

HCSA Peer Review Report Asia Pulp & Paper (APP) - Muba Region

Background information:

- a) Did a Registered Practitioner Organization lead the HCS assessment? If not, has the organization which led the assessment started the process of registration?
Yes, Ata Marie is a Registered Practitioner Organisation.
 - b) Was the HCS Team Leader a Registered Practitioner?
Yes, Alex Thorpe led the assessment and he is a registered practitioner.
 - c) Were at least 2 HCS team members Registered Practitioners?
Yes, Alex Thorpe and Dadan Setiawan are registered practitioners in the 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>).
HCV reports submitted was dated back in December 2013, before the establishment of HCVRN ALS.
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Questions for peer reviewers
(Peer Review Panel: Jules Crawshaw, Cynthia Chin)

1. Peer Review Summary

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

Finding:

Regarding the summary report, it would aid understanding to have a table of abbreviations at the start of the report.

In general, the Summary Report lacks detail and doesn't adequately summarise the material that it is based upon. Ideally this document should stand on its own and give the reader a broad overview of the FPIC, HCV and HCS work that was undertaken. In some cases, it merely refers the reader to the full document. In other cases, it gives an incomplete summary.

HCS - it is premature to summarise the main findings because the data sets are too incomplete at this stage.

HCV - the summary report needs to give the reader an overview of the main findings of the HCV report which it currently does not. It just refers the reader to the full report.

Social - the community engagement and FPIC processes have not been undertaken in a systematic and thorough manner. Furthermore, the processes that have been undertaken have not been well documented.

Reviewers Recommendation (partly included Company Responses):

As a major point, section 1.2 of the summary report states that the total area of the concessions is 200,287 ha. However, the AOI is 90,341 ha (the undeveloped area). Yet it appears that many of the social issues and conflicts are spread across both the developed and undeveloped areas. So the reviewer believes that the scope of the study should be the full area of the concessions. The company explains that the HCS assessment in 2015 only carried out in undeveloped area which is 90,341 ha. However, other assessments e.g. Conflict mapping and HCV studies were carried out in the whole concession (200,287 ha). The peer reviewer responded that while APP has done Conflict mapping and HCV studies over the whole concession, the recommendation is that the HCS study is used as the vehicle for drawing all these studies together to develop an ICLUP (Integrated Conservation Land Use Plan) which seems very similar to the ISFMP.

A chronology needs to be presented, which shows the dates of all the studies and FPIC within the area. Given that many of the studies occurred some years ago, the reviewer assumes that the AOI has already been totally developed? However, the company provided explanation that not all AOI had been

developed. Annex 4 in the Summary Report has shown land allocation based on ISFMP assessment (under the criteria of “Tanaman Pokok”). For chronology/dates of the studies implemented within the concession, the documents uploaded in the SharePoint (EIA, SIA, and HCV reports etc.) can be used as reference.

The peer reviewer responded to the company’s response by stating that there is no Annex 4 in the summary report as it goes from Annex 3 to Annex 5 and skips Annex 4. Annex 3 presents Management Plan maps, which the reviewer assumes, as “plans” do not show the areas which have been developed or otherwise. Also, the dates of the reports are in these documents, but it is recommended that a chronology be put in the summary report. Bear in mind that there are EIA, SIA, HCV and HCS reports over 5 concessions, all with different scopes. This is very difficult for a reviewer to process and the company should try and explain it to the peer reviewer as clearly as possible. **The company responded that Annex 3 in the revised/latest summary report is Annex 4 in the previous original document.**

The Summary Report needs to be rewritten to provide a standalone summary of the key points of the work that was undertaken. This should include:

HCS – the appropriate data needs to be provided before recommendations can be made.

HCV – provides summary tables of the findings and the area of the HCVs that are present. This should be associated with HCV maps presented at an appropriate scale with land cover as a background.

Social – community engagement and FPIC processes need to be mapped out showing the elements that have been completed and the elements that still have to be done. From there a roadmap to completion of core tasks needs to be undertaken. As well as this the social team needs to undertake on-going FPIC management activities.

In order to bring the process to be in line with HCS Toolkit Version Two, only the executive summaries of the ISFMP have been provided so far, and these appear to have been written in 2015 (although there are no dates on them). These read more like an operational plan for the development of the area. Currently there is no mention of any HCS analysis feeding into the development of the ISFMP. Clearly the HCS analysis has to be presented to allow the reviewer to interpret these documents. Below (in the company response) it is stated “All of these assessments were then integrated with the HCS result under a process the company call Integrated Sustainable Forest Management Plan (ISFMP) development.” The reviewer needs to have this information presented in a step-wise manner to enable it to be reviewed. Currently only the output is presented, and it is not clear how this was derived. With regards to these statements, the company explained that ISFMP is applied for both developed and undeveloped area. For more details on the ISFMP process, please refer to the document on integration of various studies, including HCS into ISFMP.

There are other elements, such as the fact that no buffering of the companies' boundaries took place to identify HCS forests in the surrounding landscape. This needs to be done and the patch analysis repeated. In response to this statement, the company states that it was not part of the approach when they did the HCS assessment in 2015 but this will be a point for improvement.

Company Response:

It is important to emphasise that HCS Assessment in Muba region was completed before the HCS toolkit existed. The assessment and analysis in this process was implemented using patch analysis decision tree agreed upon by Grant Rosoman, Ata Marie, TFT and APP factoring in that information and recommendations would be integrated into the ISFMP process (see below). In fact, the HCS assessments process in Muba region was used to inform the development of the first version of the HCS toolkit. As we have anticipated before, the process or outcome of some assessment steps might not be identical to HCS Toolkit. For example, HCS Toolkit stated clearly that the first step to overlay HCS classes should use background data including PM, HCV, peat and riparian. Meanwhile the first step of decision tree of HCS Assessment in Muba region only consisted of connecting potential HCS polygons into HCS patches.

