HCSA Peer Review Report

Musim Mas – PT. Lestari Abadi Perkasa (LAP)

Background information:

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, Remark Asia is a Registered Practitioner Organisation.

b) Was the HCS Team Leader a Registered Practitioner?

Yes, Cecep Saepulloh lead the assessment and is a registered practitioner.

c) Were at least 2 HCS team members Registered Practitioners?

Yes, the registered practitioners on the team are Cecep Saepulloh and AdiWijoyo.

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 report was done prior to the ALS. However, PT. LAP also undertook a new HCV assessment on LAP 2 and submitted for review under HCVRN ALS. The status as below as per 3 April 2018.

HCV Report PT Lestari Abadi Perkasa. Ketapang District, West Kalimantan, Indonesia	PT Lestari Abadi Perkasa	RSPO NPP	Sigit Bhudi Setyanto Provisional	29/01/2018	IC With ALS since 29/01/2018

Questions for peer reviewers
(Peer Review Panel: Kimberly Carlson, Cynthia Chin)

1. Peer Review Summary

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

Finding:
The reviewers found that the overall quality of the HCS Assesment, including SIA, HCV, and HCS components, was high.

Regarding SIA and HCV assessments, those for the main concession area (PT LAP 1) were conducted in 2010, and are therefore outdated; community perceptions as well as biodiversity may have changed since that time. However, most communities and many lands in the region underwent more recent SIA and HCV assessments for PT LAP 2, which have been submitted to HCVRN. Moreover, starting with stakeholder consulations in 2012, the company has developed a management and monitoring plan which is updated on an annual basis. PT LAP conducted participatory mapping 2009-2010 and again from 2016-2017.

Considering FPIC, in the FPIC process undertaken by the company, the community is given the right to refuse if the community is not willing to sell the land.

The forest inventory is well described and solid, although the field sampling strategy differed slightly from that recommended in the HCS Toolkit. Around 50 plots were used to develop estimates of carbon stocks for each HCS class. The forestry team was well qualified. The allometric equation used was appropriate for the analysis, and the statistical analysis of carbon stocks and class separability was robust.

Considering the HCS Classification, appropriate satellite imagery was used, and sufficient overall accuracy was achieved in the original classified map (>80%). However, remote sensing classification was underexplained and it was not clear how the final maps were produced from the original classified imagery. Some of the classes used in the remote sensing analysis were not the six listed in the HCS Toolkit, and these land use classes were not well defined.

The decision tree to indentify final HCS areas was applied correctly, and because of overlap between HCS and HCV areas, most of the low priority HCS patches were designated for conservation.

The management plan is thoughtful and comprehensive, and integrates both social and environmental/ecological concerns. The plan includes consultation and collaboration with local residents and government agencies, incorporates specific plans for monitoring and restoring conservation set-asides, and will work to educate people on legal restrictions regarding hunting/poaching.

Reviewers Recommendation: N/A.

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

Finding:
Yes, based on the peer review results, the assessment team had sufficient expertise in HCV and FPIC processes, as well as field work and quantitative methods to assess vegetation and carbon stocks. Given the underexplanation 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?

Finding:
The report outlines further steps that need to be completed to create a final land use and conservation plan. These include verification and consultation with communities, integration of social management plans in the two concession areas, a quality review of HCV procedures with HCVRN, and a New Planting Prodcedure with RSPO. In addition, the report outlines next steps for protection of HCS areas, including outlining and signing these areas, excluding them from development plans, explaining HCS areas to communities, patrolling these areas on a monthly basis, developing monitoring plots within these areas, and working with local government agencies to educate communities about legal requirements with respect to forest-based activities. If implemented alongside the already-exisiting management and monitoring plan, these actions are likely sufficient to fulfill HCS requirements for a land use and conservation plan.

Reviewers Recommendation: N/A.

2. Social Issues

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:
Yes, the summary is clear on the engagement processes in the project area, as well as elaborating the layout of the districts and village clusters as well as the general population profile. More importantly, the districts assessed are included in and the same as those in the HCV report. Also, the FPIC process, dialogues, and participatory mapping approaches were described. The summary also mentions a holistic approach to the assessment.

The SIA was conducted in 2010 and the report was produced in January 2011. The company has a regularly updated Social Management Plan implemented in consultation with local communities; as well as on-going FPIC and participatory processes that ensure that social impact management are adapted to current scenarios.

Reviewers Recommendation: N/A.

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

Finding:
Yes, land tenure studies were undertaken at the time of the FPIC process of land acquisition. More broadly, social impact assessments carried out by independent social experts have served as baselines in land tenure studies where patterns of natural resource use and the fulfillment of community needs have been described. This information was used in land tenure studies during participatory mapping. The topic of tenure is embedded in the information presented in both the Summary Report and the SIA Report.

Reviewers Recommendation: N/A.

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:
Yes, participatory mapping activities were elaborated in the Summary Report, with resulting maps in Figure 4 (Page 13, Section 3) and details of the villages provided to reviewers.

Although the the participatory mapping activities did not calculate the minimum hectarage requirement, they identified those areas which will be part of the evaluation of social management programs.

