

RSPO

**RSPO New Planting Procedure
Summary Report of SEIA and HCV Assessment**

PT Karya Makmur Sejahtera

**Kotawaringin Timur Regency
Central Kalimantan Province
INDONESIA**

1. Executive Summary

PT Karya Makmur Sejahtera (KMS) is located in Mentaya Hulu District, Kotawaringin Timur Regency, Central Kalimantan Province. In February 2005, PT KMS has obtained location permit (“izin lokasi”) from Bupati of Kotawaringin Timur Regency, with decree No. 213.460.42 dated 28 February 2005 it consisting of ±13.000 ha area. PT KMS also received Plantation Permit (IUP) base on Decree of Kotawaringin Timur Regent No. 525.25/605/VIII/Ekbang/2006 on 4 August 2006 with total area ± 13.000 ha. Base on Cadastral information from National Land Agency (BPN), it could be described that PT. KMS consist of 2 (two) blocks of plantation, namely PT. KMS A with area size of 7.687,69 ha and PT. KMS B with area size of 5.294,32 ha and some part of PT. KMS Area is overlapping with the other Goodhope Asia Holding Subsidiary namely PT. Agro Wana Lestari (see figure 3). This area will be excluded from PT. Karya Makmur Sejahtera Management and will be manage by PT. Agro Wana Lestari.

Based on overlay map with Central Kalimantan Spatial Land Use Plan (RTRWP), according to Provincial Decree No. 8/2003, the concession area of PT KMS’s status is Land for Settlement and Other Uses (“Pemukiman dan APL/Areal penggunaan Lain”) which can be developed as oil palm plantation, this includes Production Forest which shall acquire Forest Land Release permit for development of oil palm plantation. Furthermore, based on map in the Appendix Decree of Forestry Ministry No. 529/MENHUT-II/2012 dated 25 September 2012, regarding to Forestry Development Authority Land Use Suitability Map of Central Kalimantan Indonesia for Conservation Forest & Other uses, the concession area of PT KMS status is under Limited Production Forest (HPT), Production Forest (HP), Convertible Production Forest (“HPK/ Hutan produksi yang dapat dikonversi”) and Other Land Uses (“APL/Areal Penggunaan Lain”).

In other hand, based on map in the Appendix Decree of Forestry Ministry No. 6982/Menhut-VII/PSDH/2014, dated 13 November 2014, regarding to indicative Map on Moratorium of new concession permit for Forest Use and Utilization and Amandement of Forest Allotment area and Other uses, PT KMS’s concession areas is not included in Moratorium as indicated in the map. There is no primary forest and peat land within proposed concession area. PT KMS is committed to comply with relevant regulation through a formal process to obtain Forest Swap permit from Forestry Ministry prior to land development. In other case, for areas which consist of water conservation area will be maintained as reserve and riparian areas alongside with other protected area according to HCV assessment results.

As part of its commitment PT KMS has enforced the RSPO New Planting Procedure using the Guidance Document approved by the RSPO Board in September 2009. PT KMS has conducted the Social Environmental Impact Assessment (EIA/AMDAL), High Conservation Value Assessment (HCV Assessment), and Social Impact Assessment to complying this RSPO procedure. The EIA/AMDAL was conducted by CV Mitra Alam Lestari in 2008 and this EIA document aproved by Bupati Kotawaringin Timur Regency on 26 June 2008. The HCV and SIA Assessment was conducted by HCV Team Faculty of Forestry IPB/Bogor Agriculture University (one of RSPO approved assessor) in October 2009.

The results of HCV Assessment by HCV Team of Faculty of Forestry IPB, showed that there is no primary forest in permit location of PT KMS. Based on analysis of Land System indicated that peatland was not found in the location permit. The results of the identification of HCV assessment showed that, there are seven types of HCV: HCV 1 (HCV 1.1, HCV 1.2, HCV 1.3); HCV 2 (HCV 2.3); HCV 4 (HCV 4.1, HCV 4.2); and HCV 6 in PT KMS location permits. The total HCV identified is about 1.870,6 ha.