This HCS assessment was developed independently from HCV, peat assessment, social engagement and FPIC processes. The other assessments and process were done either in parallel or after the HCS assessment were completed. All of these assessments were then integrated with the HCS result under a process the company call Integrated Sustainable Forest Management Plan (ISFMP) development – the land use and management plan develop by APP and its suppliers. Some aspect of the integration, such as peatland is still in process as the company is awaiting high resolution LiDar data analysis to be completed.

HCS – all requested documents have been provided to peer reviewers and HCSA.

HCV – while HCV Assessment was done independently from the HCS assessment and therefore, there are steps that might not be identical to what is expected from HCS Toolkit, the integration of the two studies was done under ISFMP development process. Summary table is already provided in the HCS summary report (Annex 2).

Social - recommendation is accepted. While this HCS assessment was completed before the HCS Toolkit and therefore, the steps might not be identical to what is expected from HCS Toolkit, the company has since strengthened the implementation of its social engagement process and it is a step that is continuously undertaken by APP.

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

Finding:

Yes, the HCS was undertaken by a strong team comprising Ata Marie and TFT staff. All the required skill sets were present.

Reviewers Recommendation:

No Recommendation.

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?

Finding:

The reviewer understands that this study was completed using a draft version of the Patch Analysis Decision Tree, which did not require other layers like peatlands, community areas, and HCV areas to be overlaid with the HCS layers to make the final land use and conservation plan. However, APP's ISFMP process appears to bring all of these considerations together in the final land use planning process. However, the information provided in Annex 4 seems to only be developed to comply with Indonesian Government Regulations. Similarly, the flowchart in Appendix 3 doesn't even mention HCS?

Reviewer's Recommendation:

The following data sets are required as inputs to the final land use and conservation plan:

- HCS patch analysis outcome.
- Peat areas.
- Community mapping.
- HCV areas.

These should be integrated in a stepwise approach and presented so the reviewer can see them. Then finally integrated with Government regulations. Regarding community mapping, based on the social issues section of this report there are concerns over the completeness of the process.

Company Response:

The company will provide peer reviewers with the latest information on spatial and management plan which is an integration of HCS, community mapping and HCV that are incorporated under ISFMP document, available in Attachment A. Integration with peatland is still in process as the company is awaiting high resolution LiDar data analysis to be completed.

Annex 3 provides ISFMP map which incorporate HCS area. HCS is beyond GOI regulation. For details on how HCS is incorporated in ISFMP please refer to the PPT file attached. In response to this statement, the reviewer cannot understand this concept that APP has that “HCS is beyond GOI regulation.” As the reviewer understands APP has committed to implement HCS, it needs to be explained further, because this sentence alone implies that APP feels that they cannot or do not wish to implement HCS? Regarding HCS incorporation in ISFMP, the ppt shows a series of undocumented outputs, the reviewer needs a description of the “method” of integrating the outputs and then be stepped through the process.

2. Social Issues

2.1. What advice do you have for the company regarding its community engagement, FPIC processes, and participatory mapping activities?

Finding (partly included Company Responses):

Section 3.1 does not provide adequate information on community engagement, FPIC processes and participatory mapping.

Four processes are described here. Each requires engagement with the many communities that could span a number of years. Yet the description has been reduced to about 4 lines. This makes it almost impossible to make any constructive comment about any of these activities. The reviewer found a section “KelolaSosial” in the ISFMP manuals, but this is written in only the most general terms. The company suggested to refer to the attached document (ppt file). Again, the reviewer needs a description of the “method” here for each of the processes and then needs to be stepped through the APP’s process of using these techniques for dealing with the social issues.

Summary Report Section 3.1 states that “Based on this information [related to conflict involving the community], team is able to decide which areas required participatory socialization, or only socialization to the village head or the head of traditional tribe. The HCS data collecting activities were carried with permission from affected local communities”.

- Existence of conflicts cannot be used as a criteria to decide where participatory socialization is necessary. Besides, the conflicts map was not provided to reviewers, there is no explanation on how and when conflicts were mapped, if the result was shared with communities: as observed in many instances, communities who initially supported the project might later on disagree as expected benefits are slow to materialize. Here, Grant Rosoman has commented that as part of the assessment here need to consider the ISFMP and POKJA process to address conflict and rights. Agree this does not address all rights and FPIC as is identified below and so gaps can be identified. The company responded to the above statement by stating that context of land boundary in pulpwood plantation is different with palm oil, therefore PM is required when there are conflicting boundaries between GOI allocated area with community use.
- The team decided who should be involved in the process, which is not in accordance with self-representation principle.
- Local communities’ permission for HSC data collection does not evidence their consent on the overall project nor on the HCSA.
- The fact that FPIC has been reduced to a socialization process does not allow any positive conclusion on communities’ consent.
- There is no written agreement, signed document or minutes of meeting attached.

From *the HCV reports*, it appears that no initial consent has been given, as socialization was meant only to inform about concession boundaries (not prior), conducted in the sub-district authorities’ office (not in village) and limited to villages’ chiefs/heads and selected personalities, without any follow-up on whether/how the information was shared/received by the community. This is recognized as a source of conflicts in the five concessions, and suggests that no prior community land use or claims mapping has been conducted.

The 5 *Integrated Sustainable Forest Management Plans* show zero FPIC conducted for 2011 to 2015, and mention FPIC process/results to be documented in selected villages starting 2016, but no information on how and if it has been done.

Reviewers Recommendation for future land use planning (partly included Company Responses):

Engage with all communities: Based on self-nomination principle, communities will decide on own representation mechanism.

Conduct genuine FPIC and respect the right of communities to withhold their consent: To inform about concessions' boundaries, but also about implications of the project development for the communities and options available to them, is only one step in FPIC process, before a consent can be sought – with the possibility that the communities withhold their consent. Company needs to listen to communities' claims, to better understand tenure issues, communities' livelihood and land use. Herein, Grant Rosoman added that the full FPIC process for all lands is outside the scope of a retrofitted HCS assessment, where there is a focus on consent for the HCS processes and any conservation of HCS areas, and as well as the time of this assessment it was not entirely clear what the FPIC/PM requirements were. Maybe this needs to be made clearer in the checklist to the peer reviewers.

