

Roundtable on Sustainable Palm Oil

New Planting Procedure

Summary Report of Assessments

PT. Karya Makmur Langgeng

**Simpang Dua and Simpang Hulu District,
Ketapang Regency, West Kalimantan Province**

Indonesia

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**Summary Report of
EIA and HCV Assessments and Social Impact Assessment
PT Karya Makmur Langgeng
Ketapang Regency, West Kalimantan Province**

1. Executive Summary

PT Karya Makmur Langgeng (PT KML) which is located in Simpang Dua and Simpang Hulu District, Ketapang Regency, West Kalimantan Province, is one of the Oil Palm plantations companies that has adopted the sustainable palm oil practices based on the Roundtable on Sustainable Palm Oil (RSPO) New Planting Procedures (NPP) using the Guidance Document approved in September 2009 by the Executive Board and which was enforced on 1 January 2010. As part of a sustainable palm oil management system, PT KML has conducted the Social Environment Impact Assessment (EIA/AMDAL), High Conservation Value (HCV) identification and Social Impact Assessment (SIA). The HCV and SIA assessment had been conducted from June – July 2012 by the Sonokeling Akreditasi Nusantara (SAN) consultants; the key consultants conducting these assessments are approved by the RSPO.

The Consent License based on Permitted Area (or called Location Permit/Ijin Lokasi) No. 293 year 2006 was approved on 13 October 2006 for an area of ± 19,000 ha. The Location Permit has been revised by decree No. 525/1513/Ekbang-A/2013, area of ± 19,000 ha dated on 22 May 2013.

The Social Environment Impact Assessment (EIA/AMDAL) was approved by the Governor of West Kalimantan province (Surat Kelayakan Lingkungan No 201/BLHD/2013) on 14 March 2013 and the Environmental Permit (Izin Lingkungan) was approved by the Governor of West Kalimantan Province (Surat Keputusan Gubernur Kalimantan Barat Number 262/BLHD/2013) on 29 May 2013. On top of fulfilling the regulatory requirements of conducting EIA/AMDAL. The combination of AMDAL together with HCV and SIA provides the geographical information of the area, the biodiversity and natural resources, the required best management practices and therefore provides the management with the platform on which the management plans for new planting will be based on.

The results of the HCV assessment by independent consultants from Sonokeling Akreditasi Nusantara with team personnels that have been approved by RSPO showed that there is no primary forest in the Permitted Area (Izin Lokasi) of PT KML. The vegetation cover is dominated by rubber (*Hevea brasiliensis*), agroforestry, shrub and degraded forest. Based on The Report of Semi Detail Soil Survey Assessment by Research Department of PT BGA, indicated that peatland was found in the Permitted Area (Izin Lokasi).

The HCV Assessment was conducted for the Location Permit No. 293 year 2006 that was approved on 13 October 2006, for an area of ± 19,000 ha. There are 5 types of HCV identified by the assessment and these are HCV 1 (1.1, 1.2, 1.3 and 1.4), HCV 2 (2.3), HCV 4 (4.1, 4.2 and 4.3), HCV 5 and HCV 6.

The key elements for HCV 1 are hill with slope more than 40% and riparian belt. HCV 2 are area for habitat which has representative population of natural species, HCV 4 are related to the potential damage from riparian belt, HCV 5 are river for transportation and area for protein resources. And HCV 6 are related to the sacred graveyard, ironwood statue, tembawang and scared tree. The results of the Social Impact Assessments (SIA) has shown that the company's development of oil palm plantation and palm oil mill production has significant and positive impacts toward the local livelihood and the society's social sustainability. The findings have defined how the company's business has can influence the key issues in the respective component of the social sustainability of the local community. There are three basic components description for society's social sustainability that influences the planning of the company's future operation.

2. Scope of EIA, SIA and HCV Assessment

2.1. Organizational information / contact person

General Data of the Company

Company Name	: PT Karya Makmur Langgeng
Deed of Establishment	: Notary Eliwaty TJitra, SH No : 73 dated on 22 December 1993
Capital Status	: Foreign Investment (Penanaman Modal Asing, PMA)
Taxpayer Notification Number	: 02.355.723.4-703.001
Company Address	: BGA Office, Melawai Street No 10, South Jakarta 12160
Type of Business	: Oil Palm Plantation & Processing
Status of Concession Land	: Permitted Area (Izin Lokasi) No.293 Year 2006 dated 13 October 2006, size ± 19,000 Ha. Plantation Business Permit (Izin Usaha Perkebunan) No. 551.31/2238/DISBUN-D/2006 dated 4 September 2006, size 17,800 Ha. Refference of Plantation Business Permit (referensi Revisi Izin Usaha Perkebunan) No. 100/1437/PEM/2013, dated 18 July 2013 size ± 19,000 Ha Plantation Business Permit (Izin Usaha Perkebunan) No. 510/DISBUN-D/2013 dated 16 November 2013, size 16,700 Ha. Permit Area Revised (revisi izin Lokasi) 525/1513/EkBang-A/2013 dated 22 May 2013, size ± 19,000 Ha.
Contact Person	: Francisca Damanik
Geographical Location	: See Picture 1, Picture 2, Picture 3 and Picture 4
Surrounding Entities	: North : IUPHHK PT INHUTANI (timber concession company) South : Bordering the City District Simpang Dua West : IUPHHK PT INHUTANI (timber concession company) East : Bordering the City District Simpang Dua

The scope of the EIA/AMDAL of PT KML show the local social entities within the Permitted area. The High Conservation Value assessment covers the Permitted area (Ijin Lokasi). It is also expanded into villages and other areas which are considered important to the proposed surrounding plantation area.

Figure 1. Location of PT Karya Makmur Langgeng in Indonesia



Figure 2. Location of PT Karya Makmur Langgeng in Kalimantan island

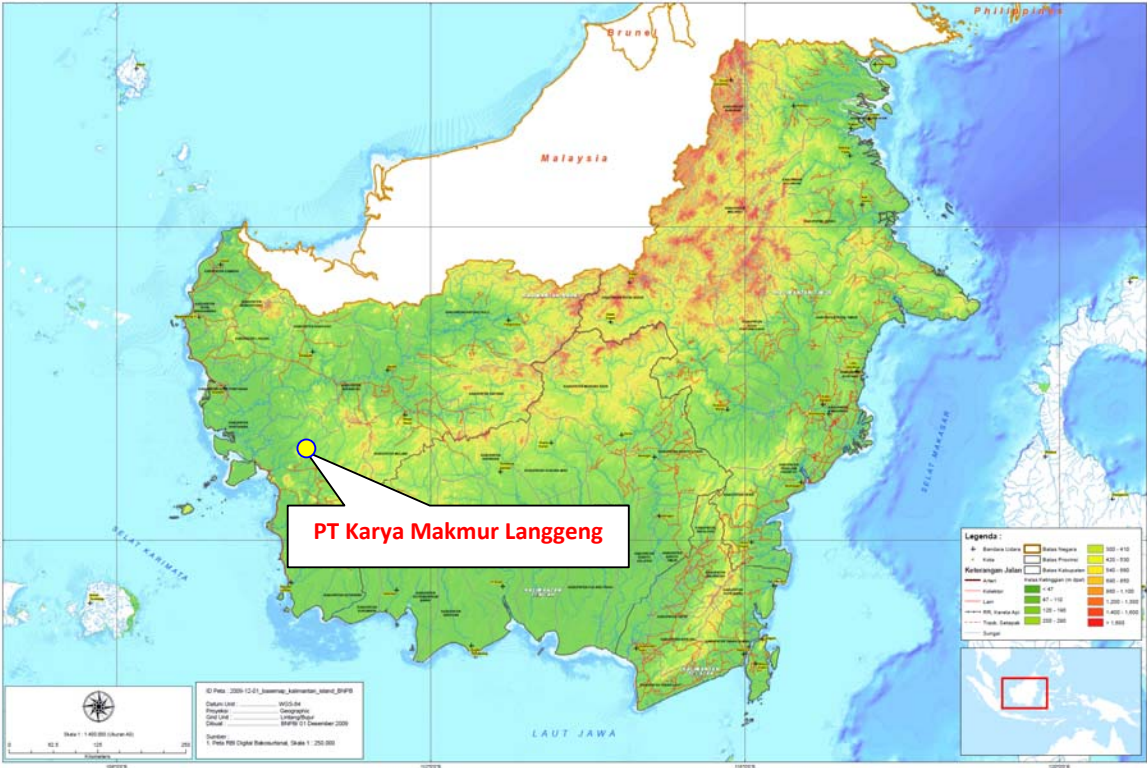
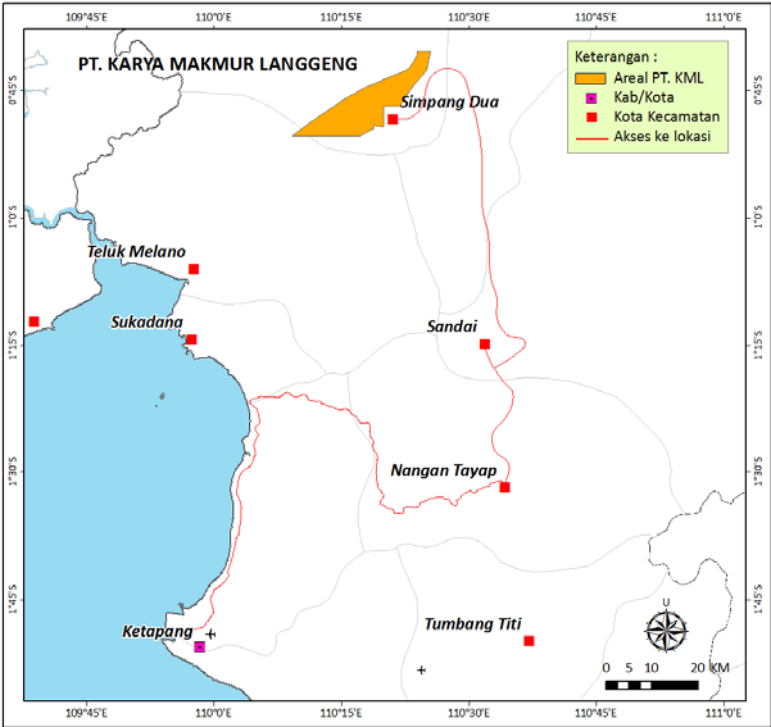


