

HCV Assessment Report

PT Sumalindo Hutani Jaya

Unit I

East Kalimantan, Indonesia

Asia Pacific Consulting Solutions

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FINAL



ACKNOWLEDGEMENTS

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WWF Indonesia

WWF International

HCVRN Indonesia

HCVRN International

Forest People’s Program

Eyes on the Forest

The Forest Trust

WALHI

and many others at the local level

Thank you all!!

EXECUTIVE SUMMARY

The HCV Assessment in East Kalimantan province focused on two (2) concessions comprised of PT Sumalindo Hutani Jaya Unit 1 (SHJ1) and PT Sumalindo Huntani Jaya Unit 2 (SHJ2) all of which provides timber supply to PT Lontar Papyrus Pulp & Paper Industry which belongs to Asia Pulp & Paper (APP) Group. This particular report present findings for PT SHJ1 and the scope of the HCV Assessment for PT SHJ1 is limited only to primary field data collection within the area of the concession area.



PT SHJ1 is a forest management enterprise managing an industrial plantation forest located within East Kutai District of East Kalimantan Province. Most of the area is plantation pulpwood forests (planted forests) and a mosaic of interspersed natural forest and shrub remaining in conservation areas. Between February and March 2013, the area of PT Sumalindo Hutani Jaya Unit I (PT SHJ Unit I) was surveyed for presence of high conservation values using the Guidelines for Identification of High Conservation Values in Indonesia 2010. Understanding the nature of HCV is fundamental to developing strategies to maintain and enhance the values and is a pre-requisite to meeting the requirements of sustainability standards; eg FSC principle 9. In addition, no conversion of HCV area is a key element of APP's Forest Conservation Policy.

Project Ownership

This project was commissioned by Asia Pulp and Paper Group. Asia Pulp and Paper Group (APP) is a trade name for a group of pulp and paper manufacturing companies in Indonesia and China. The APP group of companies is one of the world's largest vertically integrated pulp and paper companies, with an annual combined pulp, paper, and converting products capacity of over 18 million tons.

APP-Indonesia and APP-China currently market their products in more than 120 countries across six continents. Asia Pulp & Paper's Indonesian administrative office is located at Sinarmas Land Plaza, Jalan Thamrin, Jakarta, Indonesia.

At the time of this report, the pulp mills of the Asia Pulp and Paper Group (APP) receive pulpwood from the HTI concessions of 38 suppliers located on the islands of Sumatra and Borneo. This project covers one (1) of those supplies on the island of Sumatra.

Concession Historical Aspects

Sumalindo Hutani Jaya (unit I) was started in 1988, with planting implemented in 1989 to produce sawn wood consisting of Acacia species. PT. Sumalindo Hutani Jaya (Unit I) obtained the permit of the forest plantation concession in 1996 through a Minister of Forestry the Republic of Indonesia decree number 407/Kpts-II/1996 dated 5 August 1996 with an area \pm 10,000 ha located in East Kutai regency of East Kalimantan Province. PT. Sumalindo Hutani Jaya (unit I) became a joint venture between PT. Inhutani with PT. Sumalindo Lestari Jaya Tbk and was established based on Notarial Ny. Rukmasanti Hardjasatya, S.H. number 65 Date 18 April 2006. Within the working area of PT. Sumalindo Hutani Jaya (Unit I), boundary demarcation along the 75 km was done in 1999 and has been approved in accordance Minister of Forestry the Republic of Indonesia decree number: 273/Menhut-II/2007 dated August 7, 2007 with an area of 10,976.40 ha. For general planning of forest plantation (RKUPHHK-HTI), the area of PT. Sumalindo Hutani Jaya (Unit I) was rounded to 10,976 ha in order to facilitate the calculation for plantation management.

Assessment Findings

In an effort to provide APP a result that could be more easily utilized, this report is prepared at the concession (Forest Management Unit) level. The concession report provides:

- Introductions and assessment methods conducted during the survey for ecology, soil, hydrology, and social,
- HCV definitions according to the HCVF Toolkit for Indonesia,
- a landscape context summary of the management unit derived from secondary data and map analysis,
- a landscape perspective in which the concession is operating within,
- findings of the assessment,
- management and monitoring recommendations based on the identified threats, and
- barriers should the company choose to pursue FSC certification in the future.