Conduct social baseline assessments to understand rights holders, decision making and groups that will be impacted.

Conduct participatory land use and claims mapping: To be successful, HCS approach has to be fully embedded into FPIC process and must integrate a participatory land use planning covering protection of HCV areas, peat lands, and lands important to communities.

Resolve conflicts to restore justice: Handling of conflicts starts by sharing the conflicts map with the communities and their advisors (where communities do not have advisors, company must tell them it is their right), and establishing agreed conflicts resolution processes together with the rights holders. Community fields were destroyed, and peoples evicted, losses that can't be addressed only with Community Development or CSR (which sometimes prioritizes ceremonial expenses or local officials' needs), but requires negotiations with affected peoples on adequate compensation, including possible return of part of the developed land or expansion of planned set-aside areas for communities' usages. NGOs can be involved to ensure that communities understand the conflict resolution process, the options open to them, and act as observers of the whole process.

- The company stated "Conflict mapping was implemented to identify land claims. APP have categorized those into 8 typologies: old village, new village, customary land/forest, livelihood, land trading, speculant, non-procedural land use and overlapping license." Can APP provide a short description and example of each of these types of land claims? The terms themselves mean nothing to the reviewer. In response to the statements, the company suggested the peer reviewer to refer to the document (PPT file). And the reviewer pronounced that the description provided aids the understanding.

- Write a report that provides reasonably in-depth information on each of the processes (conflict mapping, community engagement, FPIC and participatory mapping). This should detail current activities and plans for the future.

Company Response:

The company has added more information regarding community engagement including FPIC and PM in the HCS Summary Report. These are activity that are continuously undertaken by APP.

Peer reviewer mentioned that HCV Studies showed no initial consent given by community. While the HCV studies were held separately from this HCS studies, the studies include pre-consultation as well as post consultation. In HCV Assessment of PT BPP 1, for example, the involvement of community and stakeholders is explained in page 3, in where the assessor team visited impacted villages, held interviews and focus group discussion. The consultation with stakeholders – which include scientists, academics and organizations – aimed to verify available information, get additional information, confirm the legitimacy as well as credibility of existing claims, identify opportunities to minimize conflicts and develop management plan. Beside formal meetings, assessment team also consult individually through in-depth interview. Annex 3 of the report also gives the conclusion of inputs given by stakeholders.

Engage with all communities – Recommendation is accepted.

Conduct genuine FPIC and respect the right of communities to withhold their consent – Recommendation is accepted.

While FPIC for this HCS study was not done concurrently, it is in APP and its suppliers' commitment to conduct FPIC annually as a part of its Annual Work Plan (*RKT / Rencana Kerja Tahunan*) process. Additionally, in APP's FPIC SOP, it is also stated that FPIC is held for new planting areas, all development related to APP's concession, and any management activities that require FPIC based on tenorial system studies.

Conduct social baseline assessments – Recommendation is accepted. A social impact assessment has been carried out after this HCS assessment (summary is provided in SharePoint) and it is incorporated into the management plan under the ISFMP process.

Conduct participatory land use and claims mapping – Recommendation is accepted. This process is on-going in parallel and after this HCS study was conducted. It is part of the company's process for resolution of land conflict. The company's SOP for land conflict includes identification of land claim into several categories including: Old Village (village that was established before concession permit was given), New Village (village that was established after concession permit was given), and Customary (*Ulayat*) land. This conflict resolution process includes those identified in areas identified as HCS for conservation.

Resolve conflicts to restore justice – APP and its suppliers are committed to responsibly resolve conflict. New procedures have been developed and implemented to improve the process and to address the issues raised above.

2.2. What recommendations do you have regarding participatory land use mapping, including key components of community land use?

Finding (partly included Company Responses):

Again, no information is provided about participatory land use mapping, so it is impossible for the reviewer to make any constructive comments. The summary report states “The summary of land use map, including areal designated for community use can be found on Annex A.” But there is no Annex A in the report. The reviewer looked in the HCV 5 section of the HCV reports but it appeared that HCV 5 was mapped based on a level of dependency study (not PM). The company suggested to refer to the document (PPT file).

The reviewer found a claim shapefile (mapped below), but there was no associated information provided about how it was developed. The company suggested to refer to the document (PPT file). The reviewer states that there is a slide on “Conflict Mapping” – with no supporting documentation. Supposing this is an element of participatory mapping but there is nothing on community land use here. Once again the reviewer states there needs to be a “method” provided and then a documented process describing how APP uses these techniques to deal with social issues.



Regarding the requirement for 0.5ha / person for gardens. The company states below that this does not apply under Indonesian regulations. However, “TanamanKehidupan”, from the words, sounds like area that could be set aside for gardens to ensure food security? In which case setting aside these areas

for gardens would not conflict with regulations. In response to these statements, the company agrees as APP provide areal for community use through 20% of Tanaman Kehidupan.

Provided maps delineate recommended HCV and HCS areas, but don't show communities land use (no key components on subjects – communities, nor objects –lands). The plan to do such a participatory land use mapping is part of the SIA recommendations, but has not been done prior to starting forestry concession operations.

Reviewers Recommendation (partly included Company Responses):

The company has to provide information to enable a worthwhile review to take place. As mentioned above, a report is necessary, which details the methods, findings and actions that result from these studies. There should be maps associated with this report, presented at a scale and with sufficient annotation that would enable someone unfamiliar with APP's activities to understand them.

Looking below at the company's responses; the company discusses how it obtains and manages against its "legal license" but there is no mention of how it obtains and manages its "social license." Clearly the focus of HCS is around obtaining a social license. With regard to this statement, the company states that ISFMP is a part of the strategy to maintain social license, but of course it will need to be aligned with legal requirement. The reviewer suggested that now APP needs to demonstrate how it balances / meets the two requirements.

Furthermore, the information provided seems to date back 3 years or more. This should be updated with current data and activities. The company mentioned that the Scope of the peer review is HCS assessment done in 2015. The reviewer responded to the company that it is a Fair Point. It would be interesting to see how HCS had been implemented in the intervening years, but this may be out of scope.