Figure 3. Location of PT Karya Makmur Langgeng in Ketapang Regency



2.2. List of legal documents, regulatory permits and property deeds

The permits that have been obtained by the company are inclusive of Consent License (Izin Prinsip), Permitted Area (Ijin Lokasi), Environment Impact Assessment (AMDAL) and Environmental Permit (Izin Kelayakan Lingkungan and Izin Lingkungan) and the Plantation Business Permit (Izin Usaha Perkebunan). The followings are the list of the licenses and recommendations:

Table 1. Types of permits and licenses recommendation PT Karya Makmur Langgeng

No	Licenses and recommendations	Issued by	Number	Note
1.	Deed of Establishment	Eliwaty TJitra, SH	No : 71	Registered 19-11-2003
2.	Tax Registration Code Number	Directorate General of Taxes, Ministry of Finance	02.355.723.4-703.001	Registered 09-08-2012
3.	Permitted Area (Izin Lokasi)	Regent of Ketapang (Bupati Ketapang)	No.293 Year 2006 (size ± 19,000 Ha)	Registered 13-10-2006
	Permitted Area an extention	Regent of Ketapang (Bupati Ketapang)	No.24 Year 2010 (size ± 19,000 Ha)	Registered 13-01-2010
4.	Plantation Business Permit (Izin Usaha Perkebunan)	Regent of Ketapang (Bupati Ketapang)	No. 551.31/2238/DISBUN-D/2006, (size ± 17,800 Ha)	Registered 04-09-2006
	Plantation Business Permit revised (revisi Izin Usaha Perkebunan)	Regent of Ketapang (Bupati Ketapang)	IUP no.510/DISBUN-D/2013 (size ± 16,700 Ha)	Registered 16 - 10 - 2013
5.	Permit Area Revised (revisi izin Lokasi)	Regent of Ketapang (Bupati Ketapang)	525/1513/EkBang-A/2013 (size ± 19,000 Ha)	Registered 22-05-2013 to 22-05-2014
6.	Environmental Permit (Izin Kelayakan Lingkungan)	Governor of West Kalimantan (Gubernur Kalimantan Barat)	No. 201/BLHD/2013 size ± 18,483.2 Ha	Registered 14-03-2013
7.	Environmental Permit (Izin Lingkungan)	Governor of West Kalimantan (Gubernur Kalimantan Barat)	No. 262/BLHD/2013 size ± 18,483.2 Ha	Registered 29-05-2013
8.	Reference of Plantation Business Permit revised (Surat referensi Izin Usaha Perkebunan dan ijin lokasi)	Regent of Ketapang (Bupati Ketapang)	No. 100/1437/PEM/2013, (size ± 19,000 Ha)	Registered 18-07-2013

2.3. Area and time-plan for new plantings

The proposed area for new planting area by PT KML is in the location of the Plantation Business Permit (Izin Usaha Perkebunan, IUP) which the owners of the land have received the free, prior and informed consent (FPIC) . The land development and planting of oil palm will begin in 2013 following the procedures of the RSPO New Planting Procedures (NPP).

Table 2. Estimation of new plantings area and time-plan for new planting PT Karya Makmur Langgeng

Potential Land	Year Planting (ha)			
	2014	2015	2016	total
12,500	1,500	6,000	5,000	12,500

3. Assessment Process and Procedures

3.1 Environment Impact Assessment

The Social Environment Impact Assessment of PT KML was carried out by CV. INTERGRAHA CITRA PERSADA, with address at Komplek Tanjung Pura University Jl. M.H. Thamrin No. P-42 Pontianak, West Kalimantan (Telephone No: 0561 – 745286)

The key consultants conducting these assessments are accredited with the Competency certificate which was approved by The National Association Of Professional Consultants Of Indonesia:

Table 3. Person and Expertise EIA Team Assessor in PT Karya Makmur Langgeng

Team composition	Name	Specification	Competence certificate
Team Leader	Yudi Andrian, ST.	AMDAL A dan B	Team Leader
Sub Team Physic – Chemist	Sulistiani, ST	AMDAL B,	Member
	Dhipa Raditya, ST		
Sub Team Biologi	Zulkifli, SP.M.Si.		Member
	Naveri, S. Hut		Member
Sub Team Leader of social culture-community health	Endang Mulyadi A.K, MSi		Member
	Sutriswanto S.K.M. M.Kes (Epid)		

Assessment Methods (data sources, collection, dates, program, and visited places)

The data collection process was strongly associated with the type of data that collected. In generally, studies will be conducted based on primary data and secondary data. Primary data obtained through observation, measurement and field interviews, and secondary data obtained from the literature collected, either from the company, or directly from related institutions in the study of this areal. The methods that were used to collect the data adjusted with components that can be studied. The used data must be accurate and reliable so that it could be use to analyse, measure and observe the environmental components which was predicted would be affected and components of action plan which was predicted to give significant impacts to the surrounding environment. The data were collected was as follow :

- Physic – Chemist Components (Climate, Air Quality and Noise, Hydrology, and Soil).
- Biological Components (Vegetation, Animals, and Water Biota).
- Socio-Economic Culture Components (Demography/ Population, Social, Economic, Social and Cultural).
- Environmental Health and Public Health Components (Environmental sanitation, public health level, level of public health services).

Methods of Significant Impact Estimation

Determination of the significant impact to the environment caused by the development activities of the plantation and the palm oil mill is only intended as an attempt to estimate the large and important environmental quality changes that are caused by the plantation development activities and the palm oil mills of PT KML in Simpang Dua Subdistrict and Simpang Hulu, Ketapang District. Method of significant impact estimation is by differentiating the magnitude impact and significant impacts.

A. Estimation on the Magnitude of Impact

Magnitude Impact are measured from the environmental quality changes. On estimates of changes in environmental quality are used formal and informal methods.

1. Formal Methods

Formal methods are used to estimate the impact of parameters which the system characteristics can be identified or estimated by using the approach of environmental threshold at national and regional levels.

2. Non Formal Methods

Non-formal method is a method that is based on the professional judgment of experts, logical frame analysis and analogy. This method is use to estimate the environmental parameters which characteristics system finds difficult to identify or estimated by modeling approach such as models, socio-cultural systems.

To simplify estimates of magnitude Impact from changes in quality of the matrix filling, then used the approach of environmental quality assessment scale. Level of environmental quality assessment scale using a scale of 1-5. Based on these figures assessment, environmental quality differentiated as: excellent (5), good (4), fairly good (3), bad (2), and very poor (1).

B. Determination of Important Impact Characteristics

Assessment of the important impact characteristics were in accordance to BAPEDAL decision Number: KEP-056 of 1994 on Guidelines Regarding Significant Impacts size. Meanwhile, in relation to the impact evaluation conducted by Important Impact scaling into two categories: important and less important. Characteristics Impact divided into two groups, negative impacts and positive impacts. It will be regarded as negative if the changes/ impact estimated is get adverse towards the environmental, and it is positive if the changes/ impact estimated giving beneficial to the environment.

C. Methods of Important Impact Evaluation

The Important Impact evaluation explore "holistic causative" against expected environmental components that is affected. For this purpose the supporting tools used is such as interactions matrix. Interactions matrix between activity components and environmental component contain magnitude of Impact and Importance of Impact. This Important Impact evaluation will conduct careful and thorough study to the primary impact (positive / negative) and secondary impacts (positive / negative), and also other derivative impacts on the environment component and activities component.

The study of the important source impact and hypothetical impact can identify the key issues that needs to be managed. Results of the Important impact evaluation are also expected to assist the decision making process in the selection of a viable alternative plan that takes into consideration of the environmental aspects of the proposed area.

3.2 SIA (Social Impact Assessment)

The Social Impact Assessment of PT KML was carried out by SAN which is located at: Komplek Sari Inten Number. 44 RT 02/RW 09, Ciomas Rahayu, Ciomas, Bogor - West Java, 16610 Telephone. 0251-7521685.

The key consultants conducting these assessments have been accredited and approved by the RSPO. The team members are:

Table 4. Person and Expertise SIA Team Assessor in PT Karya Makmur Langgeng

No.	Expert Name	Expertise/Position
1	Ir. Taufik., M.Sos	Sociologists
2	Rahmat Daulay SH, LLM	Legal Labour and
3	Doddy S.Sos, MS	Anthropologists
4	Indrawan., S Sos	Sociologists

Assessment Methods (data sources, collection, dates, program, and visited places)

Social Impact Assessment (SIA) on the ground was carried out as bellows :

Method of Executing the Study

The approach framework for SIA was by learning the present existing condition in PT KML, particularly the socio-economic condition, socio-economic impact of the company toward the surrounding of the community, and the community's perception. Based on the existing condition, preparation and compilation were made with SIA document and social management plan which contain activities that should be carried out in order to create ideal condition (desirable condition).

The sampling technique that is being used was purposive sampling (samples were selected on the basis of researcher's judgement on those samples that were the most suitable to be selected for the purpose and objectives of the research) and simple random sampling (technique of sample collection which gave the same chance for all population elements to be taken). In determining the distribution of research samples, representativeness of the samples was considered on the basis of population characteristics.

Purposive sampling was used for determining the sample villages, whereas simple random sampling was used for determining respondents which were taken from villages which became the sample. Sample villages were taken on the basis of typology/ characteristics of the community, accessibility, social vulnerability and inputs from PT. KML. On the basis of sampling techniques being used and inputs from the company, the villages which became the sample were village of Semandang Kanan, Kampar Sebomban and Paoh Concong .

