

# HIGH CARBON STOCK APPROACH

HCSA PEER REVIEW REPORT

*Company Name: FAP Agri*

*HCS Assessment Area: PT. Ketapang Hijau Lestari-1*

*29 December 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. PT. Sonokeliling Akreditasi Nusantara led the HCS assessment.
- b) Was the HCS Team Leader a Registered Practitioner?**  
Yes. The Team Leader is Kasuma Wijaya from PT. Sonokeliling Akreditasi Nusantara, a Registered Practitioner.
- c) Were at least two (2) HCS team members Registered Practitioners?**  
Yes. Kasuma Wijaya, Kresno Dwi Santosa, and Siswoyo are Registered Practitioners in the HCS team.
- d) Was the HCV assessment judged 'satisfactory' (highest rating) by the HCV Resource Network (HCVRN) Assessor Licensing Scheme (ALS)? (See <https://www.hcvnetwork.org/als/public-summaries>).**  
Not applicable. HCV assessment completed in 2012.

## Questions for peer reviewers

*(Peer Review Panel: Ihwan Rafina & 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:**

**Social:** Lack explanation about "Adat" and gender aspect

**Ecological and conservation:** HCV assessment conduct without ALS review with note that most of the assessment are not in line with the updated HCV Guidance

**Image Analysis:** Satellite imagery used for classification has intermediate quality with thin haze and in some part of the area the interpretation seems missed interpret, its can systematically change the result of HCS classification

**Forest Inventory:** Plot inventory not quite represent total area of each landcover class (esp. Belukar class with most larger area)

**Land use Planning:** Depend on the re-classification process, if the interpretation changes the HCS classes then the patch analysis will also adjust for verification process.

#### **Reviewers Recommendation:**

**Social:** Additional explanation for "Adat" and gender aspect, provide more information/documentation for land tenure study, Community land ownership and Social Impact Assessment

**Ecological and conservation:** Company need to make sure the HCS assessment also verify the potential HCV area which is not identify in the previous HCV assessment

**Image Analysis:** Re-do the analysis with better image quality

**Forest Inventory:** Add additional information for justification on plot numbers distribution

**Land use planning:** Review the patch analysis based on re-classification process.

The company needs to provide the HCSA Revised report with additional information/analysis based on the reviewer's recommendation. Also, note in the previous company respond still not answered the previous recommendation with the adequate information and only given the unnecessary explanation.

Provide more comprehensive information, support by data, and documentation provided in the revised HCSA Report or additional Supporting File Responses.

Please see each section of reviewer recommendation and provide additional documentation and accurate description/explanation.

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, the HCS assessment conduct with adequate expertise but need more detail information for team experiences

**Reviewers Recommendation:** Add more detail information in the report suitable section. Update the HCSA Summary report with the amendment information provided

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:** Will follow up after first company respond regarding Image analysis and patch analysis process. Also In chapter 3 (3.1 & 3.2) in Laporan-Penilaian-HCSA-BH-Template\_KPL-1\_Release, doesn't enough explanation about social aspect about land use, especially about community land use after the company establishing his operation

**Reviewers Recommendation:** Need more explanation about community land use after the company establishing the operation. Provide a more precise explanation with supporting complete GRTT map/document cover all area and revise the HCSA Report as necessary for the final land use and conservation plan section.

## 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:**

The main issue of FPIC is, how to identify the community representation. FPIC Process is document, explain about the community representations come from the official positions in Community.

**Reviewers Recommendation:**

Reviewer need some explanation, how to engage informal actor and woman (gender aspect) in FPIC Process. Woman and children still get big impact from land use change were the Man who still taking formal decision for change land use. The livelihoods variety, the husbands' roles on the land use planning and cultivation, and the informal sectors' job variety are mentioned in company's response; and the information are also available in the documents. However, company needs to provide information on how women have roles in taking decision to cultivate the land (the way they communicate it to their family members), and also providing information on total number of women who involved in the FPIC process. Furthermore, for informal sector engagement evidence and/ explanation, it is better to provide information on how informal sectors responding the company establishment and taking roles on the FPIC process.

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

**Finding:**

No explicit explanation about land tenure study

**Reviewers Recommendation:**

Reviewer need the full report about Tenure study to know about process and content of Tenure situations. A part of land tenure process, participatory mapping activity, Landsat Imagery interpretation activity, number of beneficiaries, some information on land ownership boundary, land cover information, all are mentioned in the documents. However, company needs to provide map of participatory mapping result, and also a full list of information and/map on land ownership.