We understand that the company conducted the HCS forest identification separately from other land tenure and HCV studies, as the integrated methodology was not yet available. However, we have the following recommendations for creating the final land use and conservation plan:

Conduct a quality participatory land use and claims map: A participatory land use and claims (including fallow areas) map establishes community occupation, and current/future utilization of the land. This is important as HCS Assessment report states that 73% of the HCS forest area is HK, and 37% BT, an area that might contain smallholders' agriculture. In some concessions, most of the remaining unplanted area is under claim from local people, including the forested areas. The absence of participatory land use mapping will exacerbate disputes with communities.

Involve all villages in concessions area in the participatory mapping process in order to map villages' assets, as HCS zoning might impact on community's ability to further access those areas (for shifting cultivation, NTFP or other usages...).

Train those conducting the participatory mapping: Company's employees involved in this work receive training about participatory mapping concept, NTFP identification, FPIC and basic mapping competencies. It is equally important that community members involved in the participatory mapping receive similar prior basic training and understand the purpose of mapping to ensure the quality of the process.

Respect formal and customary tenure rights: To establish a land use and conservation plan, it is essential to ensure that formal and customary tenure rights are respected, that meaningful community participation is secured, and existing community-based conservation practices are valued.

Engage with relevant stakeholders: Cooperate with local organizations doing communities' participatory mapping and who have developed a methodology to ensure quality of the mapping process (JKPP, BRWA and their local networks). Gain buy-in of local government for the set-aside areas, as they might perceive these as reducing economic development potential for the district.

Mapping of community land use and land claims should be done prior to HCV reports being completed (and prior to these being used as inputs for ISFMPs development): Results of participatory mapping and areas identified and claimed as important for communities' livelihood, economic and cultural activities should form the basis for HCS/HCV approach and recommendations.

Identified HCS/HCV areas so far need to go through an FPIC process before final designation.

Company Response:

The company has ensured that it sets aside an area for community used under the government regulation that obliged HTI companies to allocate minimum of 20% within its concession for community use. (It is important for peer reviewers to understand the differences between HTI and palm oil context in Indonesia. Palm oil plantation is acquired through land acquisition / buying from community, meanwhile HTI is a land received by company through a permit to carry out forestry operation on a state-owned land. Being state-owned, government already regulate the allocation for community use (minimum 20%) and conservation (minimum 10%). In other words, company refers to this regulation in order to set aside an area for community use. All companies in Muba are in compliance with this regulation. The distribution of area for community use in all companies can be seen in Annex 4 of HCS Summary Report.)

The company responded that Annex 3 in the revised/latest summary report is Annex 4 in the previous original document.

Conduct a quality participatory land use and claims map – The land use and claim map is already conducted in participatory way.

Involve all villages in concessions area in the participatory mapping process – PM is carried out through ISFMP development process. There are ISFMP working group consisted of community representatives, NGOs, scholars and government officials who provide recommendation and conducted ground check.

Train those conducting the participatory mapping - recommendation is accepted.

Respect formal and customary tenure rights – recommendation is accepted, it is already part of the company's commitment and procedures have been developed to support the implementation.

Engage with relevant stakeholders – recommendation is accepted, engagement with relevant stakeholders is a continuous process that company is doing and improves.

Mapping of community land use and land claims should be done prior to HCV reports being completed (and prior to these being used as inputs for ISFMPs development) – Recommendation is accepted for future HCS assessment process. Land Claims is constantly evolving on the ground and the land claim data is a living document that is continuously being updated by the company. ISFMP is already completed and already include community land use and land claims.

Identified HCS/HCV areas so far need to go through an FPIC process before final designation. – Recommendation is accepted for future HCS Assessment process.

- 2.3. 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 (partly included Company Responses):

Within the current data set provided there is no information on the company's FPIC processes. The reviewer cannot review this section. The company suggested to refer to additional information in the document (PPT file). The reviewer responded that there is nothing relevant to the "record of consultation with affected communities and FPIC processes on the proposed development, the HCS Approach and issues/concerns they raised" presented in the ppt.

Company Response:

While FPIC process was not done for HCS Assessment in Muba region, the company has since developed/revised their relevant procedures to take into account the recommendations listed here. The company's FPIC procedure includes identification and inclusion of women, youth, elders, etc.

APP and its suppliers are committed to resolve conflicts responsibly and ensure that it will not ignore any grievances raised. Numerous SOPs had been developed to address claim, grievance and inputs from community, including SOP Responsible Conflict Resolution, SOP Grievance Handling and SOP FPIC. These SOPs are available publicly in APP dashboard and been implemented by the company.

- 2.4. What recommendations do you have for any improvements regarding community consultation and negotiation of Free, Prior and Informed Consent relating to the HCS assessment process, including forest evaluation and conservation planning?

Finding:

As mentioned above, in the current data set there is no FPIC information provided.

Company Response:

APP and its pulpwood suppliers have continuously improve their stakeholder's engagement, including with the communities, since the launch of its Forest Conservation Policy in 2013. New procedures have been developed and implemented at the operational level to address the concerns that the peer reviewers have highlighted above. That includes:

- Ensuring that discussion is not done only with community leaders, but with elected representatives of the community affected, through clear documented evidence.

- Community is informed that they can get external support from 3rd parties (e.g. NGOs) to facilitate their discussion with the company. APP suppliers have engaged with 3rd party facilitators that have been elected by communities to support them in conflict negotiations.
- APP and its pulpwood suppliers had developed a regional forum for companies, community representatives, NGOs, related government agencies, and academics to identify better conflict resolution process through multi-stakeholder reviews and facilitation on mutually agrees conflict cases.
- This program to further strengthen the company's process to engage with the communities is on-going with the companies.
- We realize that there is always room for improvements and we are open to constructive feedback to address any related issue.

Disclosure of information – Summary of HCS, HCV and ISFMP is publicly available on the dashboard. All studies including SIA and EIA has been through public consultation before finalization.

