

HCV ASSESSMENT REPORT

PT TEBO MULTI AGRO

Jambi, Indonesia

Asia Pacific Consulting Solutions

June 30, 2014

FINAL



ACKNOWLEDGEMENTS

We would like to thank Asia Pulp and Paper Group (APP) and Sinar Mas Forestry (SMF) for providing us the opportunity to help on such a dynamic and significant shift in the approach by the companies in managing their plantation concessions and the additional important high conservation value resources that are contained within. Particularly Ms. Linda Wijaya, Aida Greenbury, Rolf Jensen, Dolly Priatna and Dewi Bramono of APP were invaluable in providing guidance while still allowing for independence throughout the project. Robin Mailoa, Elim , and Adrianto plus the SMF staff at the field level has provided needed support in accomplishing what needed to be done within such a short time frame.

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Greenpeace

WWF Indonesia

WWF International

HCVRN Indonesia

HCVRN International

Forest People’s Program

Eyes on the Forest

The Forest Trust

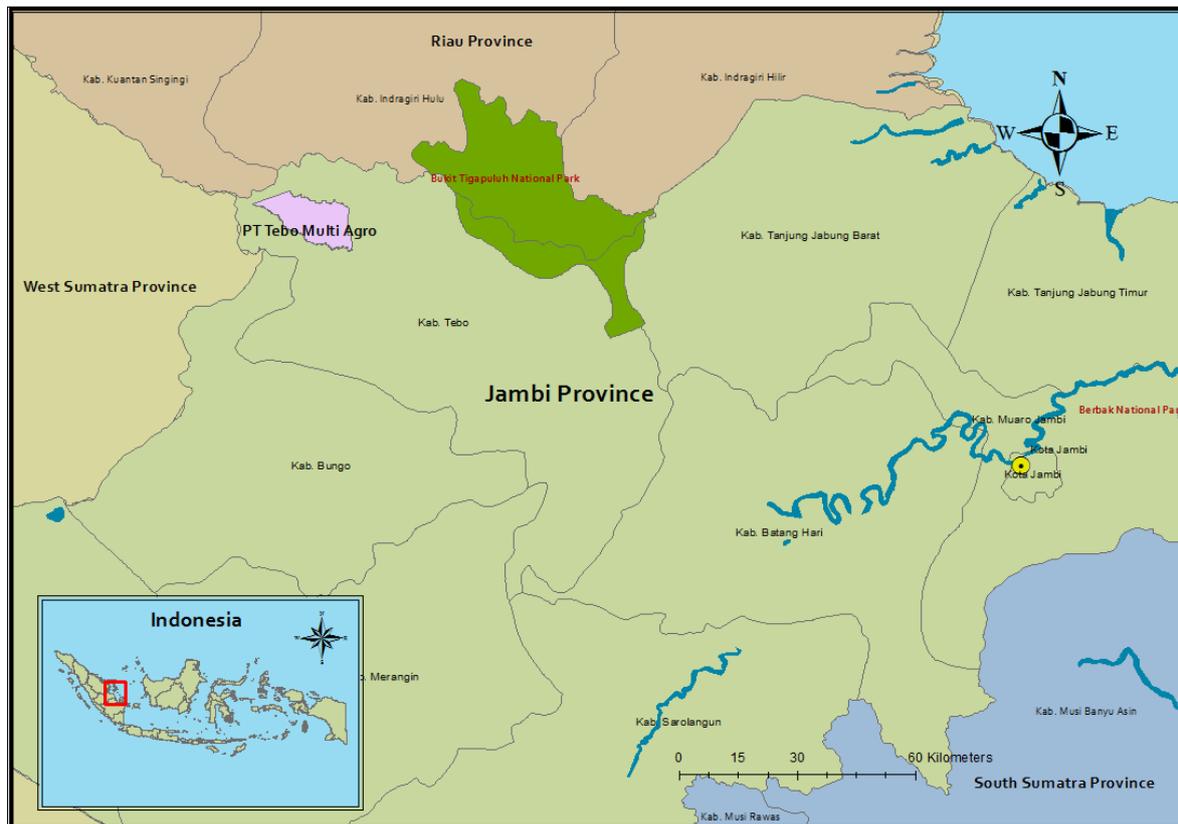
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and many others at the local level

Thank you all!!