There was no preliminary assessment conducted for SHJ1, however there was one done for SHJ2 and in addition there had been a landscape level assessment for all of East Kalimantan by Daemeter Consulting, thus this was the primary source of secondary data used prior to the field work. The field assessment sampled the area extensively using a systematic methodology for all HCV classes based on the latest Indonesia HCV toolkit available that is explained in greater detail in Section 1. The following descriptions summarise the results of the HCV identification process:

HCV 1 Areas with Important Levels of Biodiversity

HCV 1.1 Areas that Contain or Provide Biodiversity Support Function to Protection or Conservation Areas

The PT SHJ1 concession is far from protected or conservation areas such as protection forests, national parks, nature reserves and the like. Consequently, activities inside the concession do not really affect any officially designated protected or conservation areas. However, PT SHJ1 management has established protection areas along riparian buffer zones inside its concession. These protection areas inside the concession cover 385.20 hectares, or around 3.30 % of the total the PT SHJ1 area, and follow provisions laid out by Ministry of Forestry rulings (*MENATA KAWASAN LINDUNG, Menuju Sertifikasi Pengelolaan Hutan Lestari* and Peraturan Permemerintah Republik Indonesia, Nomor 38 Tahun 2011 Tentang Sungai). These protection areas are riparian buffer zones along the Pesab and Meluwai rivers, as well as a basin that constitutes a water source. Thus, there is HCV 1.1 present in PT SHJ1.

HCV 1.2 Critically Endangered Species

The area SHJ 1 is located in has a significant history of catastrophic fires and the concession and landscape has been drastically changed as a result. Visits to areas inside the PT SHJ1 concession revealed that no species meeting HCV 1.2 criteria (under Critically Endangered status in IUCN) was found in the concession area of PT SHJ 1. **However, it was odd that there were no diptorcarps found within the survey, thus the company should do additional surveys to confirm this absence.** Thus, there is no HCV 1.2 present in the PT SHJ 1.

HCV 1.3 Areas that Contain Habitat for Viable Populations of Endangered, Restricted Range or Protected Species

This area is explained in the Toolkit (2010) as areas that constitute habitat for viable populations of endangered, restricted range, or protected species and the team found that 2 flora species, 10 mammal species, 22 bird species and 9 herpetofauna species exists within the concession that meets the requirements for HCV 1.3. Most of these were found inside protected areas along riparian buffers, while a few were found in plantation forest. Orangutan nests and one sighting also occurred during the survey which indicates their presence in the concession and Dr. Yaya Rayadin from Mulawarman University was brought in to advise the team about issues relating to orangutan.

A lot of effort, and more time is required to assess population viability than was available during HCV assessments. As there were no population viability analyses, HCV assessments used landscape carrying capacity analyses for HCV 1.3 species, which consider the level and quality of support to the ecosystem from the landscape closest to the concession. A simple approach for looking at 'potential carrying capacity' that can be used for population viability is by observing the presence of numbers of certain species in the PT SHJ1 concession area and linking them to places that allow populations of the same species in a larger and protected forest landscape near the concession. Another way is through secondary data on carrying capacity research for habitats around the concession.

Near the concession there is a compact and relatively pristine area of forest; however no data or information is available on the flora and fauna it contains.

Considering the findings and conditions on the ground, it is extremely difficult for mammal species found inside the concession to survive, as their original natural forest habitat has been converted to plantation forest, and most flora and fauna species have been lost in the land clearing process. In addition, most of this wildlife struggles to adapt to new ecosystems. Nevertheless, birds, herpetofauna, and flora does not necessarily require vast amount of natural forest cover, and through precautionary approach, it is concluded that for such species, the condition of protected area in PT SHJ 1 may still viable for the species to survive as long as the area is managed under best management practice. The area is also located near a compact and larger forest landscape in the north. Thus, HCV 1.3 is present in the PT SHJ 1. Additionally a network of corridors along riparian zones that is rehabilitated with fruit trees and native species will provide cover and food to enhance the ability of these species to continue to survive.

HCV 1.4 Areas that Contain Habitat of Temporary Use by Species or Congregations of Species

No key breeding grounds or nesting areas; caves for swiftlets and bats, or saltlicks were found during observations in the PT SHJ1 concession. There was no information indicating the presence of key habitats or 'special areas' inside the PT SHJ1 concession. This could have been due to the limited time available for assessments resulting in a lack of information from communities, or because such special areas have been lost with the conversion of forest to plantation forest. However, based upon the findings of HCV1.3 species still remaining in the concession and using the precautionary principle, key selected riparian zones are highly likely to be used as local corridors for species crossing the concession area from the large forest block just northwest of the concession to a smaller intact forest block to the northeast of the concession. These key riparian areas have been mapped both inside and outside the concession so that the company can do additional surveys within their concession to determine their use as wildlife corridors and will have a concept of how they might work together at the landscape level to connect these significant blocks of remaining forest cover.