The results of Social Impact Assessments (SIA) has shown that developments of palm oil plantation have potential and significant impacts by The presence of PT KMS

towards social sustainable for local community. The positive impacts or benefits generated towards the surrounding communities are in the form of employment and business opportunities, the village situation became crowded, better accessibility and the development of village infrastructures. While the negative impacts generated are such as increased pollution as a result of the use of chemicals, fertilizers and soil surface erosion, increased dust, social conflict and so on.

2. Scope of EIA, SIA, and HCV Assessment

2.1. Organizational Information/Contact Person

Company Name : PT Karya Makmur Sejahtera
 Deed of Establishment : Eliwaty Tjitra, SH
 No. 118 dated 20 October 2003
 Capital Status : Foreign Investment (Penanaman Modal Asing/PMA)
 Tax payer Notification : 02.355.685.5-022.000
 Number
 Company Address : Menara Global Building Lt. 16, Jl. Gatot Subroto, kav. 27
 Jakarta, 12950, Indonesia.
 Type of Business : Oil Palm Plantation
 Status of Conesion Land : Location Permits (Izin Lokasi) from Kotawaringin Timur
 Regent: No. 213.460.42 dated 28 February 2005
 (±13.000 ha).
 Contact Person : Wilton Simanjuntak
 E-mail: wiltens@goodhope-id.com,
 Phone: +62 2152892260 Ext : 552
 Geographical Location : 112°20'0" – 112°30'0" E and 01°50'0" – 02°00'0" S
 Surrounding Entities : **North** : Convertible Production Forest and PT Sarpatim
 Production Forest
East : Villages: Keminting, Tumbang Penyahuan, and
 Tanah Haluan
South : PT Sinar Mas
West : Limited Production Forest

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

The following are list of liscences and recomendation:

Table 1. Types of permits and licesed recomendation PT Karya Makmur Sejahtera

No	Licenses and recomendation	Issued by	Number	Remarks
1	Deed of establishment	Eliwaty Tjitra, SH	118	Registered 20 October 2003
2	Tax Registration Code Number	Directorate General of Taxes, Ministry of Finance	02.355.685.5-022.000	
3	Location Permits (Izin Lokasi)	Regent of Kotawaringin Timur	No. 213.460.42 dated 28 February 2005 (±13.000 ha).	
4	Plantation Business Permits (Izin Usaha Perkebunan)	Regent of Kotawaringin Timur	No. 525.25/605/VIII/Ekbang/2006	Registered August 2006 4
5	Forest Swap recommendation	Governor of Central Kalimantan	Governor of Central Kalimantan Decree	Letter from Ministry of

No	Licenses and recommendation	Issued by	Number	Remarks
	letter		No. 522/1348/Ek dated 30 December 2013, with total area ±3.763 Ha	Forestry issued on 19 November 2012; No. S.835/KUH-4/2012 (It is waiting for The formation of integrated team which were ratified by Forestry Ministry)
6	Environmental Permit	Regent of Kotawaringin Timur	No. 15/Komisi-Kotim/VI/2008	Registered June 2008 26