Address shortcomings in FPIC process, so that affected communities are able to give or withhold their consent – Prior to the implementation of Annual Work Plan (RKT), APP suppliers always conduct FPIC to community. The information given included project activities, location, size, potential impacts, company CD/CSR activities etc. The reviewer stated that, “Where company has failed to secure communities’ initial consent, the FPIC process should be conducted; and where communities reject the plantations, the company supports government decision to excise village lands or enclave these within concessions,” indicating that there is actually a government decision to excise or enclave village area. This needs to be clarified to avoid misleading information since there is no such government decision like the peer reviewer mentioned. As far as the company experience, government does not instigate the decision to enclave community area inside concessions. It is the company that requests the enclave, and government does not always agree.

While FPIC was not carried during this assessment – because it was done before the launched of HCS Toolkit, the company has since developed FPIC procedures. The result of this process and other social engagement that was carried independently from this HCS Assessment were then integrated under the ISFMP document.

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?

Finding:

The summary report refers the reviewer to executive summary reports on the APP website. So the reviewer is just referred back to the same report. However, the summary report should have the required information made available without having to go searching for multiple reports.

For Section 4.1 of the summary report, a table of HCVs identified/potentially present was made available, along with threats, management and monitoring. Wildlife/biodiversity management measures are somewhat lacking, especially for RTE species. It would be useful to have a column for threats to identified HCVs together with the management and recommendations.

In the reports proper, a summary matrix has been developed showing clearly the presence and/or absence of HCVs 1 to 6. The matrices cover identification, threats, management and mitigation/management recommendations. For “Laporan BPP1”, all HCVs 1 to 6 were treated. However, this table only extends from HCVs 1 to 5 for “Laporan BPP 2”, HCVs 1 to 5 for “Laporan SHP” and HCVs 1 to 4.3 for “Laporan TPJ”. The development of such a matrix is a practical approach to giving a bird’s eye view of the fundamental elements of the HCV report. However, the tables need to be kept consistent, reflecting all HCVs from 1 to 6, whether absent or present.

Reviewers Recommendation:

To assess the summary report all the HCV presence for all the concessions needs to be laid out simply and clearly. Showing:

- The presence of HCV 1 – 6 for each concession.
- The area of each HCV.
- Maps with the HCV areas mapped with landcover at the time of the assessment as a background. Maps should be presented in a consistent format.
- Add in a threats column.
- Improve on biodiversity and wildlife management measures.
- It would be much clearer if a table or matrix of HCVs present/absent and their management and monitoring prescriptions could be displayed in this section.

Company Response:

Recommendation is accepted, the summary table is already provided in the summary report as annex 2.

- 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?

Finding: (The following points apply to both reports)

The assessment did not receive a rating by HCVRN because it predated the quality panel system. An extensive and comprehensive background to the assessment area from climate and landscape features to social elements and history was given. It is recommended that the ALS format be followed as a guidance (for site description as well as analysis of landscape at regional and national context). I did not detect the presence of any agreements with the communities for use of their lands for forestry (e.g. for joint venture, etc.). Is this present?

The introduction and background are quite extensive. However, the methodology and data sections paled by comparison to this background. Specific issues:

- There is no description of land cover mapping methods.
- The fauna data is somewhat deficient. Checklists used as secondary data need to be in the annex.
- There needs to be a section clarifying the sampling plots.
- Descriptions of FPIC approaches and potential conflicts in relation to HCVs 5 and 6 are needed.
- Clear methods of data collection need to be specified.
- The map resolutions are poor.
- The introduction and background information are verbose, taking away from the key objectives of the report, which are the presence/absence of HCVs, threats to them and mitigation and monitoring measures.

Clearer reference to the Indonesian HCV toolkit is needed.

Reviewers Recommendation:

- Shorten the background information.
- Expand on the methods of assessment.
- Clarify how the sampling plots/areas were chosen.
- Put in better resolution maps.
- Make management and monitoring recommendations as specific as possible. For example, if the recommendation is to delineate an area for protection, specify which area and what monitoring prescription applies.

- Use western numbering system not Indonesian numbering system as this causes confusion (e.g.28,484 not 28.484).

Company Response:

The company appreciates the recommendation of reviewers related to HCV Assessment. This recommendation and information are accepted and will be delivered to Ekologika and will be well taken into account as a future improvement of future HCS Assessment.

Use western numbering system not Indonesian numbering system as this causes confusion (e.g.28,484 not 28.484) – recommendation is accepted for future improvement. The company will adjust the numbering into western system for reports that are written in English. For reports written in Indonesian the numbering system will remain Indonesian.

- 3.3. 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:

(Sections 10.3 and 10.4 are included in the assessment)

No information is currently provided. More information on the ISFMP Manual should be given, specifically, what happens after dissemination of the manual. This has bearing on the details listed in section 10.4.

Reviewers Recommendation:

Provide information that details the forest conservation management and monitoring activities. Recommend that company include a succinct and simple explanation of the ISFMP process (not just maps), but also that you focus in this report on using the HCS format and terminology, to help peer reviewers and HCS stakeholders understand how the APP process meets HCS requirements.

Company Response:

Recommendation is accepted, information is already provided in section 10 and relevant annex.