Implementation in the field of Social Impact Assessment carried out by following the principles as follows:

1. Participatory: Issues and information identification was conducted in a participatory mechanism. This approach used the people as subjects and to use their experiences for social issues mapping, sharing their opinions and aspirations, as well as in designing and managing the changes that will take place.
2. Multiparty : Issues and information identification was conducted through multiparty approach that involved those party both directly and indirectly giving and/or receiving the impact.
3. Rapid and Ex - ante ; Issues and information identification were done quickly and based on alleged (forecast) to the change that occur rather than based on accurate factual data - as a solution to the Social Impact Assessment limitations, as well as of the time limitation.
4. Appreciative : Issues identification guided information in a positive manner, not only to determine the extent of the gap that happened, but also to explore their expectations, potential, and ideas to find solutions to the social issues that occur.
5. Social - Learning Cycle : Social impact assessment is not one linear process but more to a cycle process, which serves as a social learning processes to respond to any changes to the environmental

Secondary data or primary data collected was analyzed by integrating quantitative and qualitative method. Qualitative analysis emphasizing more on description and illustration of various facts and relation between variables being found in the field. Based on description and relation between variables existing in the field, analysis was performed on (1) socio-economic condition of the farmers and community in general, in the region, and in the areas around the company sites, (2) farmer's perception and general community's perception toward the company, and (3) analysis of impacts (positive and negative) of the company existence toward the environment and community socio-economics. Results of those analysis were synthesized in the form of document of SIA of PT. KML.

The findings obtained from the methods above were analyzed. The baseline of the analysis was based on RSPO criteria which is relevant to sustainable social aspects. The recommendations also covered other issues which were not required in the RSPO criteria, in the form of ideas or aspirations as the result of the field analysis.

3.3 HCV Assessment

The key consultants conducting these assessments have been accredited and approved by RSPO. The team members are:

Table 5. The name of team members Assessor and its approval status

No.	Expert Name	Expertise/Position	Status
1	Ir. Kresno Dwi Santosa, M.Si	Team Leader Socio Economic and Culture Expert	Approved by RSPO
2	Dr. Ir. Harnios Arief, M.Sc.F	Biodiversity (Fauna) Expert	Approved by RSPO
3	Ir. Sad Hasto Agus Suprpto	Biodiversity (Flora) Expert	Approved by RSPO
4	Dr. Ir. Rachmad Hermawan, M.Sc.F	Environmental Services Expert	
5	Kasuma Wijaya, S.Hut, M.Si	GIS Expert	
6	Yanuar Wicaksono, Amd	Biodiversity (Fauna) Assistant Expert	Approved by RSPO
7	Catur Wiradityo, S.Hut	Biodiversity (Fauna) Assistant Expert	
8	Domi Suryadi	Biodiversity (Flora) Assistant Expert	
9	Ainurrahman, Amd	Biodiversity (Flora) Assistant Expert	Approved by RSPO
10	Berry Lirra Rafiu, S.Hut	Environmental Services Assistant Expert	
11	Rikto, S.Hut	Environmental Services Assistant Expert	
12	R. Sigit Pamungkas, S.Hut	Socio Economic and Culture Expert	Approved by RSPO
13	Hutrizal Amran, S.Sos	Socio Economic and Culture Expert	
14	Riza Yuhniadi, S.Hut	GIS Assistant Expert	

Assessment Methods (Data sources, data collection, dates, program, and visited places)

Implementation Method

Date and Location

Identification and analysis of the HCV was carried out in the area of PT. KML at Semandang kanan district (Paoh Concong, Semandang Kanan) and Semandang Hulu District (Kampar Sebomban Village), Ketapang Regency, and West Kalimantan Province. The identification and analysis was held on 22 June until 7 July 2012.

Materials and Equipments

Materials used in the identification and analysis include are : *digital elevation model map, landsat image map, land system map/RePProt, indonesia topographical map (Rupa Bumi Indonesia map), forest land use map (TGHK), hydrology map, unit management administration map, IUCN red list of threatened species, The CITES Appendices, Government Regulation of Indonesia Number 7 1999 (PP 7 1999) and materials that used in the field survey are Guidance Book on Bird Life in Java, Bali, Sumatera and Kalimantan, a Field Guide to Mammals of Borneo, Payne et al., 1985, published by WWF Malaysia, Kuala Lumpur, Questioners and tally sheet.*

Tools used are GPS, compass (Brunton), plastic rope 50 m (marked at 2, 5, 10 and 20 m), circular/diameter gauge, camera, length gauge, binoculars, and stationeries.

Approach

There are 2 (two) factors that determine the success in maintaining and increasing HCV in the area of PT. KML, namely (1) the availabilities of identification and analysis of documents on the existence of HCV since this will be use as reference in preparing management and monitoring plans, and (2) management documents and monitoring plans for the identified high conservation value area (HCVA) which will be used as a reference in the management and monitoring of HCVA.

The success in the implementation of identification and analysis activities of HCV existing in the area of PT. KML is determined by 2 (two) factors, namely: (1) the availabilities of adequate data and updated secondary and primary data, and (2) proper and systematic documentation of activities in stages. The availabilities of updated and reasonably sufficient data and information are greatly dependent on the activities of field surveys which were carried out systematically, adequately and well planned. In order to conduct a field survey plan as expected, the reviews on the available documents/reports and maps and initial identification of HCV had to be done. Precise and systematic stages of activities to enhance the success of the identification and analysis of the existing HCV included field surveys, data processing, data analysis and synthesis, identification of HCV, analysis of HCV existence, and mapping.

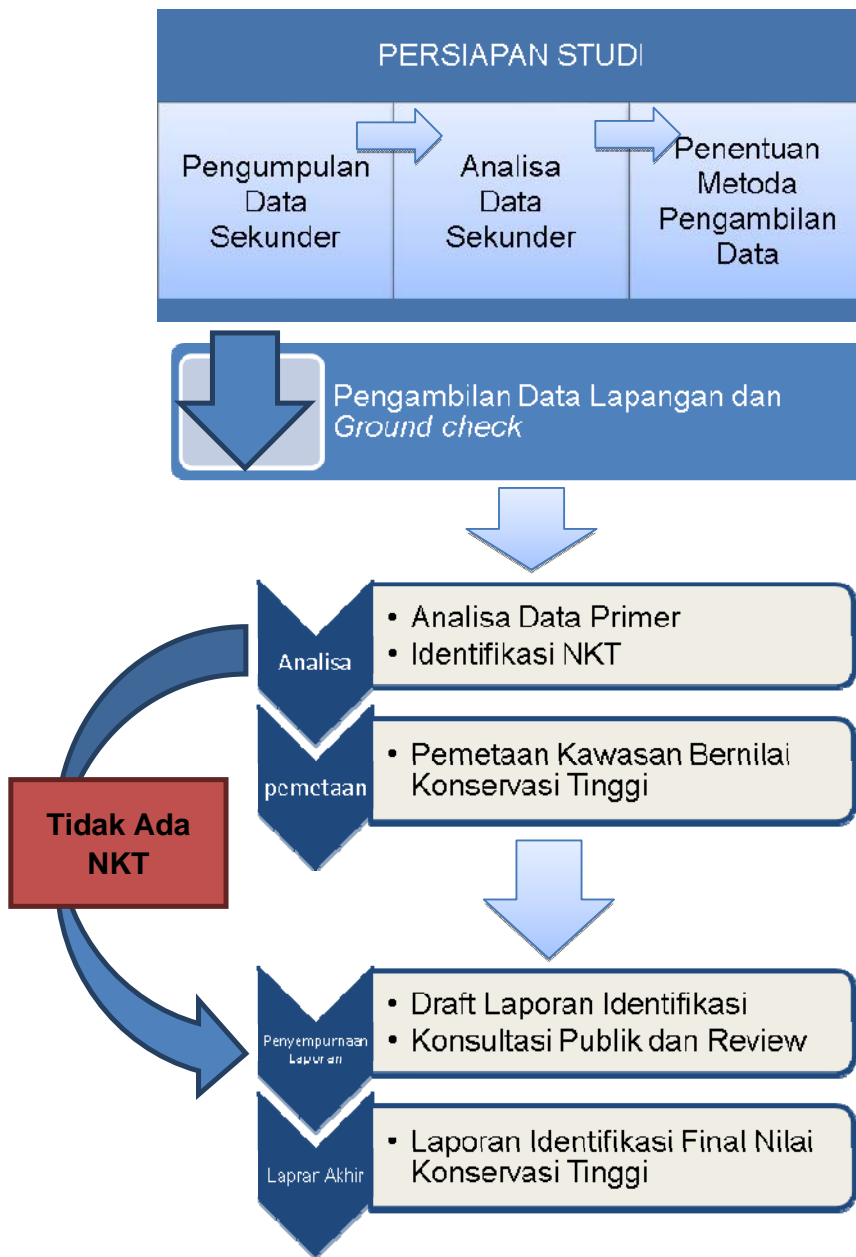


Figure 4. Approach in The Identification and Analysis of HCVs

HCV Identifying Methods

The assessment covers the Permitted Area (Izin Lokasi) which has been approved as the company's project area. Assessments also expanded into villages and other areas which was to be considered on its of relevance of importance to the proposed plantation area. The field survey was conducted on 22 June – 7 July 2012.

In the process, each observation team was accompanied by the field staff from the company and local representatives who are familiar with the site. Besides field activities, the team also collected information from the local people through individualistic interviews, Focus Group Discussion (FGD), as well as public consultations (the list of stakeholders in the participative process is included in **Appendix 1**). At the same time, confirmation and cross checking of the findings were carried out with the local people using the technique of purposive sampling – which included the socialites and the related interest parties.

The understanding and scope of HCV for the oil palm plantation sector refers to the HCVF definitions which apply to the forestry sector. The Identification of High Conservation Value in Indonesia was developed by the *Konsorsium Revisi HCV Toolkit Indonesia* (2008) - the toolkit for the revision HCV consortium. Other references used were IUCN, CITES, and other guidelines as well as the relevant laws and regulation of Indonesia (See **Appendix 2**).

