

HIGH CARBON STOCK APPROACH

HCSA PEER REVIEW REPORT

Company Name: Genting Plantations Berhad
HCS Assessment Area: PT. Citra Sawit Cemerlang
25 February 2020

Dear peer reviewers:

Thank you for agreeing to review this HCS study. As you know, we are asking you to do a desk review of the material provided and to highlight any concerns you have about the land cover classification, land-use planning, or consultation processes. We have invited you as an expert in your field, and hope that you will bring your own experience and knowledge to this review to help the company improve its study. We are not asking you to provide a pass/fail decision, just to give your honest opinion and suggestions for changes to the company's plans or activities to ensure that the HCS Approach methodology is implemented correctly. Please refer to the latest [HCSA Toolkit](#) as reference.

Some of the issues raised in the review may be complicated and long-standing, especially those related to land tenure and historical conflict with communities. It is not within the scope of the review for you to do hours of research and determine who is at fault, or to examine stakeholder activities outside of the particular concession or plantation which is the subject of the review. Rather we ask that you call attention to topics that need further research or more information from the company, to improve community relations in the future or to reassure external stakeholders that the intent of the HCS Approach is being followed.

Background information to be provided by the HCSA Secretariat:

- a) Did a Registered Practitioner Organisation lead the HCS assessment? If not, has the organisation which led the assessment started the process of registration?**
Yes, the HCS assessment was led by Adriani from Aidenvironment, a Registered Practitioner Organisation.
- b) Was the HCS Team Leader a Registered Practitioner?**
Yes, the HCS Team was led by Adriani, a Registered Practitioner under Aidenvironment.
- c) Were at least two (2) HCS team members Registered Practitioners?**
Yes. Adriani and Haryono from Aidenvironment.
- d) Was the HCV assessment judged 'satisfactory' (highest rating) by the HCV Resource Network (HCVRN) Assessor Licensing Scheme (ALS)? (See <https://hcvnetwork.org/reports/find-a-report/>).**
Not applicable. The assessment was prior January 2015.

Questions for peer reviewers

(Peer Review Panel: Tri Agus Sugiyanto)

The estimated time to complete each section is noted in parentheses.

1. Peer Review Summary (2 hours, Lead Reviewer)

1.1. What are the major findings and recommendations from the peer review?

Please refer to the peer review results in this report.

Finding: The reviewers found that the overall quality of the HCS assessment, reporting activities of SIA, EIA and HCV, was worthy.

- 1). Regarding SIA assessments were conducted in 2012. FPIC processes are likely only defined as an involvement of community to dig up the issues during company's establishment and development. Participatory mapping only a sketch maps that show area boundary. Doesn't clearly about minimum requirement for future farmland 0.5 ha per person.
- 2). HCV reporting was conducted on November 2014 and A map of the HCVA has generated for RSPO notification of proposed new planting. HCV 2 and HCV 5 were not present and illegal logging as one prominent issue.
3. HCS land cover stratification using Sentinel 2 imagery, and had an overall accuracy and kappa < 50%, however mistake interpretation in HCS class. There is a mistake in the choosing of allometric. Land use planning consider take and give.

Reviewers Recommendation:

NA. PT CSC is committed to complete the recommendation

1.2. Did the HCS assessment team include or have adequate access to relevant expertise to undertake the HCS assessment?

Please refer to Section 2 of the Summary Report.

Finding: Yes, based on the peer review results, the assessment team had sufficient expertise in field work and quantitative methods to assess vegetation and carbon stocks. Given the low accuracy of the remote sensing analysis, we recommend further training of assessment teams in the classification of satellite imagery.

Reviewers Recommendation: N/A

- 1.3. What elements of the HCS Approach still need to be completed in order to create a final land use and conservation plan? Are there aspects which you feel need to be re-done?

Please review Section 10 of the Summary Report and the peer review results in this report.

Finding: Most of HCS area already compensated, final landuse planning and conservation plan has consider take and give. Collaboration of company, local community and local government to make success conservation HCS forest. The actions are likely sufficient to fulfill HCS requirements for a land use and conservation plan.

