS forest areas for conservation and achieving FPIC and support from local communities for the conservation as per the recommendations of this report are both important prerequisites for conservation, especially as the HCS forest identified is adjacent to community lands and will likely come under pressure for clearance. However, unless there are formal conservation agreements with the community and/or the forest area is legally protected, and a benefits and incentive package implemented, there is no guarantee the HCS forest area identified will be conserved.

_____

2.   Social Issues Review
Chapter 2 of the HCS Toolkit provides more information on the expected quality of community consultation and FPIC procedures.

2.1.   *Does the summary provided in Section 3.1 adequately represent the community engagement, FPIC, and participatory mapping activities?*
It is critical to distinguish information about Phase 1 vs Phase 2 because there seems to be important variations in their experiences and current situations – which maybe underlie their reactions to the project. For example, the report notes that most of the people in the Phase 1 area want the project to go ahead but those in the Phase 2 areas seem to be opposed – it would help to explain this important variation in the residents' reaction to the project. It would also help to explain this in the context of the history of the project and recent developments.

In terms of negative experiences with plantation the report mentions LAC but says almost nothing about the communities' experiences with LIBINC, i.e. their historical and recent experiences with LIBINCO would be more relevant.

Additional comment: even though it appears that participatory mapping was carried out for phase 1 area, given the historical context of land acquisition for plantations, areas for community use and food security would appear to be inadequate and not distinguished from the small HCV areas around settlements. The shape of these areas around the settlements also brings into question whether these areas were identified and selected by the communities themselves of allocated by the company. The minimum requirement for the HCSA is full community land boundaries, community land use maps including future farmland, and a minimum of 0.5 ha per person set aside for food security (future farmlands). A significant concern that the TFT assessment identified that many communities did not sight the maps, understand them, or then signal their agreement with them. Issues around representation were also raised with consultation being carried out at the District and Clan level.

2.2.   *Does the summary provided in Section 3.2 adequately represent the findings of the social impact assessment?*
Most of the text in this section appears to be based on literature review. It does not demonstrate sufficient link to the communities to the situation on the ground. There is a lot of generalization hence the report needs much more specificity. The report should say what the impacts of the project has been to date on communities in the area and what the future impacts are likely to be – based on their current situation and location within the planned development area.

_____

2.3.   *Were affected communities adequately identified?*
In the Phase 1 area – this seems to be the case. In the Phase 2 area, the report does not identify all the communities. See comments under 2.1 above to further validate this point. However, it is stated that this report is only relevant for the Phase 1 area – thus it can be considered to be adequate.

2.4.   *Were affected communities adequately consulted about the proposed development and the HCS Approach?*
This seems to be the case in the Phase 1 area. Given that Phase 1 is the focus of this study – this may be deemed adequate. If the report includes findings from the Phase 2 area – then much more details on who was consulted, where and the findings – disaggregated by gender – would be very important to complete the picture.

2.5.   *Were their views incorporated into the findings?*
This seems to be the case in the Phase 1 area. It is probably important to highlight the context of the Phase 1 communities, i.e. the towns have already lost almost all of their land to the plantation and that cash payments for crops presents a major opportunity for significant income. It also raises significant questions around food security and sufficient future farm land.

2.6.   *What recommendations do you have for any improvements regarding community consultation and negotiation of Free, Prior and Informed Consent?*
No verification of FPIC was made as this would require a field assessment. Several issues and problems with the FPIC process were identified by the TFT assessment (see p20 of LIBINCO summary report), and would at a minimum need to be rectified if FPIC was to be achieved. The process for community consultation and FPIC as outlined in Chapter 2 of the HCS Toolkit is comprehensive and provides very practical guidance. In this light, it might be useful for anyone conducting a community consultation and negotiation of FPIC should first lay out in very precise terms or a summary Standard Operation Procedure (SOP) how they would follow the process as laid out in the HCS Toolkit. Once the process has been completed, the report preparation should outline very clearly how the steps in the SOP were followed and the outcome at each stage. This would be useful for independent verification that the process was thorough and that the findings reflect the realities on the ground.