EXECUTIVE SUMMARY

The HCV Assessment in Jambi province focused on three (3) concessions comprising of PT Wirakarya Sakti (WKS), PT Rimba Hutani Mas (RHM), and PT Tebo Multi Agro (TMA) 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 TMA and the scope of the HCV Assessment for PT TMA is limited only to the area within the PT TMA concession area.



PT TMA is a forest management enterprise managing an industrial plantation forest located in Tebo regency in Jambi Province. Most of the area is plantation pulpwood forests (planted forests) and a mosaic of interspersed natural forest remaining in conservation areas .

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

Based on the Micro Delineation Report in 2005, a company named PT Tebo Multiagro Corporation was established based on Notary Deed No.6 dated 11 July 2001 issued by Elben Syakban, SH in Jambi. The company obtained an area with the extent of around 20,000 ha which was previously natural forest concession owned by PT IFA (Industries et Forests Asiatiques) Unit Pasir Mayang. On 28 September 2001, the Head of Tebo District issued decree No 522.11/282/Dinhut/2001 on the issuance of a forest concession permit to the company in VII Koto Ilir Sub-district. On 20 Februari 2002, the Head of Tebo District issued amendment of the previous decree numbered 522.11/146/DINHUT/2002 changing the status of the permit into an industrial plantation forest permit. The location of this concession was, at the time of the micro delineation report, in two sub-districts (VII Koto and VII Koto Ilir Sub-districts).

The company then experienced several changes and had its name changed into PT Tebo Multi Agro (PT TMA) with the last revision of company establishment deed No.3 dated 13 September 2005 by Notary Yanti Susanti, SH. PT TMA is a private company, holders of IUPHHK-HTI on the Industrial Plantation Forest in Tebo District of Jambi Province. The company has a supply agreement with PT Indah Kiat Pulp & Paper and PT Lonthar Papyrus Pulp & Paper supplying raw materials for the industries. PT TMA obtained a license for the Industrial Plantation Forest based on the Ministry of Forestry Decree No 401/Menhut-II/2006 dated 19 July 2006 on the Lansisip River Forest Group, Tebo District, Jambi Province with the extent of approximately 19,770 ha.

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:

- identification of the team members and background,
- details on HCV descriptions according to the HCVF Toolkit for Indonesia (2010),
- a discussion of the methodology used to identify potential sites where HCV might exist,
- a landscape perspective in which the concession is operating within,
- results 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.

The following descriptions summarize 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

This sub-category focuses on maintaining the status of protected areas including the supporting functions a management unit can play in ensuring that a protected or conservation area meets specific objective(s). If a management unit (i) has a protected or conservation area within it, (ii) is thought to provide a biodiversity support function to a protection or conservation area nearby, or (iii) management unit activities are expected to affect the conservation function of nearby protected or conservation areas, then it is considered an HCV. The management unit of PT TMA has designated several protected areas within its concession area covering riparian buffer zones. The extent of the protected area within the concession area of PT TMA is around 2,497 hectare or around 12,63 % from the total concession area.

This protected area follows provisions laid out in forestry regulations as well as based on the company's own initiative. The condition of parts of the protected areas is degraded due to illegal logging activity and land annexation by the community, as such, only the areas that can still provide biodiversity support functions are delineated as HCV 1.1 in the extent of 962.57ha.