HCV 2 Natural Landscapes and Dynamics

HCV 2.1 Large Natural Landscapes with Capacity to Maintain Natural Ecological Processes and Dynamics

The PT SHJ1 concession fulfills the requirement for HCV 2.1 as part of a forest block covering more than 20,000 ha, parts of which are inside buffer zone regions. These regions are in the northwest of the concession. A small amount of the area inside the buffer zone is protected, while the core area constitutes forest outside the PT SHJ1 concession. The remaining areas of natural forest in the buffer zone inside the concession should be preserved and not converted. The management unit could carry out enrichment planting of local timber species in this area.

HCV 2.2 Areas that Contain Two or More Contiguous Ecosystems

Three approaches used to identify HCV 2.2 i.e. contiguous forest ecosystems were based on (1) ***differences in elevation (ecocline)***, the area was formerly a natural lowland rainforest ecosystem with elevations between 0-500 m asl. According to available topographic data, the highest region is around 100 m asl. Most of this area has changed to become a man-made acacia plantation forest ecosystem, while some is heavily degraded lowland rainforest ecosystem. (2) ***Contiguous swamp and non-swamp ecosystems and*** (3) ***presence of kerangas forest***. The last two approaches were not found inside the PT SHJ1 concession. Any areas of wetland are only basins where rainwater collects and mixes with spring water. Of the three approaches, none meet the criteria for HCV 2.2. Consequently, HCV 2.2 is not present in the PT SHJ1 concession.

HCV 2.3 Areas that Contain Representative Populations of Most Naturally Occurring Species

The area of habitat necessary to maintain minimum viable population (MVP) varies greatly between species. Nevertheless, large areas that are not fragmented and cover various ecosystem types have greater potential for sustaining various species than those that are smaller and fragmented with a limited variety of ecosystem types. The above requirements and conditions cannot be fulfilled by forest in the PT SHJ1 concession, as there is no longer any natural forest that could support minimum viable populations. Almost all of the area has already been converted to plantation forest. Consequently, the PT SHJ1 concession does not constitute HCV 2.3.

HCV 3 Rare or Endangered Ecosystems

The precautionary approach outlined in the HCV Toolkit for Indonesia was used to evaluate this category. It was found that the ecosystem is severely degraded, grows on infertile sand soil, is close to non-forestry cultivation areas, and is in a densely populated region close to a transmigration and oil palm development sites. Based on the results from using this approach, the PT SHJ1 concession does not meet criteria for being part of a landscape containing rare or endangered ecosystems (HCV3).

HCV 4 Environmental Services

HCV 4.1 Areas or Ecosystems Important for the Provision of Water and Prevention of Floods for Downstream communities

HCV 4.1 in the concession area of PT SHJ I , can be classified into 3 groups (i) Upper reaches of water courses that function as water catchment areas (ii) Rivers and their tributaries as flood controllers and water recharge areas (iii). Small lakes (lebung), water spring and seeping. There were 14 such areas within the concession found to meet the HCV 4.1 category.

HCV 4.2 Areas Important for the Prevention of Erosion and Sedimentation

This HCV was determined by using DEM that generated into contour and slope. The slope factor used as a limit was the coefficient value of slope length and slope gradient factors in regions categorised as upstream areas (slope >15%). All area with steep slope and

containing highly erodible soils, as well as riparian zones along major rivers and tributaries are identified as areas critical for preventing erosion and sedimentation. Steep areas within the upstream areas particularly need to be protected by maintaining vegetation cover necessary to prevent erosion. Maintaining healthy and adequate buffer zones provide a filtration effect that removes significant sedimentation from runoff prior to it entering the streams, rivers and other water bodies. There were 7 HCV 4.2 areas found within the concession.

HCV 4.3 Areas that Function as Natural Barriers to the Spread of Forest or Ground Fire

These areas are marked by the presence of key elements that have important functions as firebreaks. The important value of such areas is identified from their capacity to prevent or contain actual or potential forest and land fires. Natural firebreaks constitute areas that tend to be wet all year round, or areas that have high moisture levels and relatively low temperatures. A fire break area can be categorised as possessing HCV 4.3 elements if it meets some of the following criteria (ProForest, 2003): (i) can naturally prevent, limit or control fires, (ii) covers a large area as a significant barrier to fire and (iii) has or is close to a community settlement, (iv) has or is close to a place of cultural significance (cultural sites, sacred places) and (v) has or is close to a conservation area containing important species or ecosystems. There were 8 HCV 4.3 areas identified within PT SHJ 1.