- 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:** Relatively, the map doesn't explain about the community land ownership in this village

**Reviewers Recommendation:**

Reviewer need more data about community land ownership in this village. Community land ownership map, land cover map, and land compensation consolidation map are available in the documents. However, it does not explicitly explain about 0.5 ha requirement of future garden, so company needs to fulfil information of land ownership by overlaying land compensation consolidation map and land owners by names to further analysis allocation of 0.5 ha requirement of future garden.

- 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:**

Yes, especially about impact, but there isn't data related with impact on gender aspect (Woman).

**Reviewers Recommendation:**

Reviewer need data related with impact on gender aspect (Woman) and how the woman give the representation to the Man in this village. The livelihoods variety, the husbands' roles on the land use planning and cultivation, and the informal sectors' job variety are mentioned in company's response; and the information are also available in the documents. However, company needs to provide information on how women have roles in taking decision to

cultivate the land (the way they communicate it to their family members), and also providing information on total number of women who involved in the FPIC process. The evidence can be formed of Minutes of Meeting, notes, or recording transcript that had taken while conducting the interview/s.

- 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:**

There isn't no explanation about "Agree or Not Agree" from the community voice in specific section on report

**Reviewers Recommendation:**

We need data about community voice about The Company Planning in his village in this project. What is the evidence to prove the community approval about company planning. For PT KPL 1 case, the HGU is lack of evidence to prove that the area is clean and clear. It proves by issues that listed in HCS Assessment Report PT KPL 1 page 5-22 and onwards. Some of the issues that proved HGU is lack of evidence to clean and clear are events on land claimed, no clear land ownership boundary, no completion on 100% land compensation, etc. However, the community voice and list of expectancy are available in the document. In addition, company needs to provide evidence which can be formed of Minutes of Meeting, notes, or recording transcript, taken while held interview/s to represent community's voice.

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

**Finding:**

Not enough explanation about Adat situation in this location

**Reviewers Recommendation:**

The tenure study should be give more explanation about the Adat situation in this locations. We need information about Adat Organization, Tenure under

adat rights and how strong the adat law. Community tribes composition, customary organization structure, communal land, inherited land, culture sites, and rituals are mentioned in the documents. However, company needs to provide information on community customary land status.

### 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:**

A summary of HCV findings is presented in chapter 4.1 and extensive information on each HCV is detailed in table 4.1. The summary also explained the changes in the area of HCV since the status of the business became HGU (table 4.2). However, this summary discusses more about the importance of this document and the broad change in HCV from ILOK to HGU. Consideration of the presence of HCVs has not been mentioned, as has the case with threats (threat assessment methods), and a brief management and monitoring plan has not been made available. This includes steps for management and monitoring of riverine which were originally HCV areas (based on ILOK), but which were issued after status as HGU, specifically for areas that have been GRTT.

**Reviewers Recommendation:**

Provide justification for each HCV value, as well as threats and threat assessment methods, and recommendations for management and monitoring of HCV areas. This also includes the management and monitoring of HCV areas that have been compensated. The explanation already stated in the report, the company still needs to justify the HCV finding and threats in the revised HCSA report.

#### 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?

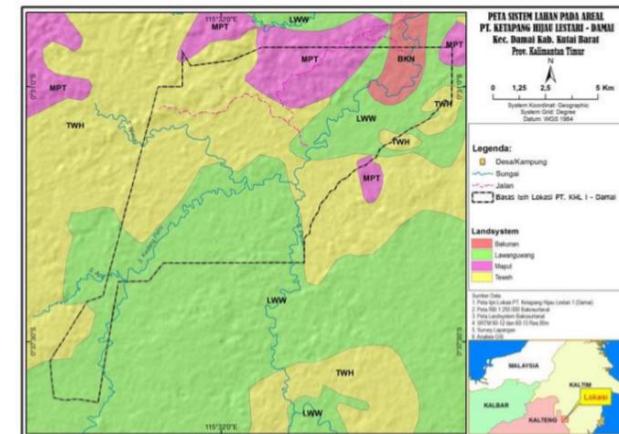
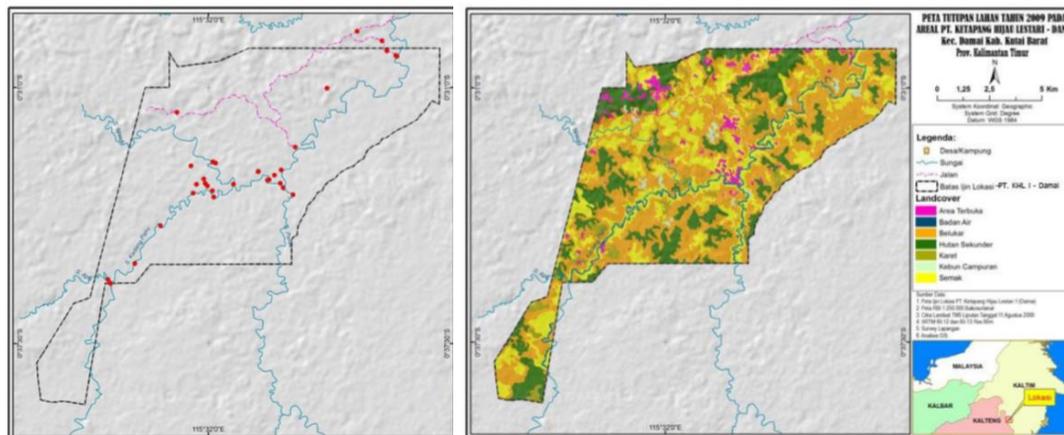
*The HCV Report can be found in the SharePoint.*