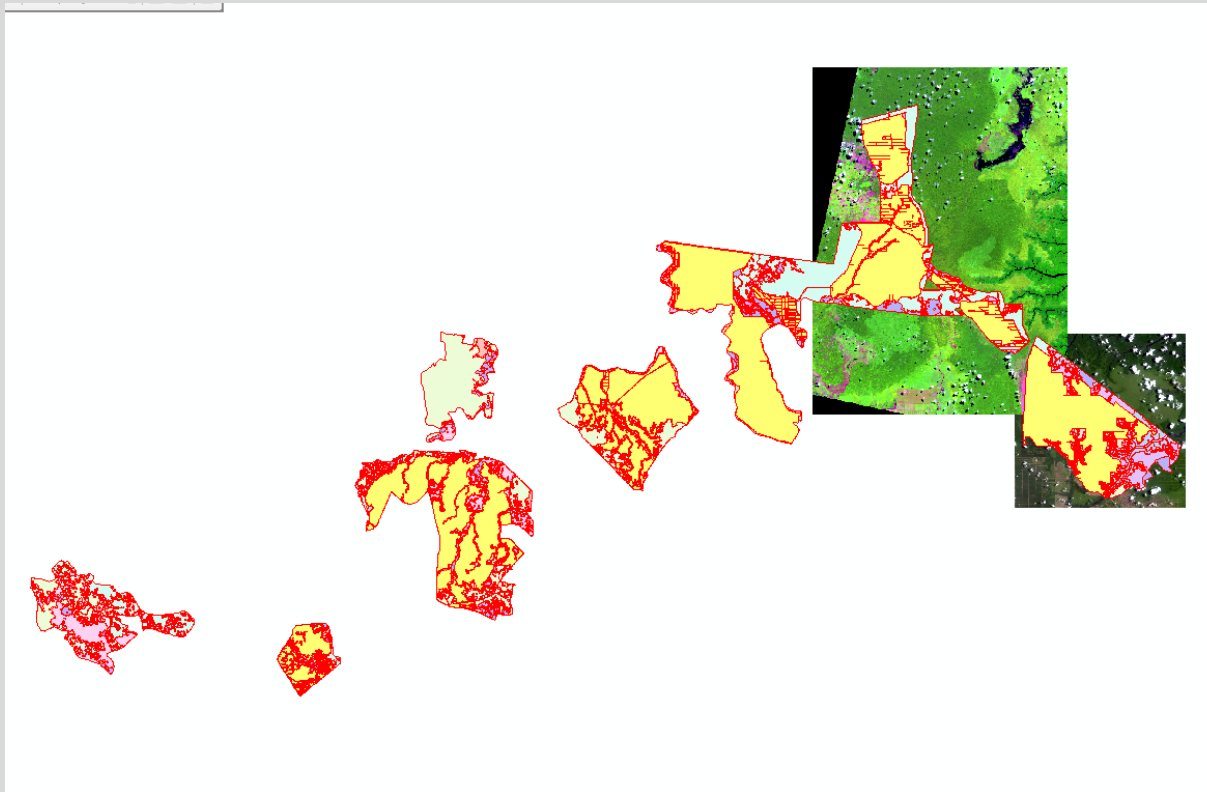
4. Image Analysis

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

Finding (partly included Company Responses):

As mentioned above, the reviewer questions whether the AOI should be the sum of the concessions' areas (200,000 ha) plus a 1-2 km buffer. The company provides explanation that 200,000 ha consisted of 109,946 developed area and 90,341 of undeveloped area. So the HCS assessment is only carried out in the undeveloped area. Assessment to 1-2 km buffer was not a part of the HCS assessment in 2015. This will be point of improvement.

Despite stating that all the images have been provided it seems that no more images have been added to the library (see below). Similarly there has been no buffer of the concessions in the landcover.



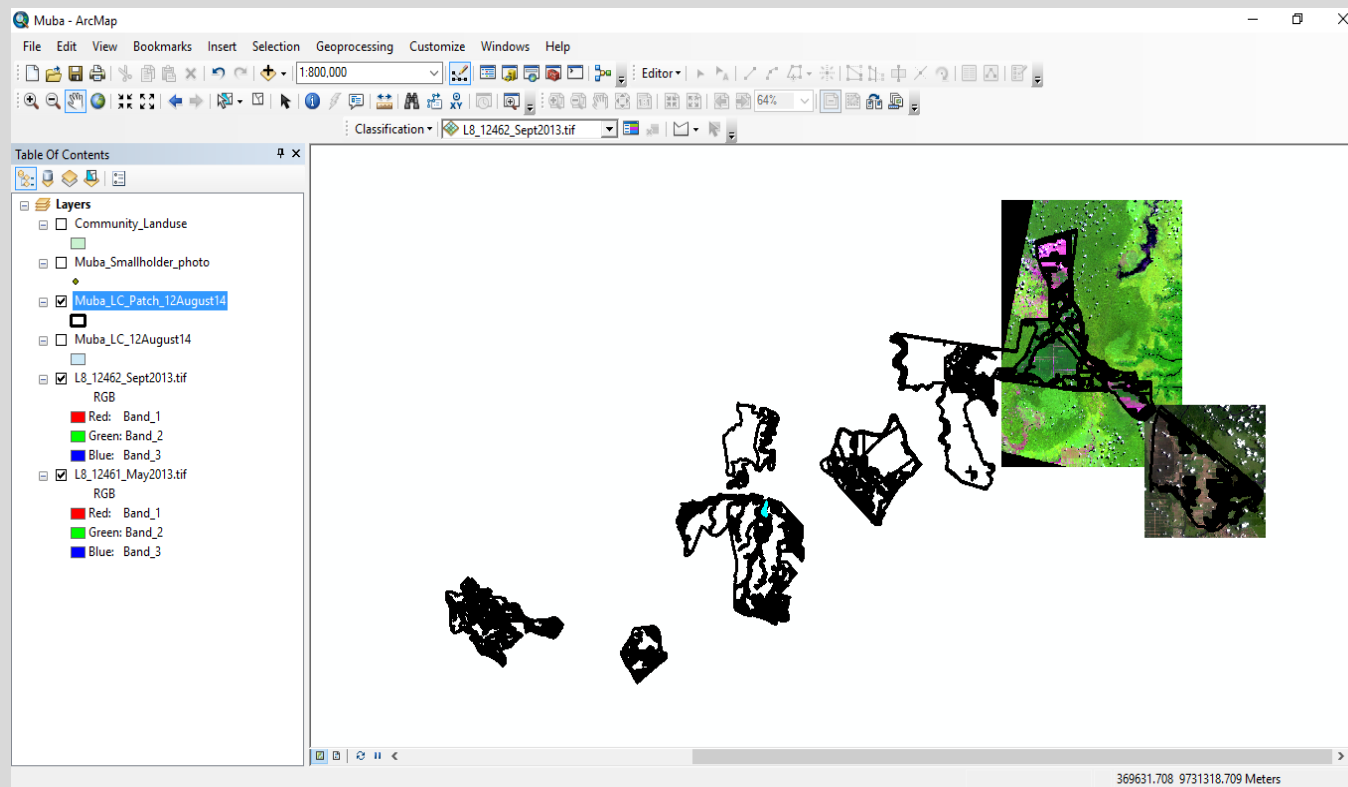
Reviewers Recommendation:

Please provide the images that were used to create the landcover map and the landcover map in shapefile format. See below only 2 images are provided and they don't cover the whole of the assessment area.