HCV 5 Natural Areas Critical for Meeting the Basic Needs of Local People

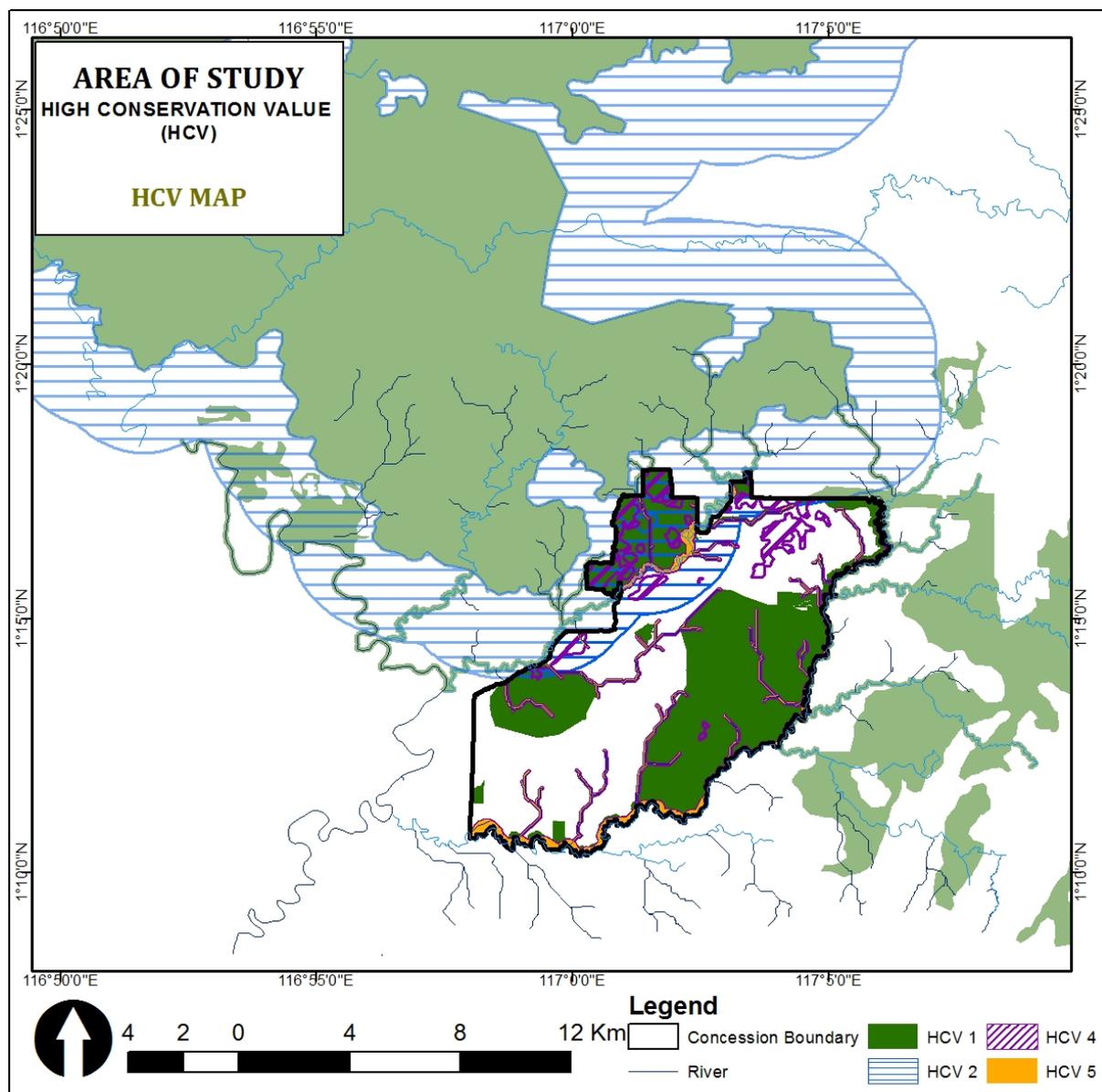
HCV 5 and 6 were identified using Focus Group Discussions (FGDs) and in the case of a lack of data as a result of a community group not being represented, then in-depth interviews were held. Village or sub-village FGDs were held in all sample villages and sub-villages. The approach used was in identifying communities' dependence on the forest in relation to their basic needs: carbohydrates, protein, vitamins, building materials, water, medicinal plants and cash earnings. Based on this, the basic need for fish protein is met from rivers or wetlands around villages. Of the 24 sample villages surveyed, 17 meet their basic need for protein by buying fish from travelling traders. Fish species commonly caught in rivers and wetlands include iridescent shark catfish, bagrid catfish, eels and walking catfish. These fish are caught in swamps and rivers such as the Telen, Wahau, Merah and Pesab and their tributaries. Villagers commonly consume an average of 1 kg of fish every day. The price of fish bought ranges from IDR 20,000 – 25,000/kg. Some communities are already farming fish. Several of the villages still rely on fishing, however those of Miao Baru village rely more heavily on fishing in the Pesab and Miao rivers which are located within the concession area of PT SHJ 1. While alternatives such as fish farming is available, the villagers still retained most of their protein basic needs from fishing in the concession area as the fishes are abundant in the part of the rivers within SHJ 1 concession area. As the fish is not commercially sold and mostly used only for family needs, its sustainability should be maintained. Thus, the PT SHJ 1 company has HCV 5 present in the form of river as source of basic need - protein. No other HCV 5 was found to be present.