**Finding:**

This HCV assessment was carried out in 2012 by the Faculty of Forestry of IPB, and was not included in the ALS Scheme. That is why some formats have not yet followed ALS, including project status information "whether included in the category of expansion or classified as greenfield. Information on the start date of production activities, the extent and opening date. "This information needs to be added to the description of the study site (site).

Scoping study information does not address in the report.

The general description of the location includes: History of the acquisition of a concession permit, boundaries with the location of the study, the location of the study in the Kalimantan map, the location of the study is in APL, the presence and condition of protected areas in the landscape. However, there are several parts of the presentation related to the landscape context and the national / regional context that the HCVRN requires that are not met or fulfilled but do not fit the ALS format, including: (i) Unclear landscape boundaries, despite the elaboration of PT KHL and the landscape context Kalimantan regional space, land status and land cover; (ii) biodiversity in the context of national / regional existence (Ramsar Site, National Park, etc.) and the characteristics of biogeographic zones (EBA / IBA) are only very rarely mentioned; (III) Distribution of important species is inadequate; (VI) Land use around the study area (for example settlement, forestry, agriculture, infrastructure) has not been spelled out in a concise and clear manner, this relates to the history of land use and development trends in accordance with the spatial plan of the area around the study area; (vi) The socioeconomic context has been alluded to, but it is necessary to add changes in the community's economy to the presence of PT KHL's oil palm plantations, village demographics are not mentioned.



1. If referring to the 2009 land cover map (green is secondary forest) and the distribution of existing sample points, HCV 1 potential areas should not be limited to riverine area only . It is possible that the presence of animals and vegetation of important species is still found in the secondary forest
2. Interpretation of limited land cover is only done in the concession area, forest cover within the boundaries of the study landscape is unknown so that HCV 2 is not possible to check.
3. HCV 3 potentially to be included in the study, but the assessor stated that HCV3 is not present, with the justification that "there are no ecosystems with land systems that fall into the category of rare and / or threatened ecosystems, only LWW, MPT and BKN. In addition, the field conditions indicate that the area with the landsystem shows that there are already many experienced land functions. Thus it can be concluded that the area of PT. Ketapang Hijau Lestari I does not have an area with HCV3 ". If referring to land cover and existing land systems, HCV 3 should be present in PT KHL. Nor does the processor try to calculate the percentage of forest cover area lost over several periods to determine the scarcity of ecosystems

The approach for identifying HCV 4 is satisfactory, but there is no adequate justification regarding the determination of the 15 m border for the Niwok and Apo River

**Reviewers Recommendation:**

HCS reports currently conducted should be able to cover the shortcomings of the results of HCV identification in the past, while still taking into account current/update conditions (eg land cover, the existence of ecosystems, etc.). The company still need to explain additional consideration in the revised HCSA report.

- 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:**

Patch analysts have followed the flowchart as outlined in the HCS Toolkit. There were 18 patches that were successfully identified and included in the

criteria for high risk patches and medium priority (1 patch) and low (17 patches). The results of the study show that low patches are generally less than 7 hectares and are not connected with larger patches. Considering the existence of medium forest cover (30-80%) around the landscape, the patches are included in the indicative development, so there is no need to do a Pre-RBA / RBA *study*.

**Reviewers Recommendation:** NA

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:**

Management plan for protection of HCV and HCS areas have been adequately described. Community involvement as a stakeholder is the best option in the management and monitoring of this HCV area, in addition to determining and socializing the existence of HCV / HCS, as well as the need to define HCV / HCS areas definitively in accordance with the actual conditions in the field.

**Reviewers Recommendation:**

Already sufficient, still the company must ensure the involvement of the party recommended by the assessor team in every stage of planning and implementing the management of the conservation area. The company still need to explain additional consideration in the revised HCSA report.