Company Response:

We have provided both data in the SharePoint:

- Images that were used to create the landcover map is already available in folder "Landsat Data for Report".
- Landcover map in shapefile format is already available under the folder "8.2Shapefiles for Landcover Map -> 4.2 SHP Image Classification".



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

Finding and Reviewers Recommendation:

As in section 4.1.

Company Response:

Please refer to section 4.1 above.

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?

Finding and Reviewers Recommendation:

As in section 4.1. All covered in Landsat data for report.

Company Response:

Please refer to section 4.1 above.

5. Forest Inventory

- 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.

Finding:

As a first remark the reviewer is reviewing a HCS assessment that is dated January 2015 against the HCS toolkit (version 1) which is dated March 2015. So clearly Ata Marie, the authors of the HCS assessment report, would not have had access to a finalised HCS toolkit.

Sections 7.1 and 7.2 of the summary report only provide a diagram of a plot layout and a plot location map which is at too small a scale to check the plot layout for adequacy. The reviewer went to the Ata Marie HCS report and referred to section “3.7 Measurement of Carbon Stocks”. Unfortunately, this report only mentions “Plots were measured along transects strategically located across the areas of interest. Only trees with diameter at breast height (DBH) greater than 5cm were measured. The species and a sample of tree heights were also recorded.”.

From the map provided in section 7.2 of the summary report (which is at a very small scale) it appears that some concessions have been sampled relatively intensively and some not at all. Most of the plots are located in HK and in transects. The logic for this sampling methodology needs to be explained.

Reviewers Recommendation:

Please provide full details of how the plots were laid out and measured. This should include plot size and shape and whether it was the plot design that is shown in the summary report or just all trees > 5 cm dbh as mentioned in the Ata Marie report. Were the plots really 30 m radius (as indicated in the summary report) – this is a very large plot!

Regarding plot location. A description of how the transect locations were determined is required. Also, how was it determined how many plots were required?

Company Response:

Details on how the plots were laid out and measured - after a certain plot was determined, the team then determined the plot center using GPS. After the plot centre is determined, the team pulled transect line from the plot center, 5.64 m for sub plot radius and 12.61 m for large plot radius (as supposed to 30 m radius, this information has been revised. New image will be provided. In sub-plot, trees that was measured were trees with 5 – 14.9 m of dbh and 15 up, while in large plot, only trees with 15 up dbh was measured. These are trees of all species, with no considerations of heights.

How the transect location were determined - The transect starting point is located in accessible area (road and rivers) while maintaining a spread of sampling locations. The exact location was determined based on land cover representation.

Regarding reviewer's findings:

1. **Some concessions have been sampled relatively intensively and some not at all** – sampling was taken in the undeveloped area, taking into considerations were: the accessibility of the area and representation of the landcover. Area that was considered as difficult to access and has homogeneity landcover were not assessed terrestrially, but aurally. These areas include RHM and BPP 1.
2. **Most of the plots are located in HK and in transects** – the area of potential HCS strata is dominated by HK (25,372 ha – in comparison with BT which is 9,536 ha). Based on this number, the study used 90% confidence interval to within 10% of the total carbon stock for the designated carbon pools. Plots were measured along transects strategically located across the areas of interest. Only trees with diameter at breast height (DBH) greater than 5cm were measured. This logic and method was explained in section 3.7 of the HCS Study Report. This method is in line with HCS Toolkit V.2 – Section C – Module 4 of Forest and Land Stratification.

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

Finding:

Section 7.3 mentions the “roles” of the inventory team but does not mention their experience or qualifications. The reviewer expects that local people (with no HCS experience) may have been used to help with measurement and tree identification. In which case, there should be some mention of the training and oversight that was undertaken.

Reviewers Recommendation:

Provide short biographies for the key team members maybe as an annex to the report.

Company Response:

Experience and qualification of the inventory - already added as annex to the report.

On the context of local people – HCS Toolkit V.1 mentioned that “local guiders and suitable transport for the whole team is imperative.” HCS Assessment team did involve local community representative to guide the team to the HCS Assessment Area. Other than guiding the team to the location for forest inventory, the locals also participate in witnessing the data collection activities, but at this stage not performing the data collection itself.

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

Finding:

No mention is made of the allometrics used in Section 7.4 of the Summary Report. However, in 7.8 allometrics are mentioned but none of the allometrics calculate carbon stock. One of the outputs is BBA, but the reviewer is not familiar with this abbreviation. Allometrics are quoted with the sources e.g.: “Nugroho, 2009” but there is no references section.

Reviewers Recommendation:

It is recommended to:

- Provide the equations for calculating carbon stocks with an explanation of any abbreviations used.
- Provide a discussion of why these equations were selected.
- Provide a references section.

Company Response:

Recommendation is accepted, additional data and information – including equation for calculating carbon stock, why such equations were chosen, and abbreviations are already provided in section 7.7 of the summary report. Reference section is provided in Annex.

- 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?

Finding:

Section 7.5 describes how plots (the reviewer assumes fixed area plots) were used where trees > 5cm dbh were measured and species recorded. There is an inconsistency with the HCS report insofar as it states a sample of heights were measured. This was not mentioned in the HCS report. It is very difficult to see tree tops in a closed canopy tropical forest.

A table of carbon stocks is provided – the carbon stocks appear to be in line with what the reviewer would expect for each forest category.

At this stage it is not mentioned whether there was a verification done of the vegetation cover mapping, e.g. the plot is in HK based on the land cover map. On the ground does the inventory team agree that it is HK (or maybe it is BT). This would provide a feedback loop for improving the land cover map.

Section 7.6 - Indicative photos of each vegetation class – only photos are provided of Young regenerating forest.