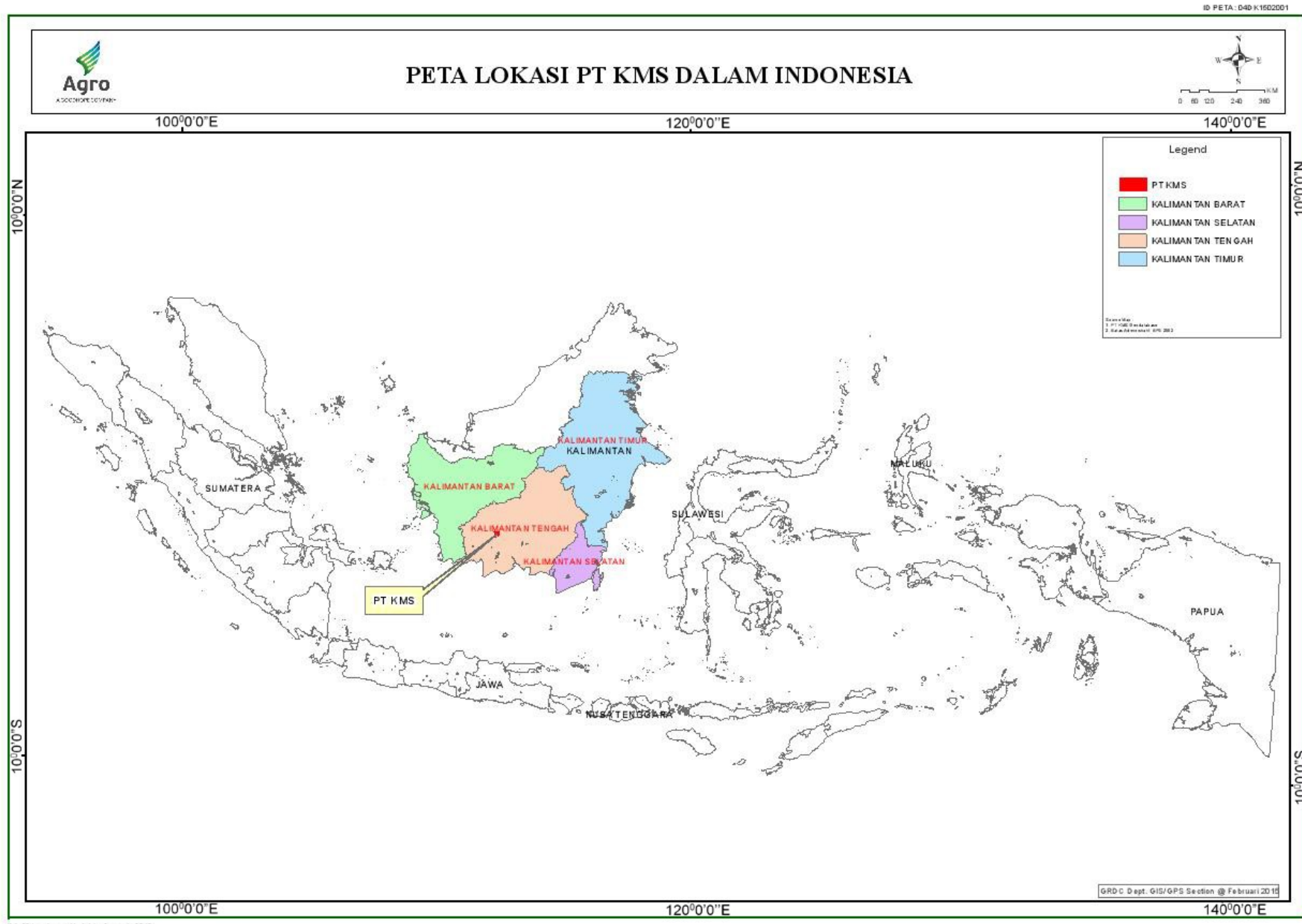


Figure 1. Location of PT Karya Makmur Sejahtera, Kotawaringin Timur Regency, Central Kalimantan