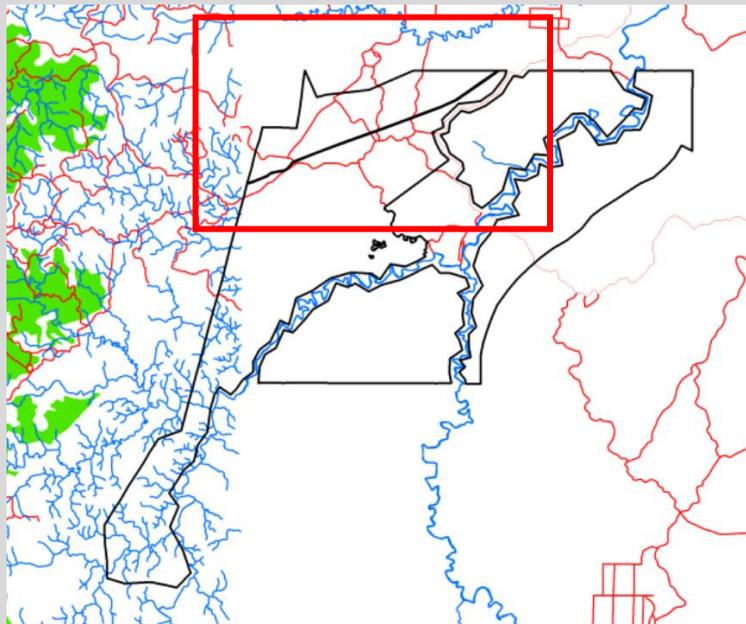
4. Image Analysis (6 hours, including land use planning/Decision Tree Section 6 below)

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:**

AOI uses PT Ketapang Hijau Lestari's HGU data, but an explanation of the concession boundary to the north is considered to be inaccurate. The results show that the northern AOI boundary is PT London Sumatera International Palm Oil Permit should the northern AOI boundary is PT Citra Agro Kencana. The eastern boundary of the concession is deemed inappropriate. The existing AOI boundary describes PT Muara Agro Lestari. The eastern boundary of the AOI should be PT Kruing Lestari Jaya. The next finding, is the difference in AOI concessions shown (see red polygons). The documents (left) are sourced from the HGU, while the ATR-BPN data (<https://www.atrbpn.go.id/Peta-Bidang-Tanah>) are also sourced from the HGU.



**Reviewers Recommendation:**

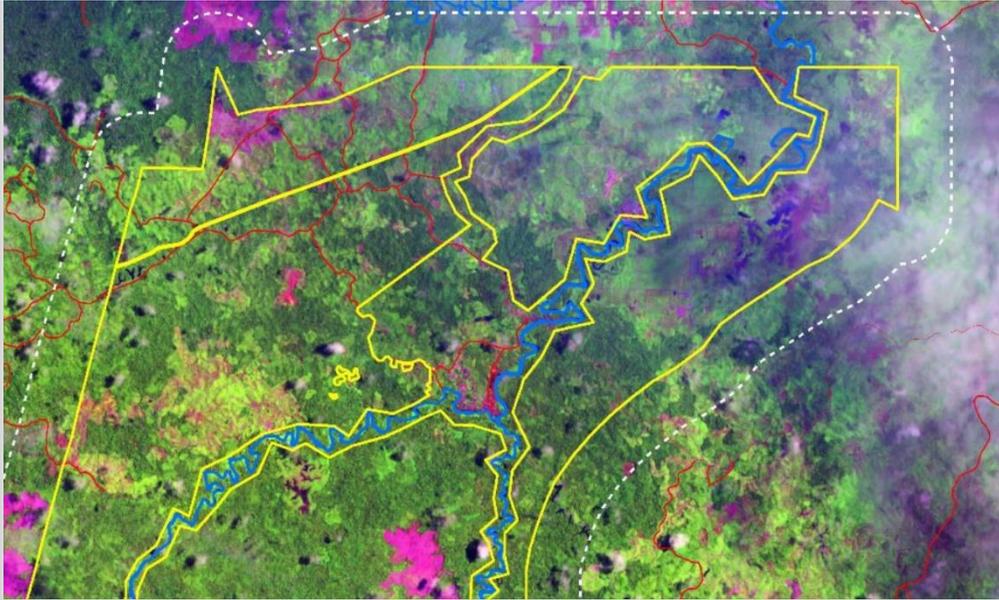
Change the information of PT KHL boundary location and make sure the AOI use is accurate. Note for the additional information, company still need to explain in the revised HCSA report.