HCV 6 Areas Critical for Maintaining the Cultural Identity of Local Communities

The area surrounding the concession has been significantly settled by transmigrants with mixing of local indigenous Dayak. As a result, in the concession area of PT SHJ 1 there was no HCV 6 found. **However, as a precautionary measure, APP should consider conducting additional surveys with the Miau Baru people to ensure that no burial sites exist within the concession.**

The following table and map summarizes the HCV management areas identified by the assessment team.

District	Area (Ha)				
	HCV 1	HCV 2	HCV 3	HCV 4	HCV 5
Pesab	5,956.24	2,208.81	NA	1,606.74	758.73



The size of the concession area based on the license is a bit different if compared with the GIS calculated size as shown in the table below. Regarding this discrepancy, the company has stated the

following "The determination of concession area size is based on the Republic of Indonesia Ministry of Forestry Decree (Surat Keputusan or SK) for the plantation forest concession license which includes the appended concession map.

Boundary in the field was laid down in accordance to the appended SK concession map. There is inconsistency between the calculated area size based on the field boundary and the area size that was stated in the SK. This variation is caused by the digitization process on the SK concession map, which was only available in hardcopy format when the SK was issued, into the company's Geographic Information System (GIS). The company is still in the process of settling the definitive boundary with relevant government institutions. Under the current situation, the company decided

Management and Monitoring Recommendations

APP has stated an intention to conduct an extensive "landscape management planning" process upon completion of HCV, HCS and social impact assessments that will provide a clear, holistic approach to dealing with all of the pertinent issues identified. The stated goal is to conduct extensive stakeholder consultations with government, universities, neighboring landusers, civil societies and communities during that process. **As a result management and monitoring recommendations provided in this report, as well as indicative High Conservation Management Areas (HCVMA) are provided in a generic framework to be used as a "guide" to help develop management prescriptions during this more extensive planning process.** HCV category and sub-category recommendations are provided in the full report and the following major generic recommendations have been provided without specific reference to HCV category or sub-category:

- Additional data for all HCV needs to be collected to supplement that from the assessment team, particularly relating to species presence, locality and potential population since due to time and budget constraints only a small fraction of the total area was able to be sampled;
- All final HCV management areas must be delineated on the ground and adequately protected from encroachment to protect and enhance HCV values present with the use of an appropriate buffer;
- Natural areas, particularly riparian zones and those areas that could be part of a larger concession wide wildlife corridor system connecting protected areas inside and outside the concession areas, need to be rehabilitated and restored with natural, indigenous species;
- Consultation with experts on specific species need to occur to determine when management activities have the most and least adverse effect on disturbance as well as what specific habitat needs are required;
- Hunting and encroachment of HCVMA must be controlled and prohibited, either using company staff, community patrols, government enforcement, civil society or a combination;
- Public education at the community level must occur to stress the importance of the HCV values, what they mean to the people living near the concession and why it is critical to protect and enhance these values;
- Designated staff responsible for HCV management should be assigned within each concession (at minimum concession level) and all field staff and contractors need training sessions explaining HCV values present and the importance of protecting and enhancing them;

- Areas with high populations of HCV 1.2 and 1.3 species should be considered for potential restoration as conservation areas;
- Collaboration with neighboring land users, particularly that can negatively influence HCV values within the concession and at the landscape level, must be undertaken in an effort to protect and enhance these values;
- Alternative species that require less intensive water management for survival and productivity need to be examined for peat soils to reduce the negative impact this has on the soil, hydrology and carbon emissions;
- HCV management prescriptions should be based on best practices instead of business as usual, summarized and made publically available;
- Identification of specific environmental values to monitor in order to determine the health of each HCV value and effectiveness of management programs must be developed and monitored on a regular basis;
- Periodic (minimum annually) summaries of monitoring results must be prepared and should be made publically available.