4. Summary of Assessment Findings

4.1. Environment Impact Assessment

The development of oil palm plantation and palm oil mill of PT. KML in Simpang Dua sub district and Simpang Hulu, Ketapang District raises awareness of the environmental impact on the physical-chemical, biological, and social, economic, cultural and local public health, both positive and negative impacts. In the implementation of plantations development and palm oil mill of PT. KML, one aspect of which is the main consideration is the preservation of the environment, to ensure sustainable development.

The EIA study of the plantations activity and palm oil mill of is a single EIA activities / projects. The scoping study of the area boundary for Environmental Impact Assessment (EIA) of Oil Palm Plantation activities consider four (4) factors, namely: limit project / activity, ecological boundaries, social boundaries and administrative boundaries.

Plantation activities and palm oil mill was predicted to impact the environment, so it needs to be explored in depth including the four phases of activities: Pre-Construction Phase, Construction Phase, Operational Phase and Post-Operational Phase.

Magnitude and importance of the impact that needed attention in the study of EIA Plantation and Palm Oil Mill of PT KML at pre-construction phase, is a change in attitudes and perceptions and containing social unrest. At this phase the identified activities to be explored is the socialization and boundary demarcation and land acquisition.

Magnitude and importance of the impact that needed attention in the construction phase is a decrease in air quality and noise levels, decrease in the quality of surface water, land and forest fire potential, decreased in the diversity of flora and fauna species diversity decreased, increase in jobs and business opportunities, increase in incomes, changes in attitudes and perceptions as well as the decrease in public health. At this stage of identified activities could be the mobilization of heavy equipment, manpower recruitment, land clearing, construction of facilities and infrastructure, seeding and planting, maintenance of immature plants, factory construction and waste water treatment plant, construction of water channels and roads.

Magnitude and importance of the impact that needed attention at the operational phase is the reduction of air quality and increased in noise level, increased job and business opportunities, increase incomes, changing attitudes and perceptions, decreased levels of public health in the study area. At this stage the identified activities could be FFB harvesting and transport, maintenance of oil palm trees, FFB processing, repair and maintenance of palm oil mill, waste treatment and replanting.

Magnitude and importance of the impacts that needed attention at the post operation phase is the reduction of air quality and increased in noise level, decrease of local income, changing attitudes and perceptions, and community unrest. At this phase the identified activities could be labor dismissals, demobilization of heavy equipment, reforestation and revegetation, and also land handover to government and community.

Changes in some aspects of the environment (abiotic, biotic, social, economic, cultural and public health) in District Simpang Dua and Simpang Hulu, Ketapang District, due to these activities require further tightening in the utilization of available natural resources and optimizing the management and monitoring efforts which needed to be integrated into all components of the integrated business.

Magnitude and importance of the impacts that will be managed and monitored in the Environmental Management Plan and Environmental Monitoring Plan based on the results of the impact evaluation are: 1) Physical-chemical environment components include air and noise quality, surface water quality, and forest fires potential; 2) Social culture and public health components including : social unrest, job and business opportunities, perceptions, local revenue and public health level.

Environmental management of the environmental components that are experiencing fundamental changes, both positive and negative as a effect of the Oil Palm Development plan of PT. KML to be carried out in terms of the three approaches, are: technological, socio-economic-cultural and institutional.

The implementation of environmental monitoring carried out by PT. KML. The environmental monitoring reports will be submitted annually to the technical adviser of the government agencies

4.2. Social Impact Assessment

For developing the oil palm plantation and mill, PT KML has a Forest Relinquishment Areas Decree (SK Pelepasan Kawasan Hutan) No 689/Menhut-II/2011 on dated 8 December 2011 for the total areas of 18,483 ha. For the construction and development of oil palm plantations and processing industry, PT KML has an area of 19,000 ha under Permits Area revised Number 525/1513/EkBang-A/2013 (size ± 19,000 Ha)

PT KML is located between $110^{\circ}9'0.122''$ – $110^{\circ}25'31.235''$ BT dan $0^{\circ}40'23.732''$ – $0^{\circ}50'16.580''$ LS. PT KML border with others as follow:

PT KML located between $110^{\circ}9'0.122''$ – $110^{\circ}25'31.235''$ BT dan $0^{\circ}40'23.732''$ – $0^{\circ}50'16.580''$ LS. PT KML border with others as follow :

- North : IUPHHK PT INHUTANI (timber concession company)
- South : Bordering the City District Simpang Dua
- West : IUPHHK PT INHUTANI (timber concession company)
- East : Bordering the City District Simpang Dua

COMMUNITY CHARACTERISTIC

Dayak Simpang Main Customaries

Wahyuni, SR., (2002) mentions in her article that in the community (Indigenous Dayak Simpang) there are some major common law, namely: Marriage customary, violations customary: deaths customary, Keagong Dangeri customary (regional/ territorial). These laws governing the relationship between individuals and or those with society institutions that exist, formed uniquely in a set of verbal rules Called "Joran Arokng Lamaga Customary".

1. Marriage customary; is a set of verbal rules governing the marriage, started from engagement, marriage ceremony sequence and procedures to the issue of divorce and other matters relating to marriage.
2. Violation Customary (customary Plangar), is a set of verbal rules relating to norms, manners and morality in daily life. In this customary law, a violation of customary law is sanctioned in a form of material payments that are adjusted for the level of violation.
3. For indigenous peoples, it is not the value of the custom unit, but with the customary law, individual will not take any risk to violate moral norms and customs. Violation customary by Dayak Simpang is known as "amar basa", customary "Basa Peri" is the norm that makes or requires people to do good in their life.
4. Death Customary (Adat pati); is kind of customary law that regulates violations related to human body or life, directly and indirectly. The bottom line is not allowed to kill, hurt and even threaten one's life.
5. Keagokng Dangeri customary; this governs relation within indigenous territories and territorial area, which is divided in several rules:
 - a. *Babantdan Bapujo Basimah Bajamu*, the meaning is to improve the relationship between human, nature and God.
 - b. *Penyapat Uma Pataunt* is the customs related with farming activities.
 - c. *Sapat Tonah Customary*, is a set of rules relating to the territorial boundary of a fellowship in a group of indigenous peoples, and between one group against another. This customary reflects the authority of the people in their territory.

Local Development and Social Community Interaction

Based on Ketapang regency development vision and mission, policy direction is for community economic development and investment through a synergic partnership model supported by excellence in service. The increasing important role of the private sector to grow and develop the economy to be ready to compete regionally, nationally and globally is key to this policy. This call for increasing human resource quality to achieve comprehensive development. Increasing community participation in planning, implementation, and supervision of the construction as well as in maintaining and experiencing the result of development. Improving governance in accordance with good governance principles. The creation of a fair and responsible law enforcement and public stability and security to accelerate regional development are also Important.

Demography and Village Density around PT KML

The population of Simpang Hulu district based on the Simpang Hulu District Figures 2011 is 27,847 people. With an area of 3,174.5 km², the population density in the district is 9 people/km² Simpang Hulu. The district of Simpang Dua is a new district of the division of Simpang Hulu district which in 2003 has a total area of 226.9 km² with a total population of 7,507 people, so the population density is high at 33 people/km². At the level of the villages that surround PT KML, overview administrative area, population and population density is as shown in **Table 6**.

Table 6. Population density in the surrounding villages PT KML

Village	Area (km ²)	Total people	Density (people/km ²)
Paoh Concong	259.1	1,336	5
Semandang Kanan	241.06	3,035	13
Kampar Sebomban	335.39	1,307	4

Source: BPS (2011)

Based on the table 6. Sebomban Kampar village has the smallest population density of 4 people per km², whilst Semandang Kanan village is the village with the highest population density of 13 people per km². But in general, the density of population in the villages adjacent to PT KML is relatively low. Population density is measured to determine the carrying capacity of the environment to the pressures made by the community in the search for sources of livelihood. In addition, population density is associated with increasingly complex environmental issues such as:

- (1) Decreasing productive land, as fields and plantations are converted into residential areas of the community;
- (2) Population growth will increase household waste, both solid and liquid waste which will further increase the environmental pollution;
- (3) Another effect of population growth is community's increased mobility flows. As a result, the need for increased means of transportation will increase the need of energy such as petroleum. This can cause air pollution and make petroleum supplies declining, and;
- (4) The reduction of clean water availability. Population growth will also lead the increased demand for clean water, and this will lead to decreased water supplies.

The number of people in a particular region or community will raise the cost of environmental health, which will implicate on the quality of health of each individual in the community.

ISSUE OF PT. KARYA MAKMUR LANGGENG

Identification of social issues through participatory processes with stakeholders indicate that at least there are 7 social issues with the communities around PT KML and there are 5 given social conditions which may be influential in the PT KML plantation development. A complete list of issues, risks and social conditions are presented in Table 7.