HCV 1.2 Critically Endangered Species

There are two critically endangered mammals found in the PT TMA concession area. Sumateran Tiger (*Panthera tigris sumatrae*) and sumateran elephant (*Elephantus maximus sumtranus*). From the result of the assessment, about 69 species of trees were found within the concession area of PT TMA. Eighteen out of 69 species are protected by government regulations and global convention, 11 species are protected by global convention and 9 species are protected by Indonesian regulation. Six species belong to CR category of IUCN, in which, all are from the meranti family (Dipterocarpaceae Family), thus there is HCV 1.2 present within the concession.

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 concluded that 18 species of flora, 13 species of mammals, 32 species of birds and 1 specie of herpetofauna met the criteria for HCV 1.3. While a lot more work needs to be done by the company to determine population viability than was available during the assessment, a simple approach to "potential carrying capacity" used was by observing the presence of certain species and linking them to areas that allow populations of the same species in a larger and protected forest landscape in or near the concession. The assumption on the viable population approach is that a fauna species have higher potential to survive in an area that is relatively vast, un-fragmented, and include several ecosystem types as compared with other areas with small size, fragmented, and limited ecosystem types. Nevertheless, the survival of each species would very much dependent on their ability to use the surrounding matrix and adapt to the changing environment. In addition to wildlife, the team also observed at least 18 flora species categorized either as Critially Endangered, Endangered, or Vulnerable under IUCN Red List, under Appendix 1 or II of CITES, or protected globally and under national regulation. Many were found in seedling stage which proves that the species have at least survived its early stage. Further efforts should be implemented by the company to ensure the viability of these species by proper management and monitoring of HCV 1.3 values.

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

During assessments in the concession area of PT TMA, seven migratory birds species were found in and around the concession. Migratory species such as these were widely distributed and found in various types of habitat.

Their capacity to survive did not depend on the condition of plantation forest and protected areas in the sites where they were documented. Therefore, PT TMA concession area is not the sole temporary habitat for these migratory species and as a result found to have no HCV 1.4 present.

HCV 2 Natural Landscapes and Dynamics

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

The concession area of PT TMA does not meet the qualification as part of a bigger forest blocks with more than 20,000 Ha as required by HCV 2.1. The concession area possesses very small portions of natural forest and is not connected or contiguous with any other bigger forest blocks. The distance to the forest block with a good condition and compact such as Bukit Tigapuluh National Park (BTNP) is about 22 km While the closest protected forest with a core area of more than 20,000 ha is Hutan Lindung Bukit Batabuh Lubuk Jambi in the north with the distance of about 2.3 km. Therefore, the concession area of PT TMA does not meet the requirement of HCV 2.1.

HCV 2.2 Areas that Contain Two or More Contiguous Ecosystems

From analysis of maps and ground truting, it is clear that the region within and surrounding PT TMA concession area is not of contiguous swamp to non-swamp ecosystem (Its an MBI land system from South-Eastern Plains and Hills physiographic region). The field work, stakeholder consultation, as well as desk study also did not discover the presence of kerangas forest within the concession area. These maps also show that there is small differences in elevation of the area within the concession. Thus, from the three approaches to identifying HCV 2.2, none meet the criteria for PT TMA concession. It can be concluded that PT TMA does not meet the qualification to have HCV 2.2.

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

The extent of habitat area 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.** These requirement and condition cannot be fulfilled by the forest area within the concession of PT TMA. Therefore, the concession area of PT TMA does not have HCV 2.3.

HCV 3 Rare or Endangered Ecosystems

All of the concession area of PT TMA belongs to South-Eastern Plains and Hills. This area was part of a very extensive lowland Dipterocarps forest. At present, the remaining forest block is in Kerinci Seblat National Park and Bukit Tigapuluh National Park. It is clear that the concession area of PT TMA meet the criteria as part of a landscape that has an endangered ecosystem. The area still has the endangered ecosystem remaining that is concentrated on the protected areas.