Reviewers Recommendation: N/A.

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. FPIC processes were mentioned clearly in the Summary Report. Although the phrase was not used in the main SIA report, the approaches, engagement and dialogue described implied FPIC. The report also made clear that not all community members approached were supportive of the prospect of oil palm development in their area. The discussion and recommendations also alluded to the fact that socialisation of the project did not extend to all layers of the communities present. It was not specifically mentioned whether the community nominated their own representatives or otherwise.

Reviewers Recommendation: N/A.

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:
Yes, there is specific reference to communities being made aware that they have a choice of saying no to the development. The right to legal representation is implied through the points in page 12, though not specifically mentioned. The views of the communities are more explicitly addressed in the main SIA report.

Although the social impact assessment (SIA) was done in 2010 with the final report released in 2011, the results of the SIA were used as baseline information in developing the social management program plan. The management and monitoring plan was prepared together with the consultants in 2012 through a workshop.The programme was also consulted with and approved by communities around the PT LAP concession in 2012. Since then, PT LAP has programmes that have been crafted from 2013 to present (2017). PT LAP also conducted yearly reviews of the programmes. In its implementation PT LAP has also conducted stakeholder consultations with surrounding communities periodically to gauge for changes in social conditions as well as to gather input for the evaluation of the implemented management and monitoring programmes.

In the FPIC process undertaken by the company, the community is given the right to refuse if the community is not willing for the land to be sold. It is already contained in standard operational procedures owned by the company.

Reviewers Recommendation: N/A.

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

Finding:
The methodology and approach are sound, and the Summary Report well written as well as clearly presented. There would not have been much comment except for the fact that six years have passed since the SIA and the current HCS report. Nevertheless, the Company has developed a Social Management Plan, which is regularly consulted with the surrounding community.

Reviewers Recommendation: N/A.

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:
Yes. The summary was clear and succinct. Five out of the six HCVs were assessed to be present, with justification. However, it is not mentioned as to why HCV 2 was not deemed present. The HCVA was clearly elaborated (3,386 ha or 26% of the project area). The recommendations and monitoring in the Summary Report were specific to HCS.

Reviewers Recommendation: N/A.

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:
Even though the HCV report was done prior to the ALS, it was clear, well written and well conducted. The methodology, landscape and identification of each HCV was clearly elaborated. A map of the HCVA was generated. Issues were clearly defined, and the management and monitoring recommendations were logical and clear.

The HCV assessment was conducted in November 2010, seven years from the current HCS report. This became the baseline material as a reference for the preparation of HCV management and monitoring program, where regularly (every year) the management and monitoring program is consulted with the villagers. From the results of this implemtation, changes to perceptions, including hunting and threat to the existence of HCV are documented, so that the management program and its implementation can be updated in response to the new dynamics

of the HCV areas. PT LAP also undertook a new HCV assessment on LAP 2 in accordance with HCVRN provisions. HCV Report LAP 2 has been submitted to HCVRN for the Quality Panel process.

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?

Finding:
Pre-RBA and RBA were not conducted because the entire HCS area overlaps with the HCV assessment which includes a biodiversity assessment of the entire area.

The older assessment flagged hunting as one prominent issue. The team reviewed the 2011 HCV documents and the routine fauna monitoring report that the company has undertaken as a basis for decision making.

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, the activities are adequate. They consider management at the landscape level, are conducting trainings and consultations with local communities, are working with local governments, and include management strategies on hunting. Notably, they will be excluding conservation areas from the oil palm development plan. The Company also has procedures for disseminating biodiversity protection programmes aimed at communities around PT LAP.

Reviewers Recommendation: N/A.

4. Image Analysis

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

Finding:
Yes, the larger landscape around the concession was studied, including a 1 km buffer around the concession boundary.

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?

Finding:
Yes, the images were adequate. The main imagery used was one Landsat-8 image from August 3, 2016. This image meets the age requirement (<12 months between image collection and field survey) and the resolution requirement (<=30 m resolution). While the image was selected because it had relatively low cloud cover within the AOI, there was some haze especially in the northeast of the AOI. The report acknowledged the haze issue in the classification section, and provided a measurement of how much of the image was covered by haze and cloud. In the hazy and cloudy areas, a Sentinel-2 image from April 7, 2016 was used to support classification.

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?

Finding:
Yes, initial vegetation classification was done correctly, with some caveats. Before classification, Landsat 8 data were converted to reflectance. The initial classification was done using a maximum likelihood classifier in ArcGIS, and then manually corrected. There was no description of vegetation index calculation, tasselled cap transformation, or other methods to support a high-quality image classification effort. The report does not describe the bands used in the classification. The initial classification had an overall accuracy of 81% and a kappa of 0.77 based on 333 sample validation points. There was no text regarding how these sample points were selected. Regarding the accuracy assessment, it seems that training data were also used to validate the classification, which is likely to result in an over-estimate of accuracy. There is no mention of how the Sentinel-2 data were used in this classification.