Table 7. Issue of Karya Makmur Langgeng

No	Issue
1	PT KML under Bumitama Gunajaya Agro (BGA) Group has shown commitment and good faith in support of sustainable development of Oil Palm plantations. In physical form, this commitment is shown by studies of HCV and Social Impact Assessment (SIA) conducted before they build the plantation
2	There are some concerns from people in the targeted villages that the existence of oil palm plantations will displace the productive rubber forests. According to them, rubber farming is a business that they understand and it is a hereditary agricultural activity that exists in their village. From their rubber, the community get on average Rp. 100,000 - 200,000 per day per family. Rubber is the source of their livelihood. Because of this, Sekucing Baru sub Village and Sungai Tontang sub Village (Semandang kanan Village) and Kelipor sub village (Village Paoh Concong) reject the presence of oil palm plantation in their area.
3	In Pantan sub village FGD, some community leaders had a concern regarding "underground movement" by some people who feel close to the company (PT KML). This Movement is quite disturbing for promising a lot of things, as if they are representing the company and sometimes make an advantage by using some community leaders name to gain the approval and signature.
4	Community's understanding regarding of the land Right title (HGU) of companies are still low. In Sungai Tontang sub Village, there are concerns that compensation of crops (GRT) from Oil Palm companies will

	eliminate their rights to land forever. Due to fear of losing their land ownership rights permanently, they offer a partnership with an Oil Palm plantation system "independent plasma".
5	Some communities in the focus group discussions are not willing to convey their expectations related to the partnership, if there is oil palm plantation in their village. This because since from the beginning they have rejected the presence of Oil Palm plantation so that they feel there is no need to have any expectation of a partnership with oil palm companies. As in Pantan Sub Village, people still expect that the company would support their development activities if there is any oil palm plantation in their village areas. This Including company's support to improve the quality of education, health and respect for local values and customs.
6	There is another expectation raised by the Pantan sub village representatives that companies prioritize local employment, in accordance with the needs of the company and matches the skills / expertise of job applicants.
7	Customary law is still held strongly by the community. Companies are expected to increase the awareness to customary law and customary institutions that exist in order to avoid misunderstandings and customs violations which will lead to the payment of customary compensation (jipen).

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

In general, PT KML oil palm plantation development plan in several villages and sub villages in Simpang Dua and Simpang Hulu district in Ketapang regency has some social issues in the community which will be the basis of social sustainability for the people around the plantation. The conclusions of this social impact assessment are as follows:

1. PT KML Oil palm plantation development plan will potentially reduce rubber agroforestry plantation area that had been cultivated by the community for generations. From total 4 sub villages of study area, three (3) villages explicitly reject the presence of Oil Palm and one (1) village accept with some conditions.
2. One of the primary conditions to be considered by the company is to conduct a formal and intensive communication, in the sense of not using other parties concerned which will instead use it for his/her personal interest.
3. There is an expectation for a good and sustainable partnership program. With a good partnership, the community will get a lot of benefits from the company's support to improve the quality of education, health and the preservation of culture / tradition of local customs

The parties (stakeholders) referred to this Social Impact Assessment are those who will be impact or be impacted or will influence or be influence by the presence and operation of oil palm plantations. Field study results show there are 14 parties that will affect or be affected by the presence of oil palm plantations. The most important social risk is that people around PT KML area have used the land (inside PT KML permit) for cultivation and rubber plantation business.

Recommendation

PT KML had taken note of the social concerns raised by the various stakeholders (villages and sub villages in Simpang Dua and Simpang Hulu district in Ketapang) on the development of a oil palm plantation. In order to ensure social sustainability and minimise the negative impact to the communities and the people around the plantation, the following will be carried out:

1. Based on the results of the social impact assessment, companies can formulate an appropriate management plan as a form of Social Responsibility to Corporate Social conditions and Environment (Corporate Social Responsibility) in a participatory manner with the involvement of local stakeholders and alignment with local government development plan.
2. Pantan sub village, part of Sebomban Kampar village is a sub village located in the business license of PT KML openly willing to accept the presence of PT KML for oil palm plantations in the area of their village. In the process of compensation of crops (GRTT), they want it to be

presented to the public as a fair process and there will be no element of coercion with respect to laws and regulations in force as well as the principle of FPIC (Free and Prior Informed Consent). Procedures and mechanisms of GRTT also consider the readiness of the land owners before they actually release the land for an Oil Palm plantation.

3. Information related to the presence of PT KML considered important by the Pantan sub village community. Therefore, Pantan sub Village community expects PT KML to provide public disclosure to Pantan sub village gradually and when there is a company related information it should be delivered openly and directly, to avoid any misunderstanding between PT KML and the community.
4. Need for socialization and education regarding land and community rights (individual and communal/ indigenous/ customary) to secure land and natural resources. In this case the company can work with BPN to explain tenure issues and land ownership rights to communities.
5. PT KML Social Management Plan have to accommodate the interests of the surrounding community through its development program support in the village either in the form of rural infrastructure such as roads access and the rural economy, as well as clean water for the community. PT KML expected to take a role in a form of programs or efforts to improve the quality of education, health and respect for the values and customs of the local community.
6. The company develops recruitment mechanisms in a transparent manner by considering the representation of local culture and background as well as provide ease of the procedure and the acceptance standards of labor from the public regarding the company performance, which critically need a job.
7. Companies should respect and support the preservation of the customs and traditions of the people around the plantation. Respect and support of the company will increase public confidence and acceptance on the existence and operation of the company for the future.

4.3. HCV Assessments

Physical

Climatic conditions in the Simpang hulu and Simpang Dua are similar to other tropical areas where condition are classified into rainy and dry seasons. Generally, the rainy season occurs between October to March, while the dry season occurs between April and September. The duration of both of this season fluctuate, at times with longer dry season or a longer rainy season.

The physiography shows a land surface that can be a factor in the process of soil formation, giving effect to the development of land. Based on the slope map, most of the land are flat (0-8%) an area 65.91% of total the area, undulating (8-15%) cover an area of 29.05% of the total area, moderate step (15-25%) cover an area 2.10%, step (25-40%) cover an area of 0.28% of the total area and very step (> 40 %) cover an area of 2.66 % of total area.

The Plantation areas and the Processing Plant of PT KML are located in an area with a height of 11-320 m above sea level (asl). The important factors in soil formation are the parent material because it influences the physical and chemical structures of the soil. Almost all of the entire studied area is dominated by 5 land class system: Honja covers an area of 82.08% of total area, Gambut covers an area of 0.94% of total area, Rangkankau covers an area of 14.40% of total area, Telawi covers an area of 1.38 % of total area and Pakalunai covers an area 1.20% of total area.

The working area of PT KML includes Kapuas River watershed. The rivers that crossed the area are as many as 13 rivers and creeks. Drainage patterns in the area of PT KML is dominated by one river, the Semandang River. Use of rivers by the community is still intensive, both for drinking, bathing, washing, transport and others. In general, the water of the rivers meet the standards for local consumption needs, the workers in the plantations and oil palm crop irrigation even into the future.

Biological

Flora

There are 59 species found in the area of PT. KML, Based on the plant class, plant species found in the working area of PT. KML can be categorized based on the habitat, the composition of vegetation in the area can be differentiated into the 7 (seven) kinds of shrubs, palms, epiphytes, shrubs, lianas, herbs and trees.

None of the flora named above are in the “protected” species under PP. 7 / 1999. The assessment identified 31 plant species that are included in the List of the IUCN Red List; 1 species, CR / Critically Endangered; 4 species EN / Endangered; 1 species VU / Vulnerable with the details as presented in **Table Table 8**.

Table 8. List of Plant Species Found in the Area of PT. KML Based on Their Status

No	Local Name	Scientific Name	Family	Habitus	IUCN	CITES	PP
1	Akar kait	<i>Uncaria glabrata</i> (Bl.) DC.	Rubiaceae	Liana	-	-	
2	Ara Daun Kecil	<i>Ficus microcarpa</i>	Moraceae	Pohon	-	-	-
3	Arang-arang	<i>Diospyros bantamensis</i>	Ebenaceae	Pohon	-	-	-
4	Balukan seinang	<i>Tricalysia javanica</i> Kds.	Rubiaceae	Pohon	-	-	-
5	Bambu	<i>Bambusa vulgaris</i>	Poaceae	Pohon	-	-	-
6	Bangkirai	<i>Shorea laevis</i> Ridl.	Dipterocarpaceae	Pohon	-	-	-
7	Bayur	<i>Pterospermum diversifolium</i>	Sterculiaceae	Pohon	-	-	-
8	Bintangur	<i>Calophyllum grandiflorum</i>	Clusiaceae	Pohon	-	-	-
9	Bungur	<i>Lagerstroemia speciosa</i>	Lythraceae	Pohon	-	-	-
10	Durian	<i>Durio zibethinus</i>	Bombacaceae	Pohon	-	-	-
11	Harendong	<i>Melastoma malabathricum</i>	Melastomataceae	Perdu	-	-	-
12	Jabon	<i>Anthocephalus cadamba</i>	Rubiaceae	Pohon	-	-	-
13	Jambu monyet	<i>Anacardium occidentale</i>	Anacardiaceae	Pohon	-	-	-
14	Jihing	<i>Symplocos cochinchinensis</i>	Symplocaceae	Pohon	-	-	-
15	Kalumpang	<i>Cyathocalyx bancanus</i>	Annonaceae	Pohon	-	-	-
16	Karet	<i>Hevea brasiliensis</i>	Euphorbiaceae	Pohon	-	-	-
17	Kelapa	<i>Cocus nucifera</i>	Arecaceae	Pohon	-	-	-
18	Kelat	<i>Syzygium palembanicum</i>	Apocynaceae	Pohon	-	-	-
19	Kempas	<i>Koompasia excelsa</i>	Fabaceae	Pohon	-	-	-
20	KerANJI	<i>Dialium indum</i>	Caesalpinaceae	Pohon	-	-	-
21	Keruing	<i>Dipterocarpus costatus</i>	Dipterocarpaceae	Pohon	EN	-	-
22	Laban	<i>Vitex pubescens</i>	Verbenaceae	Pohon	-	-	-
23	Mahang	<i>Macaranga semiglobosa</i>	Euphorbiaceae	Pohon	-	-	-
24	Mahang daun lebar	<i>Macaranga gigantea</i>	Euphorbiaceae	Pohon	-	-	-
25	Mangga Hutan	<i>Mangifera indica</i>	Anacardiaceae	Pohon	-	-	-
26	Manggis hutan	<i>Garcinia celebica</i> L.	Clusiaceae	Pohon	-	-	-
27	Matoa	<i>Pometia pinnata</i>	Sapindaceae	Pohon	-	-	-
28	Medang	<i>Actinodaphne procera</i>	Lauraceae	Pohon	-	-	-
29	Medang Perawas	<i>Litsea tuberculata</i>	Lauraceae	Pohon	-	-	-
30	Meranti Bunga	<i>Shorea teysmanniana</i>	Dipterocarpaceae	Pohon	EN	-	-
31	Meranti merah	<i>Shorea almon</i> Foxw.	Dipterocarpaceae	Pohon	CR	-	-
32	Meranti Putih	<i>Shorea dasyphylla</i> Foxw.	Dipterocarpaceae	Pohon	EN	-	-
33	Mersawa	<i>Anisoptera costata</i>	Dipterocarpaceae	Pohon	EN	-	-
34	Nangka	<i>Artocarpus integra</i>	Moraceae	Pohon	-	-	-
35	Nibung	<i>Oncosperma tigillarum</i>	Arecaceae	herba	-	-	-
36	Nyatoh	<i>Palaquium rostratum</i>	Sapotaceae	Pohon	-	-	-