Reviewers Recommendation: N/A

2. Social Issues (4 hours)

Please review Section 3 of the Summary Report and please also look at the full HCV report (Section 4) for how HCVs 5 and 6 were assessed.

The HCSA 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 and explain the community engagement, FPIC processes, and participatory mapping activities carried out?

Finding: In 3.1, summary structure doesn't represent adequately about community engagement, FPIC processes, and participatory mapping activities. It tells about summary of impact assessment. However, community engagement, FPIC processes, and participatory mapping activities structured in 4.1 until 4.5. The findings of 4.1 until 4.5 are: 1). Community engagement: the summary doesn't really represent adequately community engagement context. It captured about the ongoing issues due company establishment, but lack of information in the early stage of engagement process to community; 2). FPIC processes: the summary more refers to FPIC as an involvement of community to dig up the issues, it lack of informations how did the company take step to address the issues; 3). Participatory mapping activities: the summary doesn't provide the information that the involvement of the community in participatory mapping is adequately represent all the impacted community of company's establishment.

Reviewers Recommendation: Provide information on how company take steps to address community's concerns and/or community awareness as explained in SIA report.

2.2. Has a tenure study been completed and has it been vetted by independent social experts?

Finding: 1). The tenure study is not comprehensively explained in the summary report, although it is already completed in SIA and a few explanation in EIA report; 2). The tenure study has not been vetted by independent social experts.

Reviewers Recommendation: NA. Company added information into the summary report and is committed to complete the recommendation.

2.3. Is there a participatory land use map and does it contain the key components of community land use including the minimum requirement of 0.5 ha per person for future garden areas?

Finding: 1). Basically, the participatory land use map is the map sketch by community during the FGD process and/ outdoor mapping activities. There is no appendix shows about the participatory land use map (created by community), only a sketch maps that show area boundary; 2). The summary both in maps and descriptively doesn't clearly explain about community land use minimum requirement for future garden areas.

Reviewers Recommendation:

Sketched map is added in the summary report, need to provide a short summary about the food security planning towards affected community around PT CSC area (in summary report, it only talked briefly about rehabilitation for HHBK management).

2.4. Is there a record of consultation with affected communities and FPIC processes on the proposed development, the HCS Approach and issues/concerns they raised? Did the community nominate their own representatives?

Finding: 1). There is records of consultation with affected communities and FPIC processes; 2). It doesn't state clearly about how community nominate their own representatives during the consultation.

Reviewers Recommendation: The company's response "Community representation involved in the FPIC process was determined by village government members with direction from the assessor with minimal require of community representation" can be added in summary report.

2.5. Were their views addressed and reflected in the plans and implementation of the plantation? Is there specific reference to the customary owners being made aware that they can say no to the development and they have the right to independent legal representation with regard to their agreements before they sign (to meet the 'prior informed' test)?

Finding: 1). Affected community's views have captured, addressed, and reflected in the recommendations in SIA report, but not in summary report; 2). There is no specific reference of "no go" for company development from community side.

Reviewers Recommendation: Provide a short explanation of how company is planning to address community's views in company development.

2.6. What recommendations do you have for any improvements regarding community consultation and negotiation of Free, Prior and Informed Consent?

Finding: In SIA, EIA and summary reports, FPIC processes are likely only defined as an involvement of community to dig up the issues during company's establishment and development. For proper FPIC, it needs explanation of steps on how to address all the issues, till it reaches the consensus. Furthermore, the consensus will establish roadmap and/action plan especially to address issues on affected community in ongoing company's operations.

Reviewers Recommendation: Provide information on how company take steps to address community's concerns and/or community awareness as explained in SIA and EIA reports.

3. Ecological and Conservation Values (4 hours)

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

Finding: Yes. The summary was clear and succinct. Four out of the six HCVs were assessed to be present, with justification. However, it is not mentioned as to why HCV 2 and HCV 5 was not present. Total HCV area was clearly elaborated (1488 ha or 9.84% of the project area). The recommendations of management and monitoring HCV area not present.

Reviewers Recommendation: Appended and explained why HCV 2 and HCV 5 was not present and add table recommendations of management and monitoring HCV area.