HCV 4 Environmental Services

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

The concession area of PT TMA, can be classified into 2 groups (i) Catchment areas in the upper watershed and (ii) rivers and tributaries in upstream watershed. These regions function as water catchment areas (DTA) and can be designated as HCV 4.1. All of the rivers located inside the TMA concession area flow into the Langsisip River and consist of six tributaries and or creeks. These six tributaries and or creeks in the area of PT TMA are (i) upper course of the Langsisip River and its tributaries (ii) the Kubu River and its tributary (iii) the Pemberian River and its tributaries (iv) the Kuning River and its tributaries (v) the Salak River and its tributaries and (vi) The Bulu Hitam River. All the catchment areas of six 6 creeks and or tributaries are designated as HCV 4.1. As natural drainage channels, the rivers mentioned above together with their tributaries play a function in balancing fluctuations in river flow rate and controlling downstream flooding. The water catchment function of rivers occurs through a mechanism of underground lateral flow from the rivers to their riparian buffers. This function will continue if riparian buffers remain in a natural condition and have vegetation with root structures that provide pore space for river water to infiltrate.

HCV 4.2 Areas Important for the Prevention of Erosion and Sedimentation

HCV 4.2 determined by using DEM that is 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 6 riparian zones in the TMA concession that have value as HCV 4.2.

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. The establishment of HCV 4.3 is done with an approach that forest fires as a potential disaster. There were 6 riparian zones in the TMA concession that have value as HCV 4.3.

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

The Usman group *Suku Anak Dalam* community (part of the Bujang Rancak group) comprising around 13 families or 50 individuals and the Bujang Selamat and Jalil group comprising 11 families or 40 individuals who live or roam inside the company area, still depend on forest resources inside the PT TMA area for their life needs. During their visits to the field, the Assessment Team did not meet directly with these communities due to time constraints and difficulties finding them as they are still nomadic. Nevertheless, based on information from the company, guides from Sei Abang village and observations on the ground, it was determined that the *Suku Anak Dalam* communities still depend on forest resources around the Pemberian and Kubu rivers inside the PT TMA concession area for more than 50% of their basic **need for carbohydrates**. These carbohydrates come from rice, sweet potato (*Ipomoea batatas*), cassava (*Manihot utilisima*), taro (*Colocasia esculenta*) and other root vegetables they grow on swidden farming land.

Based on interviews with company employees and outcomes of the FGD in Sei Abang village, the *Suku Anak Dalam* communities living inside the PT TMA concession area, in addition to fishing they also meet their **need for protein** from deer (*Cervus unicolor*), wild boar (*Sus scrofa*) and soft-shelled turtles (*Pelodiscus sinensis*) caught inside the concession. They catch fish in the Pemberian, Kubu and Lansisip rivers, and hunt deer and wild boar in PT TMA protected areas such as the Pemberian and Kubu river riparian zones.

The *Suku Anak Dalam* communities living inside the PT TMA concession area meets its basic **need for vitamins** in the form of vegetables and fruit such as durian (*Durio zibethinus*), jackfruit (*Artocarpus heterophyllus*) and papaya (*Carica papaya*) from swidden fields located around the Pemberian and Kubu rivers. According to WARSI (2010), fields they have moved on from in the past appear like agroforest filled with a variety of plants, particularly fruit trees. Some of their agroforest areas are also planted with rubber as well as various fruit trees. The *Suku Anak Dalam* communities have no alternative source for meeting their basic need for vitamins (fruit and vegetables) other than forest or other ecosystems located by the Pemberian and Kubu rivers in the PT TMA area.

The *Suku Anak Dalam* communities living inside the PT TMA concession area still depend on water from rivers, which constitute forest or other natural ecosystems inside the company concession area, for more than 50% of their basic needs for drinking, bathing, washing and toilet purposes. These rivers are the Pemberian, Kubu, Lansisip and Salak. They have no alternative source for meeting their **basic need for water** for drinking and other everyday purposes other than forest or other ecosystems located inside the PT TMA area.