No	Local Name	Scientific Name	Family	Habitus	IUCN	CITES	PP
37	Paku-pakuan	<i>Nephrolepis radicans</i>	Oleandraceae	Liana	-	-	-
38	Pandan	<i>Pandanus sp.</i>	Pandanaceae	Herba	-	-	-
39	Pekawai	<i>Durio kutejensis</i> Becc.	Bombacaceae	Pohon	VU	-	-
40	Pelaik	<i>Alstonia pneumatophora</i>	Apocynaceae	Pohon	-	-	-
41	Pelawan	<i>Tristania obovata</i>	Myrtaceae	Pohon	-	-	-
42	Pulai	<i>Alstonia scholaris</i>	Apocynaceae	Pohon	-	-	-
43	Puspa/Penago	<i>Schima wallichii</i>	Theaceae	Pohon	-	-	-
44	Putat	<i>Planchonia valida</i>	Lecythidaceae	Pohon	-	-	-
45	Rengas	<i>Gluta renghas</i>	Anacardiaceae	Pohon	-	-	-
46	Rengas Manuk	<i>Melanorrhoea walchii</i>	Anacardiaceae	Pohon	-	-	-
47	Rokam	<i>Flacourtia rukam</i>	Flacourtiaceae	Pohon	-	-	-
48	Rotan	<i>Calamus caesius</i>	Arecaceae	Liana	-	-	-
49	Sengkuang	<i>Dracontomelon costatum</i>	Anacardiaceae	Pohon	-	-	-
50	Simpur	<i>Agrostistachys sessilifolia</i>	Piperaceae	Pohon	-	-	-
51	Sirih hutan	<i>Piper caducibracteum</i>	Piperaceae	Liana	-	-	-
52	Sungkai	<i>Peronema canescens</i>	Verbenaceae	Pohon	-	-	-
53	Tempening	<i>Quercus bennettii</i>	Fagaceae	Pohon	-	-	-
54	Tengkawang	<i>Shorea stenoptera</i>	Dipterocarpaceae	Pohon	EN	-	V
55	Tepus	<i>Eltingera punicia</i>	Zingiberaceae	Pohon	-	-	-
56	Terap	<i>Artocarpus rigidus</i>	Moraceae	Pohon	-	-	-
57	Ubah Merah	<i>Syzygium lineatum</i>	Myrtaceae	Pohon	-	-	-
58	Ubah Putih	<i>Syzygium sp.</i>	Myrtaceae	Pohon	-	-	-
59	Ulin	<i>Eusideroxylon zwageri</i>	Lauraceae	Pohon	VU	-	-
Jumlah							

Wildlife

There were 55 species of wildlife found in the area of PT KML and grouped in 34 families that consist of Mammals 11 species (7 families), Aves 37 species (21 families) and Reptile 7 species (6 families). Block T17 has the highest species with 28 species and Raraba river has the lowest species that is 19 species.

There are 21 species that are protected by Government Rule No 7/1999 i.e. 5 species of mammals, 12 species of birds and 4 species of reptile. Based on CITES, there are 15 species i.e. 2 species of Appendix I, 13 species of Appendix II.

Whereas, 55 species are included in IUCN RED LIST that consist of LC/Least Concern 45 species, NT/Near Threatened 4 species, VU/Vulnerable 4 species and EN/Endangered 2 species (see Table 9).

Table 9. Wildlife Species in the Area of PT. Karya Makmur Langgeng Based on Their Status

No	Name		Family	Conservation status		
	Local	Scientific		IUCN	CITES	PP NO 7
MAMALIA						
1	Bekantan	<i>Nasalis larvatus</i>	Cercopithecidae	EN	App I	v
2	Lutung kelabu	<i>Presbytis cristata</i>	Cercopithecidae	LC	App II	v
3	Monyet ekor panjang	<i>Macaca fascicularis</i>	Cercopithecidae	LC	App II	
4	Monyet beruk	<i>Macaca nemestrina</i>	Cercopithecidae	VU	App II	

No	Name		Family	Conservation status		
	Local	Scientific		IUCN	CITES	PP NO 7
5	Rusa Sambar	<i>Cervus unicolor</i>	Cervidae	VU		√
6	Kijang	<i>Muntiacus muntjak</i>	Cervidae	LC		√
7	Kancil	<i>Tragulus javanicus</i>	Tragulidae	LC		√
8	Berang-berang	<i>Lutra perspicillata</i>	Mustelidae	VU	App II	
9	Rindil bulan	<i>Echinosorex gymnura</i>	Erinaceidae	LC		
10	Babi hutan	<i>Sus scrofa</i>	Suidae	LC		
11	Kalong	<i>Pteropus vampyrus</i>	Pteropodidae	LC	App II	
	AVES					
1	Elang tikus	<i>Elanus caeruleus</i>	Accipitridae	LC		√
2	Elang-alap jambul	<i>Accipiter tyvirgatus</i>	Accipitridae	LC		√
3	Elang brontok	<i>Spizaetus cirrhatus</i>	Accipitridae	LC		√
4	Alap-alap capung	<i>Microhierax fringillarius</i>	Falconidae	LC		√
5	Pekaka emas	<i>Pelargopsis capensis</i>	Alcedinidae	LC		√
6	Raja udang meninting	<i>Alcedo meninting</i>	Alcedinidae	LC		√
7	Belibis batu	<i>Dendrocygna javanica</i>	Anatidae	LC		
8	Kekep babi	<i>Artamus leucorhynchus</i>	Artamidae	LC		
9	Rangkong badak	<i>Buceros rhinoceros</i>	Bucerotidae	NT	App II	√
10	Kangkareng hitam	<i>Anthracosceros malayanus</i>	Bucerotidae	NT	App II	√
11	Kangkareng putih	<i>Anthracosceros albirostris</i>	Bucerotidae	LC	App II	√
12	Cabak maling	<i>Caprimulgus macrurus</i>	Caprimulgidae	LC		
13	Taktarau melayu	<i>Eurostopodus temminckii</i>	Caprimulgidae	LC		
14	Delimukan zamrud	<i>Chalcophaps indica</i>	Columbidae	LC		
15	Pergam hijau	<i>Ducula aenea</i>	Columbidae	LC		
16	Punai bakau	<i>Treron fulvicollis</i>	Columbidae	NT		
17	Punai gading	<i>Treron vernans</i>	Columbidae	LC		
18	Tekukur biasa	<i>Streptopelia chinensis</i>	Columbidae	LC		
19	Gagak hutan	<i>Corvus enca</i>	Corvidae	LC		
20	Bubut alang-alang	<i>Centropus bengalensis</i>	Cuculidae	LC		
21	Bubut besar	<i>Centropus sinensis</i>	Cuculidae	LC		
22	Srigunting batu	<i>Dicrurus paradiseus</i>	Dicruridae	LC		
23	Layang-layang api	<i>Hirundo rustica</i>	Hirundinidae	LC		
24	Kucica hutan	<i>Copsychus malabaricus</i>	Muscicapidae	LC		
25	Burung-madu kelapa	<i>Anthreptes malacensis</i>	Nectariniidae	LC		√
26	Burung-madu sepah-raja	<i>Aethopyga siparaja</i>	Nectariniidae	LC		√
27	Burung-gereja Erasia	<i>Passer montanus</i>	Passeridae	LC		
28	Caladi belacan	<i>Dendrocopos canicapillus</i>	Picidae	LC		
29	Betet biasa	<i>Psittacula alexandri</i>	Psittacidae	LC		
30	Betet ekor-panjang	<i>Psittacula longicauda</i>	Psittacidae	NT		
31	Serindit Melayu	<i>Loriculus galgulus</i>	Psittacidae	LC		
32	Cucak kuricang	<i>Pycnonotus atriceps</i>	Pycnonotidae	LC		
33	Merbah cerukcuk	<i>Pycnonotus goiavier</i>	Pycnonotidae	LC		
34	Kareo padi	<i>Amaurornis phoenicurus</i>	Rallidae	LC		
35	Tiong emas	<i>Gracula religiosa</i>	Sturnidae	LC	App II	√
36	Gemak loreng	<i>Turnix suscitator</i>	Turnicidae	LC		
37	Kacamata biasa	<i>Zosterops palpebrosus</i>	Zosteropidae	LC		
	REPTILIA					
1	King kobra	<i>Ophiophagus hannah</i>	Elapidae	VU	App II	√
2	Kobra	<i>Naja sumatrana</i>	Elapidae	LC	App II	√
3	Senyulong	<i>Tomistoma schlegelii</i>	Crocodylidae	EN	App I	√
4	Biawak	<i>Varanus salvator</i>	Varanidae	LC	App II	√
5	Kadal kebun	<i>Eutrophis multifasciata</i>	Scincidae	LC		
6	Ular pucuk	<i>Ahaetula frasina</i>	Colubridae	LC		
7	Sanca kembang	<i>Python reticulatus</i>	Pythonidae	LC	App II	

Environmental Services Aspect

Region or ecosystem that is important as a provider of Water and Flood Control for Downstream Communities.

Region or ecosystem that is found in the area of PT KML is mainly lowland forest ecosystems and a little peat swamp forests; while the Cloud forest ecosystems, forest ridge and karst ecosystems are not found in the area.