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:**

The image used is Sentinel 2 with the recording date of March 2017 and the spatial resolution of the satellite imagery used is 10 meters. The findings show that there is a location covered by thin clouds (Haze) to the northeast. This results in a slight missed interpretation at that location (0 ° 31 '1 "S, 115 ° 37' 28" E).



**Reviewers Recommendation:**

Re-do the analysis with better image quality. The company need to complete the analysis based on the previous recommendation and update the revise HCSA Report.

- 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:**

In Tutupan\_Lahan\_Final\_for\_KPL\_1.shp classification we found a number of irregularities in land interpretation that did not match the appearance of the image. At the coordinate point (0 ° 33 '16 "S, 115 ° 30' 46" E) in the file it is found that the palm should be **Belukar**. In addition to this point, the coordinates of the location (0 ° 31 '1 "S, 115 ° 37' 28" E) were found in the file is **Belukar** which should be **low density forest (HK1)**. Next in the file, the coordinates of the location (0 ° 30 '3 "S, 115 ° 36' 58" E) in the file in the form of open land (LT) should be **Belukar Tua (BT)**.

**Reviewers Recommendation:**

Further check and clarifications. The company need to complete the analysis based on the previous recommendation and update the revise HCSA Report.

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:**

Although it is not crucial, this study takes a distance between plots of 60 meters, which seems to be less able to cover the area of shrubs in the northern part rather to the north, and shrubs in this area seem to have received less attention even though the area of shrubs here is quite extensive.

**Reviewers Recommendation:**

Try to consider the area for each land cover class in determining the distance between plots. The explanation below doesn't answer the previous question. The company still need to complete the justification based on the previous recommendation and update the revise HCSA Report.

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:**

It seems that the team involved in the inventory process in the field is quite capable and has their respective specialization following the needs of the HCS study. But in this summary and report, there is no concise explanation about the professional experience each team member has gained

**Reviewers Recommendation:**

Describe the detailed profiles of the experiences of each member involved in the inventory process. The company need to complete the information and update the revise HCSA Report.

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 use equation is adequate

**Reviewers Recommendation:** NA

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:**

Reviewers see the data obtained is quite good and the addition of a plot is expected to strengthen the statistical analysis that researchers expect, and it actually makes there a problem with the researchers' data. The reviewer thought that the carbon stock statistical analysis also adopted the classical statistical provisions and the reviewer found that there were still outliers in the study data so that it affected the distribution of this data. Further analysis should not be able to proceed before researchers can guarantee that existing data are normally distributed.

Tests of Normality							
Kelas	Tuplah	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Karbon	1	.140	35	.081	.924	35	.019
	2	.193	30	.006	.911	30	.016
	3	.213	15	.065	.900	15	.094
	4	.122	30	.200 <sup>*</sup>	.930	30	.049

a. Lilliefors Significance Correction  
\*. This is a lower bound of the true significance.

**Reviewers Recommendation:**

Further check and clarification before proceed to next process. The explanation of the process already stated in the report but doesn't answer the reviewer's concern. The company still need to justify the statistical analysis based on the previous recommendation and update in the revise HCSA Report.

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:**

Some forest classifications have not yet been seen, such as BT and HK, as well as the absence of low and medium density forest cover classes in identification

**Reviewers Recommendation:**

Further clarification on the absence of HK1 and HK2 identification. The explanation doesn't answer the reviewer's question, still need clarification for HK1 and HK2 absence explanation in the revised HCSA Report.

- 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:**

Inside the document there is a location (0 ° 30 '5 "S, 115 ° 36' 58" E) which is categorized as open land, that possible to be missed interpret. Therefore, it has a systemic effect which results in errors in determining the indicative area of conservation.

Furthermore, the community lands inclusion, patch merged analysis, core area analysis and connectivity analysis already used correctly.

**Reviewers Recommendation:**

Further imageries classification with better image quality before proceed with patch analysis process. The explanation doesn't answer the reviewer's question, still need clarification for HK1 and HK2 absence explanation in the revised HCSA Report.

- 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:**

The explanation of the decision tree is unclear and does not describe the process sequentially. In making patch analysis, it does not show a participative mapping scheme.

**Reviewers Recommendation:**

Further clarification on the DT Process, particularly for community involvement in participatory mapping process. The company still need to complete the re-analysis of vegetation classes before proceeding with the DT process.

- 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:**

The riparian zones area is still not fully considering in the land use planning integration, there are a number of locations that can be used as conservation areas, but the documents are still included as development areas.

**Reviewers Recommendation:**

Further clarification and information to integrated riverine area and additional input on landscape-based management plan, include area outside company concessions. Add more justification and a brief explanation of further HCV re-assessment planning in the revised HCSA report.