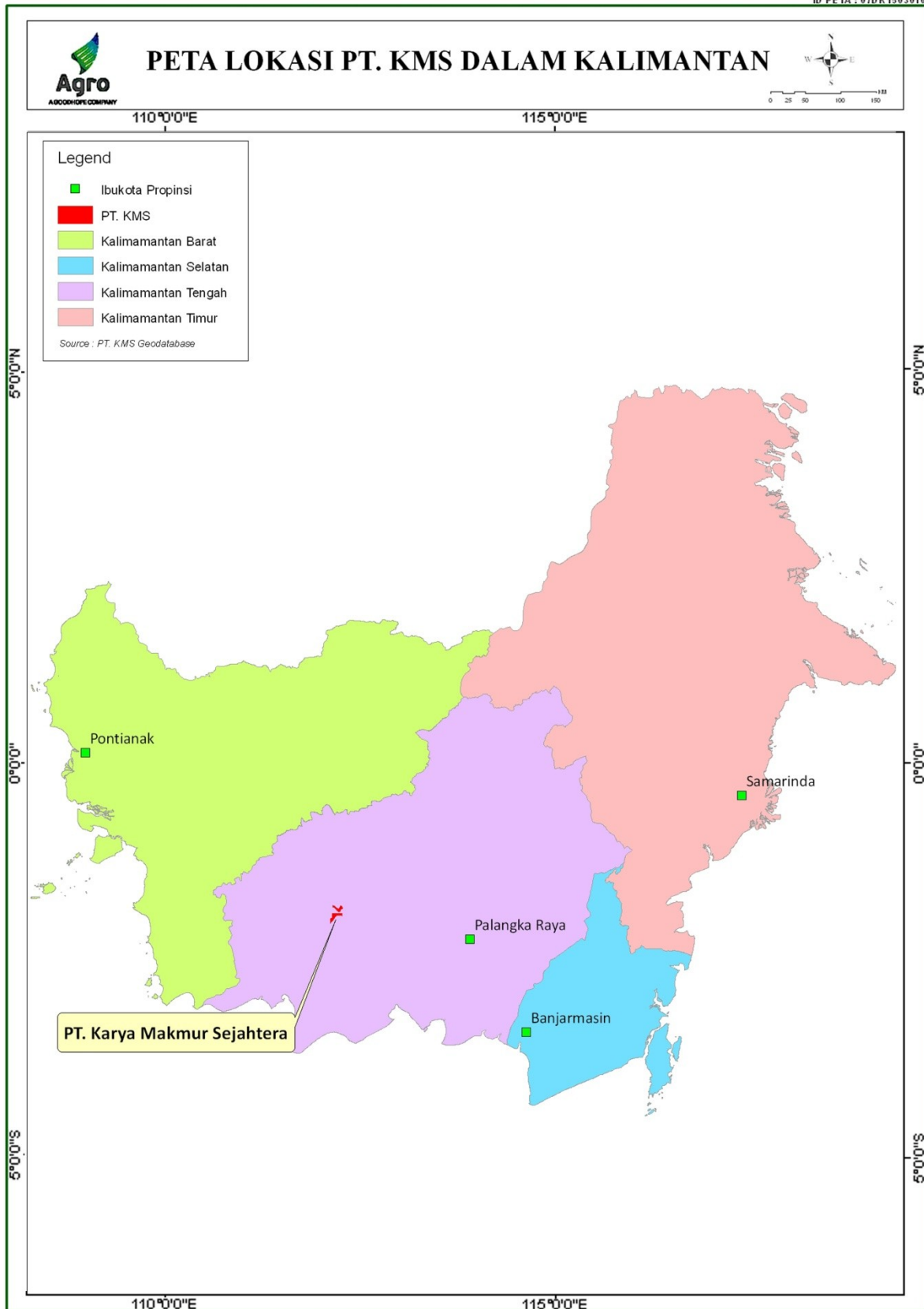


Figure 2. Location of PT Karya Makmur Sejahtera in Central Kalimantan Province, Indonesia.