Important Ecosystem and Its Relationship with the various Classes of Land Based on RePPPProT

Ecosystems found in the area of PT. KML consists of two (2) types, namely lowland forest ecosystems and peat ecosystem. Land classes found in the region consists of five (5) types, namely HJA (Honja), GBT (Gambut), RGK (Rangankau), TLI (Telawi) and PLN (Pakalunai). Based RePPPProT and HCV Toolkit (June 2008), land classes HJA, RGK, GBT, TWI and PLN including the threatened land systems and / or rare. However, because the condition of ecosystems has been much damaged (degraded) due to forest exploitation activities (logging) before any fields/cultivation, and forest encroachment activities (illegal logging), then some of the functions and benefits of ecosystems have degraded.

With regard to technical aspects of the management of oil palm plantations, the presence of lowland forest can be utilized as a land of oil palm cultivation. Similarly shallow peat lands, also technically can be used for oil palm cultivation.

But ecologically, particularly in peat ecosystems (with land system under GBT) will need to consider the legal aspects (relating to Regulation of the Minister of Agriculture No.14 years of 2009 and Presidential Decree No.32 of 1990), as well as other aspects (Prinsip 7 RSPO).

Regions that serves as a natural insulation to prevent the spread of forest fires and land

Regions that serves as a natural insulation to prevent the spread of forest fires and natural forest land is still in good condition, including swamp forests in the hydrological system (the peat swamp forest is still intact), swamp forest, inundation areas, other wetland and green lanes (green belt) with various types of fire-resistant plants. In the area of PT. KML there is area that can serve as a fire breaker is Semandang River.

Economy, Socio Culture of Local Community

Administratively, oil palm plantation of PT KML is located in Semandang Kanan district (Paoh Concong, Semandang Kanan) and Semandang Hulu district (Kampar Sebomban Village), Ketapang Regency, West Kalimantan Province. Based on the results of field observation and review of existing maps show that areas of High Conservation Value (HCVA) planned in the area of Oil Palm Plantations in the Area of PT KML, Central Kalimantan Province is 2,195.72 ha, with details as in **Table 11** and **Appendix 3**.

The identification result of HCV availability at PT KML is detailed in the below **Table 10**.

Table 10. The Identification Result of HCV Availability at PT Karya Makmur Langgeng Oil Palm Plantation Area

HCV		HCV AVAILABILITY
1	Area Has Important Biodiversity Level	
1.1	Area Posses or Give Supporting Function of Biodiversity for Protected Area and/or Conservation Area	Available
1.2	Critically Endangered species	Available
1.3	Area Has Habitat for Viable Population of Threatened, Circumscribed or Protected Species	Available
1.4	Area Has Temporary Habitat for Species or Group of Species	Available
2	Area Has Important Landscape for Naturally Ecological Dynamics	
2.1	The Area of Wide Landscape which has Capacity to Maintain the Process and Dynamics of Naturally Ecology	Not Available
2.2	The Natural Area which has Two or More Ecosystem with not Fragmented Contour (Continuously)	Not Available
2.3	Area which has Representative Population of Natural Species	Available
3	Area which has Rare or Threatened Ecosystem	Not Available
4	Area Provides Natural Environmental Services	

HCV		HCV AVAILABILITY
4.1	Important Area or Ecosystem to Provide Water and Flood Control for Community at Downstream Area	Available
4.2	Important Area to Control Erosion and Sedimentation	Available
4.3	Area which Has Function as Natural Border to Avoid the Spread of Forest Fire	Available
5	Natural Area which Has Important Function to Fulfill Basic Needs of Local Community	Available
6	Area has Important Function to Identify Traditional Culture of Local Community	Available

Analysis Result of the Availability of HCV

The area of Oil Palm plantation PT KML has 25 HCV Area with 2,195.72 ha in total area or it is coverage 11.51% out of the total area of Management Unit (18,483.2 ha). The HCV Area at the area of Oil Palm plantation PT KML are presented at **Table 11**. The Map of HCV Areas at Oil Palm plantation PT KML is presented at **Appendix 3**.

Table 11. The HCV Area of PT Karya Makmur Langgeng Oil Palm Plantation

Number	HCV Area	HCV Attribute	Area (ha)
1	Sungai Banjar	1.1,1,3,1,4, 2,3, 4.1, 5.	108.38
2	Sungai Bergoram	4.1	42.87
3	Sungai Blomah	4.1	52.06
4	Sungai Keba	4.1	28.5
5	Sungai Lamata	1.1,1,2,1,3,1,4,2,3, 4.1	80.26
6	Sungai Menggunung	4.1	27.14
7	Sungai Mengkasan	4.1	47.64
8	Sungai Mun	4.1	23.01
9	Sungai Pelanduk Jirak	4.1	17.83
10	Sungai Penyawan	4.1, 5	67.9
11	Sungai Raraba	1.1,1,3,1,4,2,3, 4.1	63.62
12	Sungai Selerang	4.1	18.33
13	Sungai Semandang/Prodan	1.1, 4.1, 4.3, 5.	893.73
14	Bukit Seriung	1.1, 4.1, 4.2	258.96
15	Bukit Batu Tulus	1.1, 4.1, 4.2	117.94
16	Bukit Dabog	4.1, 4.2	26.11
17	Bukit 17	1.1,1,3,1,4,2,3,4.1, 4.2	64.27
18	Kawasan Lindung Gambut (Potensial)	4.1.	179.59
19	Keramat Kompas Kelabo	6	0.005
20	Tembawang Sekucing Baru	6	47.03
21	Tembawang Tue	6	21.53
22	Patung Ulin	6	0.005
23	Keramat Nabo Putih Nago Ranting	6	0.005
24	Kompas Kelabo	6	0.005
25	Keramat Jajune	6.	0.005
Total			2,195.72

Internal Responsibility

Formal signing off by assessors and company

This document is the summary of assessment result on High Conservation Value (HCV) in PT Karya Makmur Langgeng Ketapang Regency West Kalimantan Province and has been approved by the Management of PT Karya Makmur Langgeng.

Sonokeling Akreditasi Nusantara



Kresno Dwi Santosa

Team Leader HCV & SIA

Dated : 16th October 2013

Management
PT Karya Makmur Langgeng,

Maman Aliman Utardi

General Manager

Dated : 16th October 2013

Statement of acceptance of responsibility for assessment

Assessment result document on High Conservation Value (HCV) of PT Karya Makmur Langgeng by Sonokeling Akreditasi Nusantara (SAN), will be applied as one of the guidelines in managing palm oil plantation in PT Karya Makmur Langgeng

Management
PT Karya Makmur Langgeng,

Maman Aliman Utardi

General Manager

Dated : 16th October 2013

Appendix 1 List of respondents and/or informal Focus Group Discussion (FGD) participants on site during the implementation process of social impact

DAFTAR HADIR
SOCIAL IMPACT ASSESSMENT
Perkebunan Kelapa Sawit . PT. KARYA MAKMUR LANGGENG (PT. KML)

WAKTU : Selasa, 03 Juli 2012

TEMPAT : Desa Kelipor, Desa Banih Concong, Kec. Simpang Hulu

NO	NAMA	INSTANSI	ALAMAT	TTD
01.	MAHFUD ROZIE	KONSULTAN	SEMARANG	<i>[Signature]</i>
02.	NARODUN P.D.	PT.KML	KETAPANG	<i>[Signature]</i>
03.	Foad	PT.KML	Jakarta	<i>[Signature]</i>
4	TAUFIEK U.	Konsultan	Jateng	<i>[Signature]</i>
5	Gudicik	Kepolisian	Kelipor	<i>[Signature]</i>
6	S. Adek	Masyarakat	Kelipor	<i>[Signature]</i>
7	U. GAIB	masyarakat	Kelipor	<i>[Signature]</i>
8	Y. Siti bela	masyarakat	Kelipor	<i>[Signature]</i>
9	S. MARIANUS	KADUS	Kelipor	<i>[Signature]</i>
10	B. Philipus	Masyarakat	---	<i>[Signature]</i>

DAFTAR HADIR
SOCIAL IMPACT ASSESSMENT
Perkebunan Kelapa Sawit . PT. KARYA MAKMUR LANGGENG (KML)

WAKTU : SELASA, 3 JULI 2012

TEMPAT : DUSUN PANTAN, DESA KAMPAR SEBELAN, KEC. SIMPANG HULU

NO	NAMA	INSTANSI	ALAMAT	TTD
01.	MAHFUD ROZIE	KONSULTAN	SEMARANG	<i>[Signature]</i>
02.	NARODUN KANDARID.	PT.KML	NANGATAP	<i>[Signature]</i>
3	TAUFIEK U.	Konsultan	Jateng	<i>[Signature]</i>
4	YUNUS	Masyarakat	Dusun Pantan	<i>[Signature]</i>
5	LAKINGSIUS	Ka-dus	Dsn. Pantan	<i>[Signature]</i>
6	JOLANGGIBH	Masyarakat	Psn. Pantan	<i>[Signature]</i>
7	YASON	-	Pantan	<i>[Signature]</i>
8	PULLY M	DIAPER	NANGATAP	<i>[Signature]</i>

DAFTAR HADIR
SOCIAL IMPACT ASSESSMENT
Perkebunan Kelapa Sawit . PT. KML

WAKTU : SENIN, 2 JULI 2012

TEMPAT : Dsn. Sungai Tontang, Ds. Semandang Kanan, Kec. Simpang Dua

NO	NAMA	INSTANSI	ALAMAT	TTD
13	A. Telem	KI-RTII	Sri Tanjung	<i>[Signature]</i>
14	Sepasius Joni	Kelua RTII	Sri Tanjung	<i>[Signature]</i>
15	Martiano	Masyarakat	-	<i>[Signature]</i>
16	Herdinata	Masyarakat	-	<i>[Signature]</i>
17	TAUFIEK U.	Konsultan	Jateng	<i>[Signature]</i>