_____

3.   Ecological and Conservation Values

3.1.   *Does the summary provided in Section 4.1 of the Summary Report adequately represent the findings of the HCV study?*

Partially. The summary provided in Section 4.1 represents the findings of the HCV study to some extent. However, both this Summary and the RSPO Public Summary Report do not give sufficient information and justification on how decisions about the presence or absence of HCVs have been determined for all the HCV categories. Both the Summary and the RSPO Public Summary Report are particularly limited in terms of providing information on species under HCV 1.2; 1.3 and 1.4. These three HCV sub-categories refer to **high concentrations of species**. The summary reports are silent on the significance of the concentration of the species encountered. For instance, information on relative abundance, whether these species were resident or not, what management areas are necessary for their maintenance and whether the populations sighted were of any special significance compared to what pertains in the wider landscape. This is particularly in light of the point in the LIBINCO report p21, "….should an adequate faunal sampling take place….", indicating that existing surveys were not sufficient.

HCV maps presented also do not fully identify the locations of the different individual HCV categories and this presents a major challenge for management (i.e. HCV1-3 are very different from HCV 5&6 and HCV5 is different from HCV6). It is not clear if the HCV areas are drawn to scale. The Public Summary Report itself does not clearly identify the sizes and locations of each of the identified HCVs. It however lumps together a number of potentially present HCV categories and allocates an area for them on page 52. It is also prudent to provide management recommendations for IUCN Red Listed threatened species as the HCV report may well be the most detailed conservation guidance the company receives; in which it will be important to provide recommendations on how to protect threatened species in the concession.

3.2.   *If the HCV assessment was not judged satisfactory by the ALS scheme of the HCVRN (as noted in the introductory information from the HCS Secretariat – please see page one of this document), please do a cursory review of the HCV report as it relates to HCVs 1-4. Were the determinations of the absence/presence and extent of HCVs 1-4 well-justified? Are the HCV management and monitoring maps accurate?*
The HCV Report can be found in Section 4.2 of the Summary Report.

The HCV report was finalized before the launch of the ALS scheme. Recommended that the HCV report and assessor be submitted to the ALS. The Reviewer finds that for all HCV categories, justifications given for decision-making to conclude the presence or absence of HCV could be clearer. For instance, not much basis for considering species presence to be of high concentrations has been provided and there appears to be adequate justification for considering dependence by communities on resources as critical. A number of HCV categories have been classified as potentially present, apparently due to constraints to undertake detailed field assessments. Consequently, there is no baseline data available to inform future management interventions and their monitoring. It is not clear from the report why detailed field data that would enable conclusive determination of the presence or absence of species have not been collected. There is insufficient information on abundance, populations, distributions, range and locations of the HCV 1-3. Additionally, the maps indicating the locations of the various HCV categories is

_____

insufficient. Generally, HCV reports should provide clear justification of how HCV 1 species (RTE) populations were deemed significant or not and clarification on whether species that were not recorded during the survey may still exist in the landscape and need precautionary management.

For those HCV categories that were considered absent, the report has not discussed them fully The Reviewer thus is unable to assess the basis for determining that those HCV categories are absent, and whether these decisions were well justified. Field survey results could be presented on a map to show the actual or likely species distribution. This will enable the Assessor to recommend the management areas that may be needed to maintain the HCVs.

3.3.   *Does the summary provided in Section 5.1 adequately represent the findings of the Environmental Impact Assessment?*
Adequate: The revised section 5.1 highlights areas within the EIA report that have not been well implemented by the company. However, the summary and issue details presented does not highlight some of the key background information relating to number of communities, population dynamics, livelihoods, etc. which could have an impact on the management of natural resources and HCVs within the area.