MAP OF SURROUNDING ENTITIES PT.KARYA MAKMUR SEJAHTERA

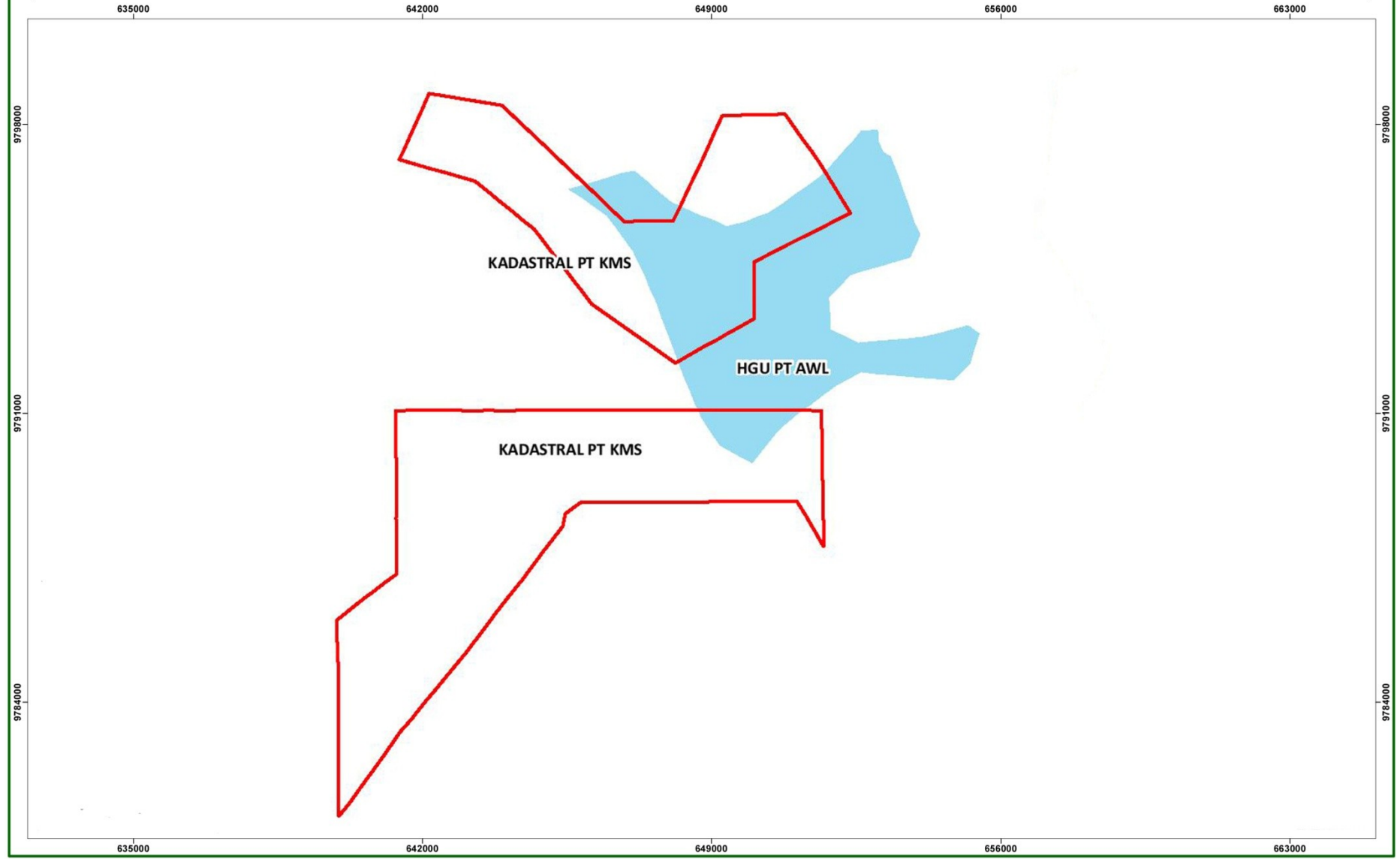
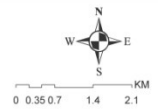


Figure 3. Map of Surrounding Entities of PT. KMS

2.3. Area and time plan new planting

PT KMS proposed new planting area in PT KMS location permits (13.000 ha) . In the time of this report, the company has an ongoing operational activities such as land clearing and planting. New planting area planted > 2010 is 1017,60 Ha and no HCV area being planted. The company also has a plan for the developing new planting area on the 2016-2019 periods, with total area is about 2.738 ha and all of the HCV Area is excluded from this development plan. The process of land development and planting of oil palm following the procedures of RSPO New Planting Procedures (NPP). Activities undertaken are land acquisition or compensation to land owners in addition to the socialization of plantation development plan or Free Prior and Informed Consent (FPIC).

Table 2. PT. KMS Planted area on 2010-2015 periods

Year Planting (ha)					Amount (ha)
2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	Total
476,9	57,3	189,6	68,8	225,0	1017,60

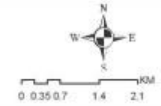
Table 3. Time plan for New Planting in PT KMS

Year Planting (ha)				Amount (ha)
2015/2016	2016/2017	2017/2018	2018/2019	2738
125	525	1160	928	