DAFTAR HADIR
SOCIAL IMPACT ASSESSMENT
Perkebunan Kelapa Sawit . PT. KARYA MAKMUR LANGGENG (KML)

WAKTU : SENIN, 2 JULI 2012

TEMPAT : DUSUN SEKURUNG BARU, DESA SEMANDANG KANAN, SIMPANG DUA

NO	NAMA	INSTANSI	ALAMAT	TTD
01.	MAHFUD ROZIE	KONSULTAN	SEMARANG	<i>[Signature]</i>
02	LAURENSIUS	KADUS - Sek. Baru	Simpang Dua	<i>[Signature]</i>
03	N. LUANG	KADUS - Sek. Baru	Sek. Baru	<i>[Signature]</i>
04	MARAI	KADUS	Sek. Baru	<i>[Signature]</i>
05	Sya. Hisi	Tani	Sek. Baru	<i>[Signature]</i>
06	S. Budang	Pendidikan	Sek. Baru	<i>[Signature]</i>
07	P. MARI	Tani	Sek. Baru	<i>[Signature]</i>
08	Nangkik	Tani	Sek. Baru	<i>[Signature]</i>
09.	SEMAN	Tani	Sek. Baru	<i>[Signature]</i>
10	M. GUTE	-	-	<i>[Signature]</i>
11	MARUS. L	Tani	-	<i>[Signature]</i>
12	TAUFIEK U.	Konsultan	Jateng	<i>[Signature]</i>

DAFTAR HADIR
SOCIAL IMPACT ASSESSMENT
Perkebunan Kelapa Sawit . PT. KML

WAKTU : SENIN, 2 JULI 2012

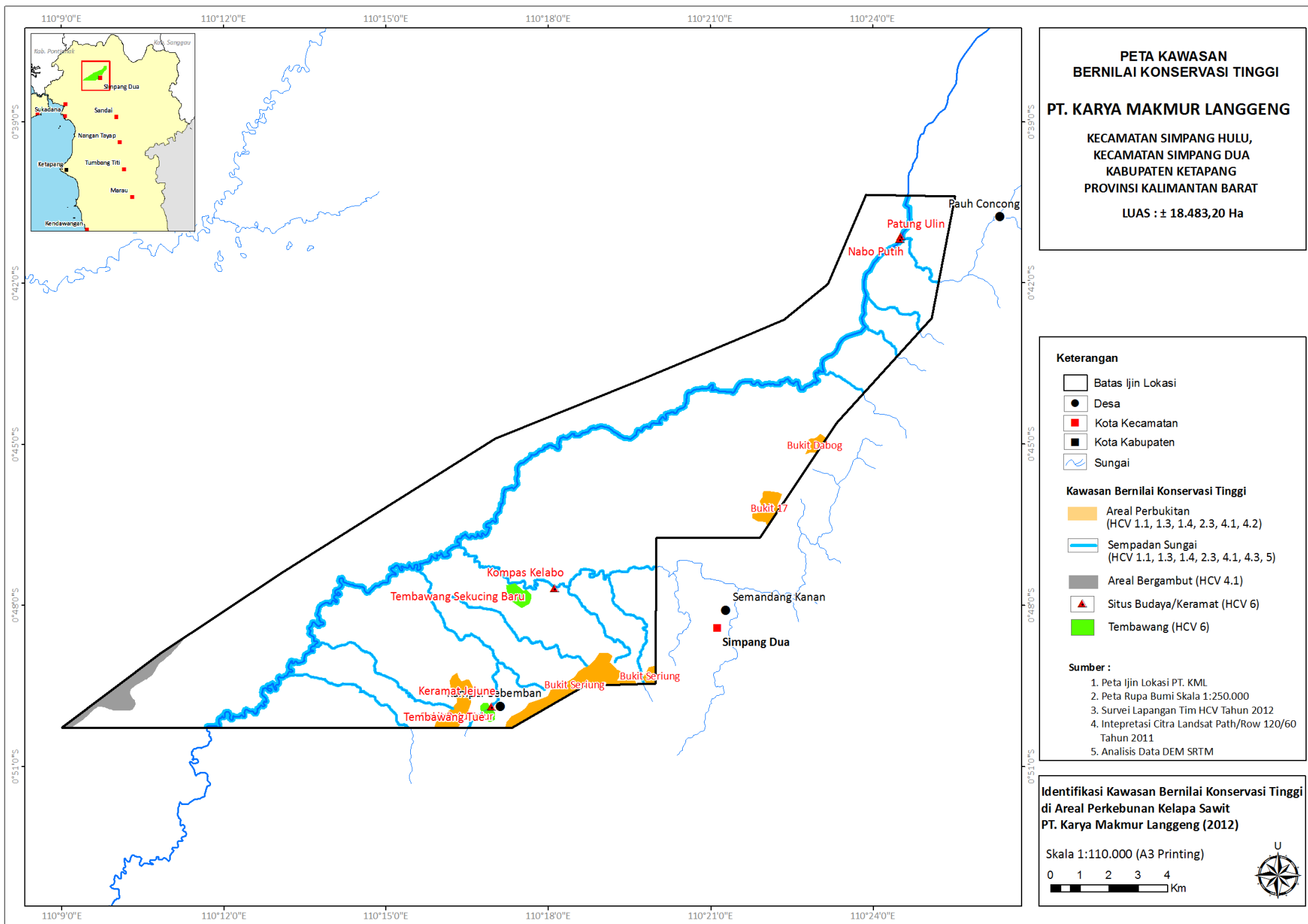
TEMPAT : DUSUN SUNGAI TONTANG, DESA SEMANDANG KANAN, SIMPANG DUA

NO	NAMA	INSTANSI	ALAMAT	TTD
01.	MAHFUD ROZIE	KONSULTAN	SEMARANG	<i>[Signature]</i>
02	Foad	PT.KML	Jakarta	<i>[Signature]</i>
03	NARODUN .P.D.	PT. KML	NANGATAP	<i>[Signature]</i>
04	PULLY M	DIAPER	NANGATAP	<i>[Signature]</i>
05.	Hasan. Am	KADUS	Sri. Tontang	<i>[Signature]</i>
06	P. Gendek	Toko. masj	Sri. Tontang	<i>[Signature]</i>
07	Yahya Ipsi	Toko. masj	Sri. Tontang	<i>[Signature]</i>
08	M. Edri	Masyarakat	Sri. Tontang	<i>[Signature]</i>
09	#. HASAN	KADUS	-	<i>[Signature]</i>
10.	M. Aleki	2	2	<i>[Signature]</i>
11	Lius	PT. OI.	ST	<i>[Signature]</i>
12	M. KENUS	Masyarakat	2	<i>[Signature]</i>

Appendix 2 List of prevailing applicable regulations and some supporting guidelines which used as references in the identification process of HCV and SIA study.

No	List / Type of Reference	Details
1.	Status of vulnerability according to the World Conservation Union (IUCN), 2009	CR : Critically Endagerd EN : Endangered VU : Vulnerable NT : Near threatened
2.	Status in terms of trade of world's wild fauna and flora (CITES), 2009	App. I : list of all plants species and animals which are prohibited to be internationally traded by any means. App. II : list of species that trading required rules to diminish the threats of extinction.
3.	RI State Legislation (Acts):	
	1931 <i>Dierenbeschermings Ordinance</i> (Wild Animals Protection Ordinance) / 1931	Wildlife protection
	1970 Decree of Minister of Agriculture, No. 421/Kpts/Um/8/1970	Wildlife protection
	1973 Decree of Minister of Agriculture, no 66/Kpts / Um / 2 / 1973	Wildlife protection
	1977 Decree of Minister of Agriculture, No. 90/Kpts/Um/2/1977	Wildlife protection
	1978 Decree of Minister of Agriculture, No. 327 / Kpts / Um/5/1978	Wildlife protection
	1979 Decree of Minister of Agriculture No. 247 / Kpts/Um/4/1979	Wildlife protection
	1980 Decree of Minister of Agriculture, No. 716 / Kpts/Um/10/1980	Wildlife protection
	1999 Government Regulation No. 7 of 1999	Wildlife protection
Government Regulation, PU 63/1993 PU	Determination width of the river riparian	
4.	Map of TGHK (Forest Land Use Agreement) and government's official documents concerning the appointment status of forest areas.	To determine the status of an area whether or not in the protected areas.

Appendix 3. HCV Map PT KML over lay with Permitted Area (18,438.20 Ha).



**PETA KAWASAN
BERNILAI KONSERVASI TINGGI**

PT. KARYA MAKMUR LANGGENG

 KECAMATAN SIMPANG HULU,
 KECAMATAN SIMPANG DUA
 KABUPATEN KETAPANG
 PROVINSI KALIMANTAN BARAT

 LUAS : ± 18.483,20 Ha

Keterangan

- Batas Ijin Lokasi
- Desa
- Kota Kecamatan
- Kota Kabupaten
- Sungai

Kawasan Bernilai Konservasi Tinggi

- Areal Perbukitan (HCV 1.1, 1.3, 1.4, 2.3, 4.1, 4.2)
- Sempadan Sungai (HCV 1.1, 1.3, 1.4, 2.3, 4.1, 4.3, 5)
- Areal Bergambut (HCV 4.1)
- Situs Budaya/Keramat (HCV 6)
- Tembawang (HCV 6)

Sumber :

1. Peta Ijin Lokasi PT. KML
2. Peta Rupa Bumi Skala 1:250.000
3. Survei Lapangan Tim HCV Tahun 2012
4. Interpretasi Citra Landsat Path/Row 120/60 Tahun 2011
5. Analisis Data DEM SRTM

Identifikasi Kawasan Bernilai Konservasi Tinggi di Areal Perkebunan Kelapa Sawit PT. Karya Makmur Langgeng (2012)

Skala 1:110.000 (A3 Printing)

0 1 2 3 4 Km

Appendix 4. Overlay map of HCV area and planting plan PT Karya Makmur Langgeng