3.4.   *Please review Section 5 of the Summary Report Was the Environmental Impact Assessment of adequate quality?*
The Reviewer is unable to provide a definitive response or make a conclusive comment on the quality of the EIA, as the link to the full EIA has not been provided.
The comments below are thus based on the details presented in the RSPO Public Summary Report.
- **Methodology**: Please note that the social survey methodology has only relied on Focus Group Discussions, Key Informant Interviews and Field Observations. Limited household interviews (20 households altogether) are mentioned in the public summary and it is not clear if this was adequate to establish baseline socio-economic data. Secondly, it is not clear how the team has collected information on environmental parameters such as soils, air quality, water quality, etc. Lastly, it is not clear from the methodology presented if the assessment process was participatory. The impression presented is that some form of consultation was conducted during the data-gathering phase. Subsequently it is not clear if affected communities have been involved in identifying and ranking impacts and also proposing possible mitigation approaches.

3.5.   *Was the methodology use for the Rapid Biodiversity Assessments (if any) satisfactory? Did the RBA(s) reveal any HCVs that should have been captured in the HCV assessment but were not? Note that this is a check of procedures, not outcomes.*
No RBAs were conducted for this assessment. In the estimation of the HCS assessor, the Patch Analysis Results did not show any areas that required a Rapid Biodiversity Assessment. Hence, no RBA has been conducted.

_____

3.6.   *Are the forest conservation management and monitoring activities outlined in Section 10.3 adequate? Do they take into account forests and protected areas outside the concession?*

No forest conservation management and monitoring activities have been outlined in Section 10.3 as it was explained that this would come later in the process.

4.   *Image Analysis*

4.1.   *Was the Area of Interest correctly identified?*

Yes, the Area of Interest was identified correctly. Double check with another L8 imagery (LC81990562015014LGN00) which has different date acq with the one used for analysis (LC81990562014363LGN00). Please refer to 2016-05-20 Double_check_the_AOI_Location.pdf to see the comparison.

4.2.   *Were the images used of adequate quality, including resolution and date?*

The image used for classification is Landsat 8 with (30x30)m resolution. Date of acquisition: December 29, 2014. The image is cloud free image, this can be understand since the wet season in Liberia is from May until November where normally we can not find any cloud free image during that period.

4.3.   *Was the initial land cover classification done properly?*

Generally, the initial land cover stratification was done properly, even they mix the classification between forest land cover (BT,BM,LT) with land use (SH, SHOP, INFRASTRUCTURE, LC NEW). Suggest for the future assessment, is to classify the land cover based on the forest presence identified from the imagery. The land use can be placed in "Remarks" column in the GIS database.

Do the land cover areas in the tables in Section 6 look reasonable? Are there any obvious errors in classification?

Yes it's looks reasonable even found a slight difference in the area calculation between reported hectares vs the area calculation based on the shapefile provided (palmbay_LC_v15.shp). Understood that the areas reported excludes INFRASTRUCTURE, SHOP, OP and LC NEW. Please refer to the tables below

_____

Land cover class	Number of Hectares	% of total concession
Potential HCS classes:		
High Density Forest	0	0%
Medium Density Forest	0	0%
Low Density Forest	0	0%
Young Regenerating Forest	618	28%
Non-HCS classes:		
Scrub	863	39%
Open Land	595	27%
Smallholder	111	5%
TOTAL	2187	99%

LAND COVER CLASSIFICATION BASED ON THE SHP PROVIDED	HECTARES	%-AGE
BT	614.72	7.4%
BM	858.77	10.3%
LT	592.22	7.1%
OP	5,824.55	69.9%
SH	110.22	1.3%
SHOP	7.10	0.1%
LC NEW	241.30	2.9%
INFRASTRUCTURE	79.78	1.0%
TOTAL	8,328.66	100%

Comparison of the area calculation

Land cover classification		Hectares		Difference
Reported	Shapefile provided	Reported	Shapefile provided	(shp - report)
YRF	BT	618.00	614.72	-3.28
S	BM	863.00	858.77	-4.23
OL	LT	595.00	592.22	-2.78
SH	SH	111.00	110.22	-0.78
TOTAL		2,187.00	2,175.93	-11.07