Section 7.7 - the report states that different equations are used for dryland and peat forest and then for gelam and palm species. The equations provide biomass only. There is no conversion to carbon stock from biomass provided. The report only provides the output – there are no workings provided that the reviewer can assess.

Section 7.8 - this is a table where the outputs are summarised. It states that LDF, MDF and HDF are grouped into a single category (High Forest). This seems a reasonable approach to the reviewer. There is a table of the number of plots by vegetation cover, with by far the most plots allocated to High Forest. If this was clearly going to be HCS, the reviewer questions why more sampling effort was not put into differentiating between scrub and YRF?

Reviewers Recommendation:

Describe the plot measurement in more detail. None of the equations provided seem to require species identification, so the reviewer questions why this was done. This should be explained.

Was there a feedback loop for improving the vegetation cover map based on the inventory teams' observations? If so this process should be described.

Provide photos for each vegetation cover category.

Provide equations that step the reviewer through from the raw plot data through to the carbon stock. As an appendix, provide a spreadsheet which calculates the final carbon stocks by vegetation class from the raw plot data.

Provide an explanation for allocation of the number of plots to each of the vegetation categories.

Company Response:

Species identification - information on species identification is actually available and used as one of the considerations in determining the right allometric for each landcover.

Feedback loop – there is no feedback loop because information regarding vegetation map was based on carbon calculation.

Photos for each vegetation category – request is accepted, photos are already provided in [SharePoint](#).

Equations from the raw plot data through the carbon stock – request is accepted, information is already provided in [SharePoint](#).

Explanation for allocation of the number of plots to each of the vegetation categories – This information is available in section 7.7 of the summary report – HK 246 plot, BT 20 plots, BM 21 plot, SH 38 plots, LT 10 plots. Most plots are located in HK due to accessibility reason and landcover representation.

6. *Land use planning*

- 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?

Finding:

Section 8.1 of the summary report just provides a map of the HCS forest patches. There is no description of the process of calibration of the vegetation classification map. The reviewer went to the HCS report where there is a general description of this process in section 3.9.

Reviewers Recommendation:

Provide the initial vegetation classification map and the final map. Highlight the areas where changes were made and describe the reason or process for confirming the change for a few example areas.

Company Response:

Initial vegetation map is available under the folder of [6.3 in SharePoint](#). Final vegetation map is available under the folder of [SHP Image Classification](#) in SharePoint. A sample map of areas that change is provided in [SharePoint](#). In Image 1 – initial map showed LT, after aerial checking it was confirmed that the area is Gelam. In Image 2 – initial map showed BM, LT and Agri, after field checking, it was confirmed that the area is SH Mix.

- 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?

Finding:

There is no mention of participatory mapping and identification of community lands that should be enclaved. Although the Ata Marie HCS work predates the HCS toolkit. A community land use shape file is provided but these areas are not included in the HCS area.

Similarly, the flowchart provided in Fig 2 of the Ata Marie report differs from the patch analysis flowchart in the HCS toolkit.

Areas for conservation and development (as a result of the patch analysis) are provided – this is helpful. But a series of maps which steps the reviewer through the patch analysis process would be even more helpful.

Reviewers Recommendation:

Assuming that participatory mapping has been done in this area. Areas to be enclaved should be provided.

Redo the patch analysis based on the flowchart in the toolkit. Although the shapefile “Muba_LC_Patch_12August14” appears to have attributes that suggest the HCS toolkit has been followed. However, there is no HCS map in the Ata Marie HCS report that enables the reviewer to cross-check the outputs from the AM report with the summary report.

Provide a map displaying the output at each step that enables the reviewer to check each step.

Company Response:

Participatory Mapping - PM is carried out when land rights are identified, and it is carried out under ISFMP development process. Due to the land status, companies are not entitled to enclave an area, it can only request to the government to enclave. Under the ISFMP development process, when community rights are identified, ISFMP working group will recommend the area to be designated as community use / social management. The distribution of these areas can be found in Annex 4 of the summary report. **The company responded that Annex 3 in the revised/latest summary report is Annex 4 in the previous original document.**

Redo the patch analysis based on the flowchart in toolkit –

HCS Assessment in Muba region was completed before the HCS toolkit existed. The differences between the patch analysis in this assessment and the toolkit has been retrofitted through ISFMP process i.e.:

- According to toolkit, PM to identify community land should be done prior to final HCS stratification. In APP process, identified community land was overlaid with HCS map in ISFMP development process.
- According to toolkit, RBA should be carried out prior to the decision making on low and medium priority. In APP process, the areas became the subject of analysis by ISFMP working group who made final decision after cross checking with the result of HCS and other relevant studies analysis.
- According to toolkit, landscape analysis need to be carried out on small patches (<10 ha). In APP process, these areas became the subject of further analysis by ISFMP team.

Provide a map displaying the output at each step - Recommendation is accepted. Tables to display output of each step will be developed.

- 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?

Finding:

Please state whether file "Muba_LC_Patch_12August14" is based on Ata Marie methodology or HCS toolkit methodology.

Reviewers Recommendation:

Please provide the land cover shapefile that was used as the starting point for the HCS analysis.

Company Response:

The data is already provided in the [SharePoint](#). Since the assessment was carried before the development of HCS Toolkit, the methodology used in this assessment was developed by Ata Marie. However, both processes are in line. For example are the methods to determine the buffering core area, buffering connectivity and buffering the threat. This process is explained in HCS Patch Analysis Decision Tree in HCS Toolkit V.10.

- 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:

Section 10.1 was empty and section 10.2 only included a map labelled “HCS forest distribution map.” It is assumed this is the end product of the patch analysis. Please confirm.

Reviewers Recommendation:

Please provide the HCV, peatland and customary areas in shapefile format. Also, please provide a copy of the ISFMP manual.

Company Response:

For this assessment, the company will provide peer reviewers with the latest information on spatial and management plan which is an integration of HCS, community mapping and HCV that are incorporated under ISFMP document, available in Attachment A, which explains how APP retrofitted the HCSA process through its ISFMP development.