The *Suku Anak Dalam* communities living inside the PT TMA concession area meet 100% of their **need for building materials** from forests around their home inside the PT TMA Pemberian, Salak, Lansisip and Kubu river riparian zone protection areas. This wood is not used for building houses or boats, but as frames for temporary shelters with tarpaulin roofs. When the Assessment Team tried to visit the *Suku Anak Dalam* communities, it only found a former *mandah* (temporary home) located inside the PT TMA area.

The *Suku Anak Dalam* communities living inside the PT TMA concession area meet 100% of their **need for fuel** with firewood from trees in the Pemberian, Kubu, Lansisip and Salak river riparian zone protection areas inside the PT TMA concession area. They use tree branches around their camp to cook every day. Based on interviews with the company and local guides, the *Suku Anak Dalam* communities have no alternative for meeting their basic need for fuel from firewood other than getting it from forest or other natural ecosystems inside the PT TMA concession area.

Based on interviews with company employees and outcomes of the FGD in Sei Abang village, some *Suku Anak Dalam* people still use **medicines** derived from the leaves and roots of plants inside the PT TMA concession area for treating various ailments. A root used to help women with childbirth is selusuh root. Based on interviews with the company, although it occasionally provides free treatment to *Suku Anak Dalam* people through its free healthcare programme, they still depend on traditional medicines from forest inside the PT TMA concession area, particularly around the Pemberian and Kubu rivers.

The presence of alternatives for meeting the basic need for fodder from roadsides, around villagers' own houses, houselots and plantations shows that communities are not dependent on forest or other natural ecosystems inside the company concession area to meet their basic need for fodder. Alternative sources of fodder are available all year round in sufficient quantities to replace sources from forest or other natural ecosystems and are easily accessed with available transport. Thus, for meeting the basic need for fodder, **HCV is not present** inside the company concession area.

Villagers in Sei Abang, the *Suku Anak Dalam* community living within PT TMA concession area, earn more than 50% of their cash income from selling dragon's blood (*Calamus sp*) and rattan (*Calamus sp*). Some of the dragon's blood and rattan comes from forest outside the PT TMA concession, while some comes from inside in the protected areas around the Pemberian and Kubu river riparian zones. Forest product extraction has become an irreplaceable main livelihood source for them and they feel highly dependent on the forest inside the protected area. They have been extracting these non-timber forest products for many generations. For meeting the basic **need for cash income**, HCV 5 is present for *Suku Anak Dalam* communities in the Pemberian, Kubu, Lansisip and Salak river riparian zone protection areas inside the PT TMA area.