LAND COMPENSATION MAP

PT.KARYA MAKMUR SEJAHTERA



635000 642000 649000 656000 663000

Legenda

- Imaginary Block
- Estate Boundary
- Lahan GRTT

Total Lahan GRTT : 3131.63 Ha

Source Map :
1. Geodatabase A/W/ KMS
2. Data GRTT Up to 2010



9798000
9791000
9784000

9798000
9791000
9784000

635000 642000 649000 656000 663000

GRDC Dept. GIS/GPS Section @ Januari 2015

Figure 4. Map of PT. KMS Land Compensation Based on FPIC Process

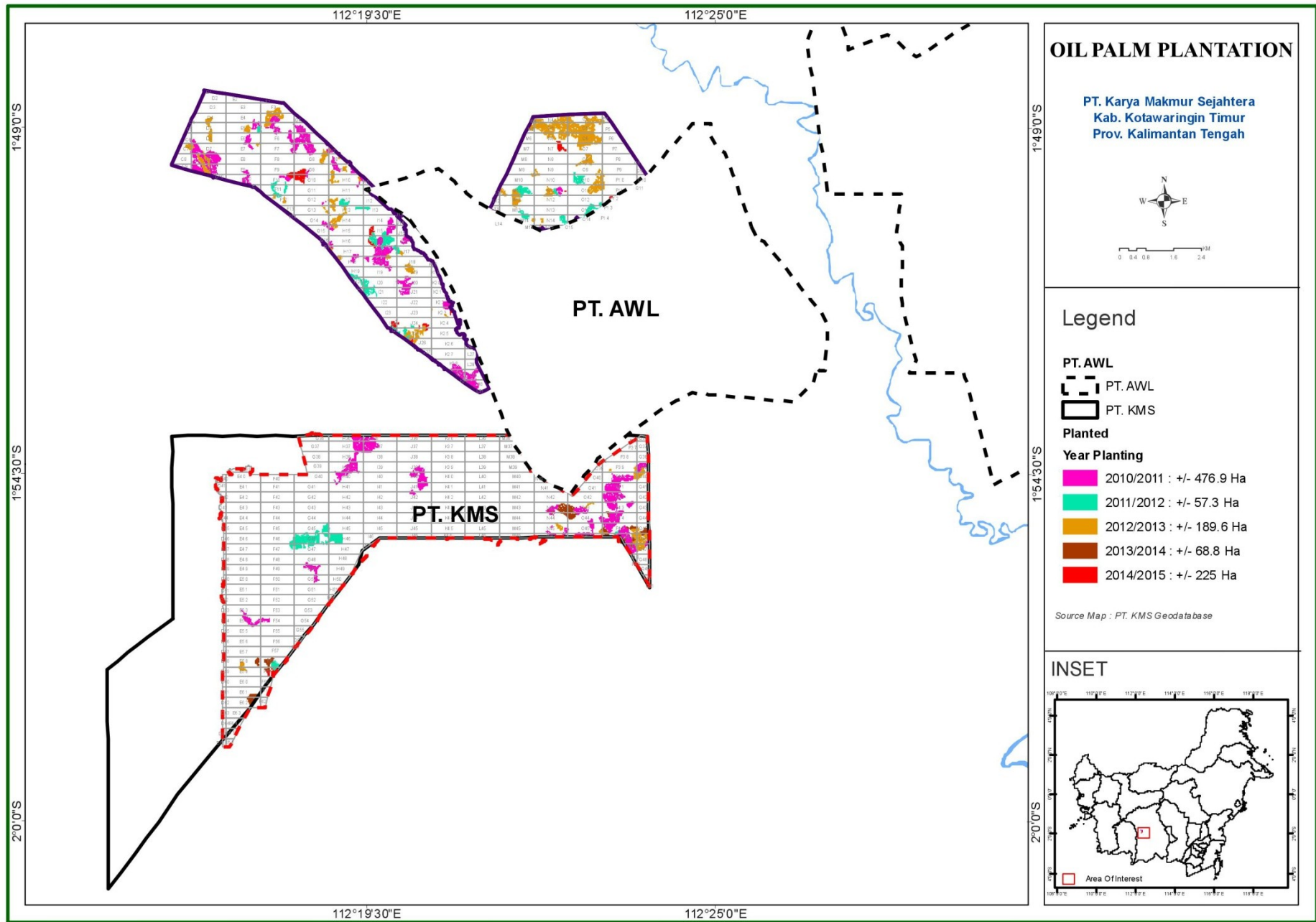


Figure 5. Map of New Planting Area in (After year 2010) the PT KMS Plantation

3. Assessment Process and Procedures

3.1. Environment Impact Assessment

The Environmental Impact Assessment of PT KMS was conducted by CV Mitra Alam Lestari Jl. Sisingamangaraja II No. 28 Palangkaraya, Central Kalimantan. Phone/Fax: 0536-3244524. Email: basuki127@yahoo.com