5.Forest Inventory
5.1   *Were the sample plots selected, set up, and measured properly? Please check the inventory plot layout for adequacy.*
The sample plots selected systematically along a transect line. The plots selected only focus in BT and BM classes within the concession area, and also only in a limited part of the concession. Understood no need plots selected inside the plantation (OP). They are following

the HCS inventory plot measurement procedures and layout. Suggestion for next assessment, please provide the reviewer with a shape file that combine all the information gathered from the ground truthing and the carbon stock calculation for each sample plots taken. The review process of the initial landcover map based on the carbon stock calculation also will be more easier.

5.2   Was the forest inventory team qualified?
Beside the 4 common workers for cutting and measurement, the forest inventory team was satisfactorily qualified. Best practice to ensure field plots are measured correctly and consistently would include quality control measures such as blind reassessments of a sample of plots by another inventory team.

5.3   Was the allometric chosen adequate?
Yes, the allometric choosen was adequate. They used the allometric equation from Chave, et.al. 2005 where it needed DBH, tree height and species specific wood density to estimate above ground live biomass.

5.4   Are there any obvious errors in the raw forestry data? Are there any flags where a result does not seem consistent with your rough interpretation of the land cover image? Do the final carbon classes seem accurate given what is known about other forests in the region?
No error found on the raw forestry data and statistical analysis. The only that need attention is to revise or review the land cover strata based on ground truthing and carbon calculation. Please refer to HCS result analysis.xlsx.

6. HCS Forest Patch Analysis
6.1   Was the initial land cover map adequately adjusted to take into account forest inventory results?
No initial land cover shp provided. From the super-impose of the land cover, sample plots taken and the tC/ha as shown on the table 2 Sect. 7-10, we can see that some points seems not take into account for map adjustment. Please refer to the file HCS result analysis.xlsx. There does not appear to be analysis of forest patches outside the concession for consideration in the Decision Tree (*see p82 of toolkit*).

6.2   Were patches merged correctly? Was the core area correctly identified?

_____

Yes, the patches of HCS (BT only) were merged correctly and the core area was correctly identified. The core is area 221.31 Ha.

6.3   Were the patches correctly identified as High, Medium, or Low Priority? Was the Patch Analysis done according to the HCS Approach Decision Tree?

From the initial forest land cover, there is only one HCS patch that is classified as High Priority (core > 100Ha). No connectivity and risk assessment shapefile to check the step of patch analysis. In particular some of the medium and low priority patches appear to be directly connected or overlap with a riparian zone and thus should be conserved rather than developed as proposed (as the LIBINCO summary report says "*most of the secondary forest is found along flowing streams*", p5). From the review, there is some slight different in the "Recommended for Conservation" category size. On the report it's written 503 ha for conservation, from the shp is 500.54 Ha and based on Decision Tree analysis by reviewer the conservation area is : 506.84 (Please refer to file : 01 Check_Core_Area_of_Patches.pdf ; 02 Check_Connectivity.pdf ; 03 Check_Risk_Assessement.pdf ; 04 DT map.pdf for the step of Decision Tree analysis). It doesn't appear that some of step 12 components are adequately considered such as boundary rationalisation to fill in pockets and conserve isolated or inoperable areas (e.g. the top right hand corner area).

Additional comment: with questions remaining around the adequacy of the Participatory Mapping and the data flowing from this (esp. future farmland shape files), the Decision Tree and patch analysis could not be adequately completed to generate the HCS conservation and development maps. Having PM maps and future farmland areas is a clear requirement in the first step of the HCS forest patch analysis Decision Tree, and it is clear from the demographical information and social assessments that providing farmland for the future is a significant issue on not fully addressed by the HCSA assessment.

6.4   Were the results of the final ground verification (if any) adequately incorporated into the land use plan and final HCS map?
       Not available

_____