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

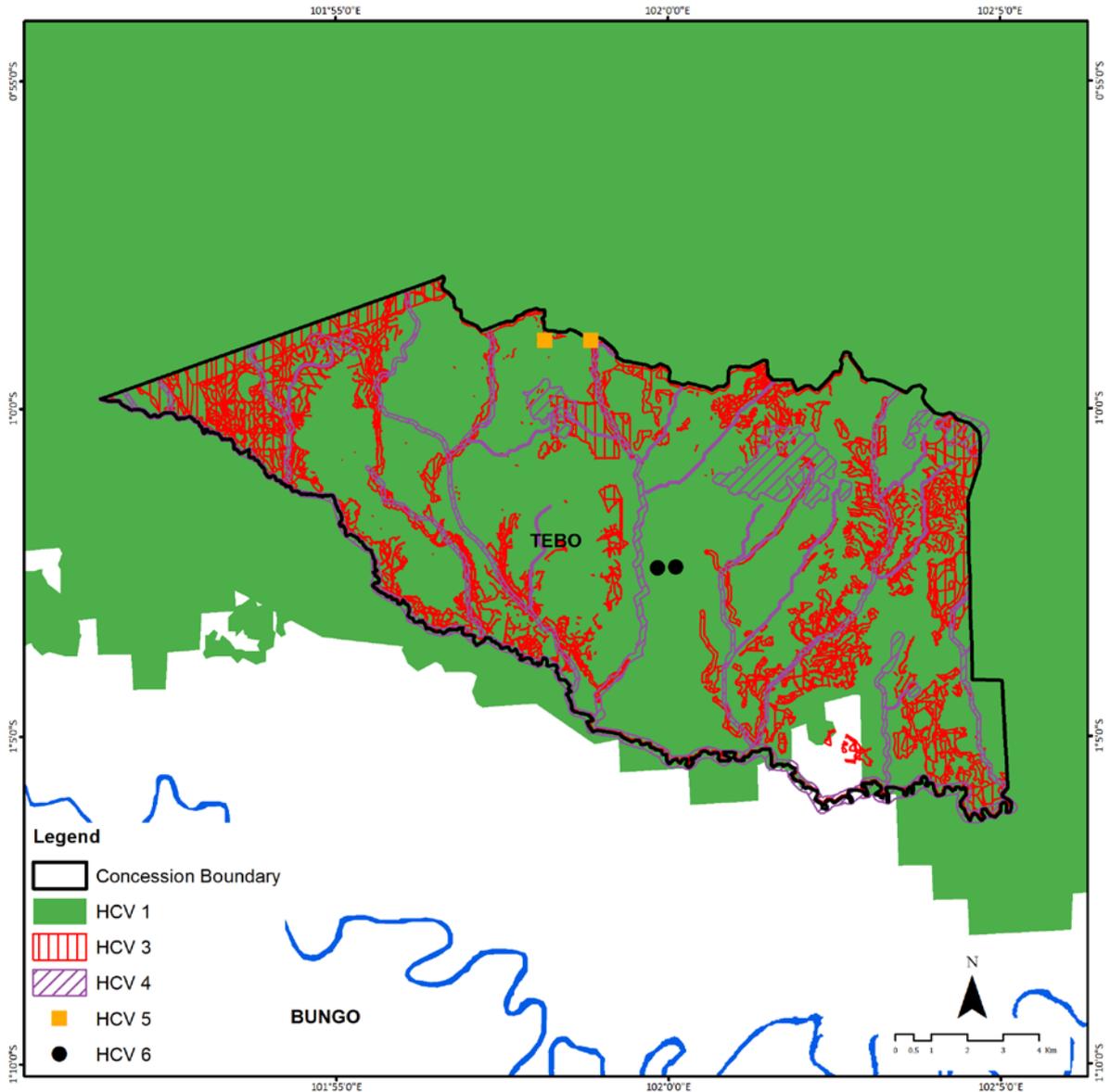
Interviews with villagers, FGD outcomes and observations on the ground in 12 villages identified in the PT TMA area revealed customary areas or forest resources used collectively or by individuals in local communities to meet their cultural needs located inside the concession. The distribution of these customary areas or forest resources is as follows:

1. The Makam Hulu Balang Sampu Bauk burial site and Kuning River sacred site for the community in Aur Cino village;
2. The Makam Syech M. Adnan burial site for the community in Sei Abang village;
3. *Suku Anak Dalam* communities.

The following table and map summarizes the HCV management areas identified by the assessment team. 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 above specifically for HCV 1.2. 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 that HCV assessment will use the GIS map which is consistent with field condition."

Type of HCV	HCV area (hectare)	
HCV 1.1	962.57	
HCV 1.2	19,661.01	
HCV 1.3	962.57	
HCV 1.4	Not Present	
HCV 2.1	Not Present	
HCV 2.2	Not Present	
HCV 2.3	Not Present	
HCV 3	3,991.76	
HCV 4.1	2,530.02	
HCV 4.2	1,770.16	
HCV 4.3	1,584.36	
HCV 5*	1,696.34	
HCV 6*	SAD: 606.12	S. Kuning: 121.6

*Only zonation of HCV 6 is presented. Sacred sites or burial grounds are indicated by dots and not calculated in the above table.



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