Table 3. Member of EIA Team from CV Mitra Alam Lestari

Position	Name	Expertise	Competence
Team Leader	Ir. Basuki, MSi.	Soil Science	AMDAL A, B, C
Member	Ir. H. Hermansyah, Msi.	Fishery & Water Quality	AMDAL A
Member	Ir. Setiarno, MP	Forestry, Biology, Vegetation, and Wildlife	
Member	Ir. H. Abdul Mukti, MP	Agrobusiness, Social Community Assessment	AMDAL A
Member	M. Kundori, SP	IT and Administration	

Assessment Methods of EIA

This assessment was involved primary and secondary data collection, field environmental sampling, and survey with purposive proportional sampling, terrestrial studies, stakeholders interview, land use and impact to surrounding community, socio-economic study, health and cultural aspects data collection and reference was made to the national, sector and regional regulations.

3.2. SIA (Social Impact Assessment)

The sosial Impact Assessment PT KMS was conducted by HCV Team of Faculty of Forestry IPB address at Jl Lingkar Akademik Kampus IPB Darmaga Bogor-16680, Phone +62 251 8621677/ Fax +62 251 8621526 Email: fahutan@ipb.ac.id

Table 4. The team members of SIA Assesor

No	Expert Name	Position	Status
1	Ir. Nyoto Santoso, MS	Team Leader	Approved by RSPO
2	Ahmad Faisal Siregar, S. Hut.	Social Culture	Approved by RSPO
3	Ir. Yohannes	Socio-Culture	
4	Jimmy Syahrasyid	Social	
5	Rahmi Oktarina, S. Hut	Social	

Assessment Methods of SIA

The social impact assessment was conducted using participatory method in the surrounding communities. The technique used in the study include document review, participatory observation, semi-structured interviews and in depth interviews, and focus group discussions. The framework of SIA Assessment that is to determine condition of the current existing condition at PT KMS, especially socio-economic conditions, socio-economic impact on the surrounding community and public perceptions.

Sampling technique used was purposive sampling (determination of sample based on an assessment carried out by reserchers that the sample is considered most suitable for purpose of data need) and Simple Random Sampling (sampling that gives equal oportunities to be taken to every element of the population). Purposive sampling is used to

determine sampling location and sample random sampling is used to determine respondents in the villages.

3.3. HCV (High Conservation Value) Assessment

The HCV Assessment of PT KMS Area was conducted by HCV Team of Faculty of Forestry IPB with address at Jl Lingkar Akademik Kampus IPB Darmaga Bogor-16680, Phone +62 251 8621677/ Fax +62 251 8621526 Email. fahutan@ipb.ac.id

Table 5. The team members of HCV Assesor

No	Expert Name	Position	Status
1	Ir. Nyoto Santoso, MS	Team Leader	Approved by RSPO
2	Ir. Heru B. Pulonggono, MSc.	Environmental Services	Approved by RSPO
3	Ahmad Faisal Siregar, S. Hut.	Social Expert	Approved by RSPO
4	Iling Nasihin, SHut, Msi.	Flora and GIS	Approved by RSPO
5	Eko Adhiyanto, S. Hut.	Flora and Ecology	Approved by RSPO
6	Ir. Jarwadi Budi Hernowo, MS	Ornithology and Wildlife	Approved by RSPO
7	Ir. Rachmad Hermawan, MSc. F	Flora and Environmental Services	Approved by RSPO

Assessments Methods of HCV

Scope of the study area is within the location permit granted to PT KMS and the study is extended to surrounding villages and other areas that are considered important. Field survey was conducted on October 2009. More than 9 observation points located in and around the study area that are relevant to this study were visited.