3.2. If the HCV assessment was not judged satisfactory (highest rating) 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. Do you have any general comments on the quality of the site description, the analysis of the landscape and national or regional context, or the methods used to undertake the HCV study? 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 the SharePoint.

Finding: HCV report was done prior to the ALS, report written and well conducted. The methodology, and identification of each HCV was clearly elaborated. The desk study, field observation and reporting was conducted on November 2014. A map of the HCVA has generated for RSPO notification of proposed new planting.

Reviewers Recommendation: N/A

- 3.3. Please review Section 9.2 of the Summary Report. Was the methodology used for the Pre-RBA and the Rapid Biodiversity Assessments (if any) satisfactory? Did the RBA(s) reveal any significant biodiversity values that should have been captured in either the HCV assessment but were not, or warrant protection?

Note that this is a check of procedures, not outcomes. The HCSA Toolkit provides more information on the expected quality of the RBA and the Pre-RBA.

Finding: Pre-RBA was conducted in 7 HCS patches and 3 Non-HCS patches, using the transect line method. Pre-RBA identifies risk and condition for river, swamp and slope. Illegal logging as one prominent issue. The next step is the Pre-RBA area will be made the take and give area.

Reviewers Recommendation: N/A

- 3.4. 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?

Finding: Yes, they consider management at the landscape level, that activities conducting patrolling, trainings, consultations with local communities, marking river borders, prohibiting hunting and burning land. Most of the HCS area has been compensated. However, it is not mentioned as to are working with local governments.

Reviewers Recommendation: NA. PT CSC is committed to complete the recommendation

4. **Image Analysis** (6 hours, including land use planning/Decision Tree Section 6 below)

4.1. Please review Section 6.1 of the Summary Report. Was the Area of Interest correctly identified?

The HCSA Toolkit explains how the AOI should be identified.

Finding: Yes, the larger landscape around the concession was studied, including sub drainage basin area around the concession boundary and already represented a 1 km buffer.

Reviewers Recommendation: N/A

4.2. Please review Section 6.2 of the Summary Report. Were the images used of adequate quality, including resolution and date?

The HCSA Toolkit describes the expected quality of the images.

Finding: Yes, the images were adequate. The main imagery used was Sentinel 2 image (10 m spatial resolution), recorded on September 2016 and April 2017. This image meets the age requirement (<12 months between image collection and field survey) and the resolution requirement (<=30 m resolution). Image was selected because it had relatively low cloud cover within the AOI.

Reviewers Recommendation: N/A

4.3. Please do a quality check using the images provided in 6.3. Was the initial vegetation classification done properly? Do the land cover areas in the tables in Section 6 look reasonable? Are there any obvious errors in classification?

The HCSA Toolkit provides more information regarding the expected quality of the image analysis.

Finding: Yes, initial vegetation classification was done correctly. Table 11 lists seven classes, including high density forest (HK3), medium density forest (HK2), low density forest (HK1), young regenerating forest (BT), scrub (BM), agriculture (AG), and oil palm (OP). The initial classification had an overall accuracy of 30% and a kappa of 0.15 based on 40 sample validation points and the next added 12 samples so overall accuracy become 45% and kappa 0.34. Even though classification accuracy is still low (<50%), but errors are in class the HCS forest strata, not in the forest become non-forest classes.

Reviewers Recommendation: N/A

5. Forest Inventory (4 hours)

5.1. Please review Sections 7.1 and 7.2 of the Summary Report. Were the sample plots selected, set up, and measured properly? Please check the inventory plot layout for adequacy.

The HCSA Toolkit describes the expected quality of the forest inventory process.

Finding: Tables and description are not appropriate; in the table the number of plots is 10 (table 14) and in the description above there are 30 plots and additional plot 10. The plot is square, and the area of large plot was 400 m² (trees DBH measured > 10 cm), and the area of the small plot was 100 m² (trees DBH measured 5 - 9.9 cm). Size of plots and class trees DBH measured aren't appropriate HCSA toolkit. The sample locations are spread evenly in each class stratification.