The choice of land cover classes was problematic from a remote sensing classification perspective, under-described, and changed throughout the document. In the classification section, Table 8 lists six classes, including medium density forest (HK2), low density forest (HK2), low density forest (HK1), young regenerating forest (HRM), scrub (BM), agriculture (AG), and community land (LB). However, Gambar 10 does not include agriculture and community land, but instead shows oil palm and other use. In contrast, Table 10 includes high, low, and medium density forest; young regenerating forest; scrub; open land; and other land. “Community land,” “agriculture,” and “other land” classes are not HCS classes, do not describe vegetation structure but rather land use (and are therefore difficult to classify using the classification approach described), and are not clearly defined.

The land cover classes seem reasonable, and there are no obvious errors in classification.

Reviewers Recommendation: N/A.

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:
Yes, the sample plots were done properly.

The team chose to sample using rectangular plots along transects. Measurement efforts are generally well-explained.

The area of the large plot was 500 m^2, and the area of the small plot was 100 m^2. The sample area is sufficiently large. Circular plots would have been preferred to avoid errors due to slope etc, as recommended in the Toolkit.

The report states that the number of plots chosen used the Winrock Calculator, which suggested that 202 plots were sufficient to achieve desired confidence interval and error levels. Due to steep and rocky conditions, only 108 plots were sampled. Of these, 59 were community lands (e.g., jungle rubber), leaving only 49 that were not community lands.

The location of plots was not provided as a shapefile, but eyeballing the locations on the report and seeing the number of samples in each class in Section 7.8 suggests that sampling was concentrated on the most critical class (young regenerating forest, n = 17 plots).

Reviewers Recommendation: N/A.

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

Finding:
Yes, the team was well qualified. The consultant team consisted of a team leader (Adiwijoyo), as well as 3 assistants with expertise in carbon or biodiversity. In addition, there were two company representatives, and two to four villagers supporting the effort. The team leader has an undergraduate degree in cartography as well as a few years of field experience. The assistants all have degrees in forestry and field experience. It is not clear that the team is highly qualified to identify tree species in Kalimantan, given that most of their experience was in other Indonesian regions or in ethnobotany, and considering that they are all relatively new graduates.

Reviewers Recommendation: N/A.

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

Finding:
Yes, the equation was adequate. The allometric equation chosen was from Ketterings et al. 2001, which was developed in Sumatran mixed secondary forests. The report chose to use the values of r and c for the mineral soil site in Sepunggur, Jambi instead of re-estimating these values for the site in West Kalimantan.

Reviewers Recommendation: N/A.

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:
Yes, the methods and the field photos are adequate (sections 7.5 and 7.6), the description of how the analysis was done (7.7) is clear, and the carbon values seem reasonable for the region, soils, and land cover classes studied (7.8). The report provides results from a one-way ANOVA with Tukey Pairwise comparisons, which suggests that medium density, low density, and regenerating forest classes are statistically separable at a confidence level of 90%. Land use class is a significant predictor of carbon density in the overall ANOVA.

However, except for rubber, a single wood density value (p) was used, which likely reduces carbon estimate accuracy (ideally, density values are specific to each tree variety).

Reviewers Recommendation: N/A.

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:

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

The map provided in this section is the "corrected" vegetation classification map. There is limited information provided regarding how the corrected vegetation map was generated after field data collection, except that plot data were used to update classification. The 2015 toolkit states that "Any [revisions to the vegetation class boundaries] should be well documented and justified so the external reviewers assessing the quality of the HCS process can understand why any changes were made." The text description does not justify specific changes made to the classified map.

Reviewers Recommendation:

Please explain in detail how the final vegetation classification map was generated from the initial map, following the HCS Toolkit suggestions on Page 67 (version 2015). In other words, describe the steps taken to generate the final map from the initial map: what classifications were changed, where, and why?

Company Response:

The re-classification were done for degraded forest and young regeneration forest into cultivated land (rubber plantation). In the initial land cover analysis, some areas were interpreted as degraded forest and young regeneration forest. Land verification shows that the areas that were initially interpreted as degraded forest and young regeneration forest were found to be mixed rubber plantation. The rubber plantation was dominated by large old rubber trees so it looks like degraded forest or young regeneration forest. The location where the changes made were scattered around the concession, mainly near the villages and rivers. The changes were made to correct the initial land cover classification. HCSA Toolkit does not categorize rubber plantation as high carbon stock areas so the rubber plantation areas are re-classified following actual condition on the field and then excluded from potential HCS area.

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:
Yes, participatory mapping, patch merging, core area identification, and connectivity analysis were done correctly.

Reviewers Recommendation: N/A.

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:
Overall, patches were identified correctly, and patch analysis was done according to the HCS Approach Decision tree. All community lands were excluded, and although several low priority patches were marked for development due to being in high forest cover landscapes, most were already identified as HCV. Only four patches were not marked for final conservation. In future HCS analyses, description of how the high forest cover landscape (>30% forest cover) determination was reached should be reported.

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 and ground verification was incorporated into the land use plan. The company verified the results of the land cover analysis during a field visit in May 2017, and found that most of the HCS areas are in steep areas. They have prepared a land use plan that integrates HCV and HCS areas, as well as community lands.

Reviewers Recommendation: N/A.