Reviewers Recommendation: NA. PT CSC is committed to complete the recommendation

5.2. Please review Section 7.3 of the Summary Report. Was the forest inventory team qualified?

The HCSA Toolkit describes the expected qualifications of the forestry team.

Finding: Yes, the team was well qualified. The team consisted of a team leader (Adriani), as well as 8 assistants with expertise in forest inventory, biodiversity and social economic. In addition, there were four company representatives. Not mentioned local worker from community who participated in forest inventory activities and GIS specialist who has process data or supporting the effort.

Reviewers Recommendation: NA. PT CSC is committed to complete the recommendation

5.3. Please review Section 7.4 of the Summary Report. Was the allometric chosen adequate?

The HCSA Toolkit provides more guidance on choosing an allometric equation.

Finding: The allometric equation chosen was from Chave et al. 2005, which was developed in tropic area like forest in Kalimantan (Sampel Balikpapan and Sebulu). In the report allometric using climate zone rainfall > 4000 mm/year (wet), however in biomass calculations using allometric climate zone rainfall <1500 mm/year (formula in excell). While the average rainfall climate zone at PT. CSC (Ketapang regency) and generally in Kalimantan have rainfall 1500-4000 mm/year (moist). Following ICRAF report “Petunjuk Praktis Pengukuran Cadangan Karbon Edisi ke 2 (table 2, page 22).

<http://old.worldagroforestry.org/sea/Publications/files/manual/MN0049-11.pdf>

Reviewers Recommendation: NA. PT CSC is committed to complete the recommendation

5.4. Please review Sections 7.5, 7.6, 7.7 and 7.8 of the Summary Report, and do a cursory review of the forestry data and statistical analysis. 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?

The HCSA Toolkit provides more guidance on what statistical analysis should be used.

Finding: Yes, the methods and the field photos are adequate, the description of how the analysis was done is clear, and the carbon values seem reasonable for a while.

Reviewers Recommendation: NA. PT CSC is committed to complete the recommendation

6. Land use planning (6 hours with Image Analysis above)

- 6.1. Please review Section 8.1 of the Summary Report. Was the initial vegetation classification map adequately calibrated and adjusted to take into account forest inventory results?

The HCSA Toolkit provides more guidance on how to incorporate the forest inventory results into the land cover map.

Finding: No, it is unclear whether the initial vegetation classification map was adjusted based on field inventory results.

Reviewers Recommendation: NA. PT CSC is committed to complete the recommendation

- 6.2. Please review Section 9 of the Summary Report. Was participatory mapping data used in step one to identify community lands that should be enclaved? Were patches merged correctly? Was the core area correctly identified? Was the connectivity analysis done correctly?

The HCSA Toolkit explain how to merge patches and identify the core area.

Finding: Yes, patch merging, core area identification, and connectivity analysis were done correctly. However participatory mapping activities the doesn't provide the information that the involvement of the community in participatory mapping is adequately represent

Reviewers Recommendation: NA. PT CSC is committed to complete the recommendation

- 6.3. Please review Section 9 of the Summary Report, and select a few sample patches to test that the Decision Tree was used correctly. Were the patches correctly identified as High, Medium, or Low Priority? Was the Patch Analysis done according to the HCS Approach Decision Tree?

The HCSA Toolkit explains how to prioritize patches and go through the Decision Tree.

Finding: Overall, patches were identified correctly, and patch analysis was done according to the HCS Approach Decision tree. Take and give analysis has been provided to support forest conservation at the landscape level (LPP patch give for development is 789 ha and the take for conservation area is 1489 ha).

Reviewers Recommendation: N/A

6.4. Please review Sections 10.1 and 10.2 of the Summary Report. Were the final integrated conservation and land use planning steps completed to maximize the ecological and social viability of the conservation areas (HCV, HCS, peatland, riparian zones, customary forest, etc)? Were the results of the final ground verification (if any) adequately incorporated into the land use plan and final HCS map?

Finding: Yes, the final steps were completed, most of HCS area already compensated and was incorporated into the land use plan. Planning has been submitted for the agreement on the results of the design of conservation areas and plasma development for community.

Reviewers Recommendation: N/A