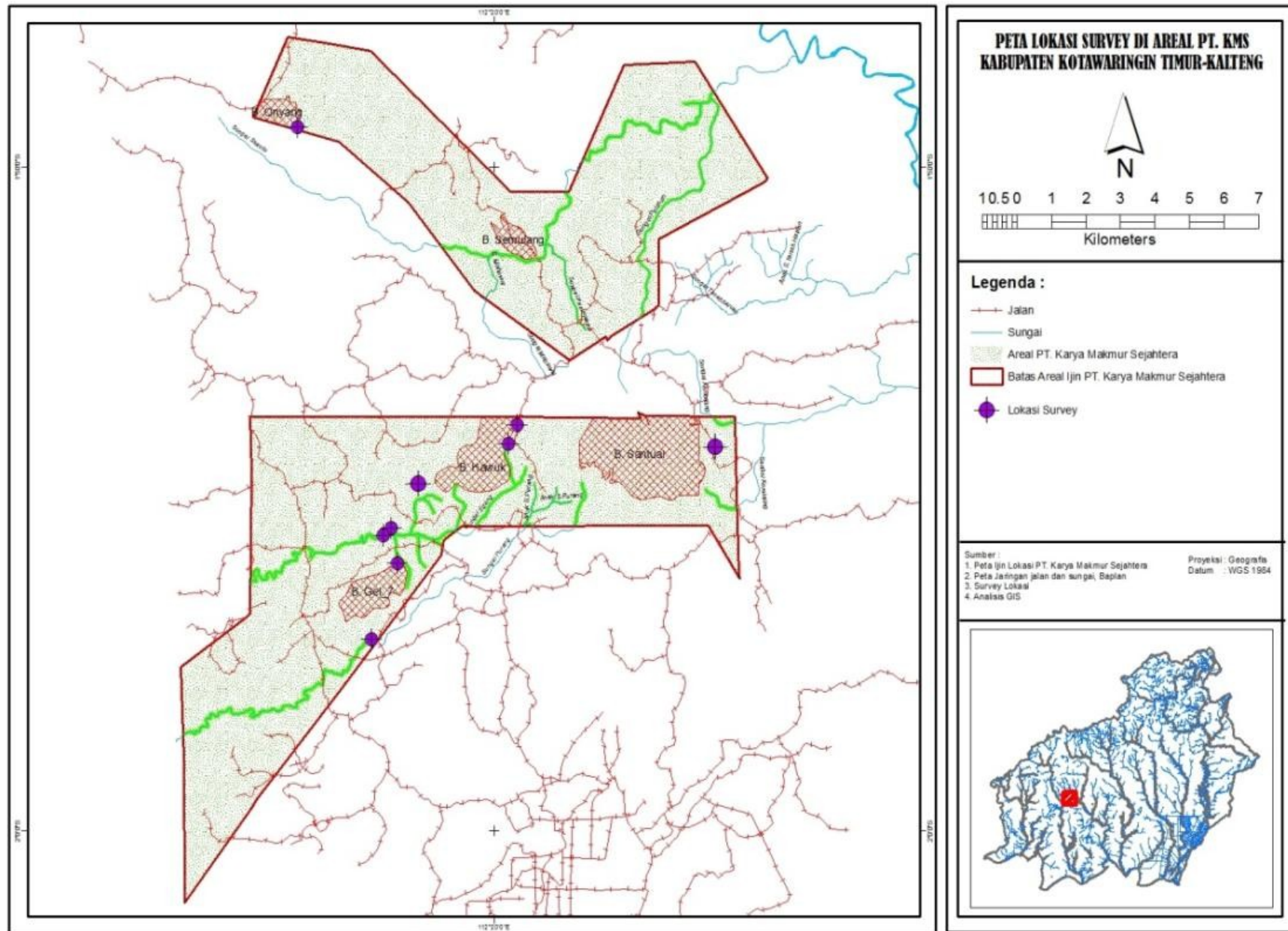


Figure 7. Location of observation points during field visit of SIA and HCV Assessment

For the purpose of this assessment, reference was made to the Indonesia HCV Toolkit 2008 [Identification of High Conservation Value Areas in Indonesia developed by the Consortium for HCV Revision Toolkit Indonesia (2008)]. Other references used that are relevant in the assessment also include IUCN, CITES, and other relevant guidelines/regulations in Indonesia.

There are two factors that determine success in conducted of the High Conservation Value (HCV) identification and analysis in the area of PT. KMS: (1) the availability of adequate and up to date data/ information, both primary and secondary data; and (2) Steps of appropriate and systematic activities. For planning field survei expected, review of available documents, maps and HCV pre-assessment needs to be done. Assessment is generally done through a series of steps consisting of: (i) Pre-assessment that includes a desk study and survey design, (ii) Field Survey in the form of observations and interviews, (iii) Data and Spatial Analysis and synthesis with the pre-assessment results and field surveys to determine the presence or absence, location, status, and landscapes of the HCVs in the area.

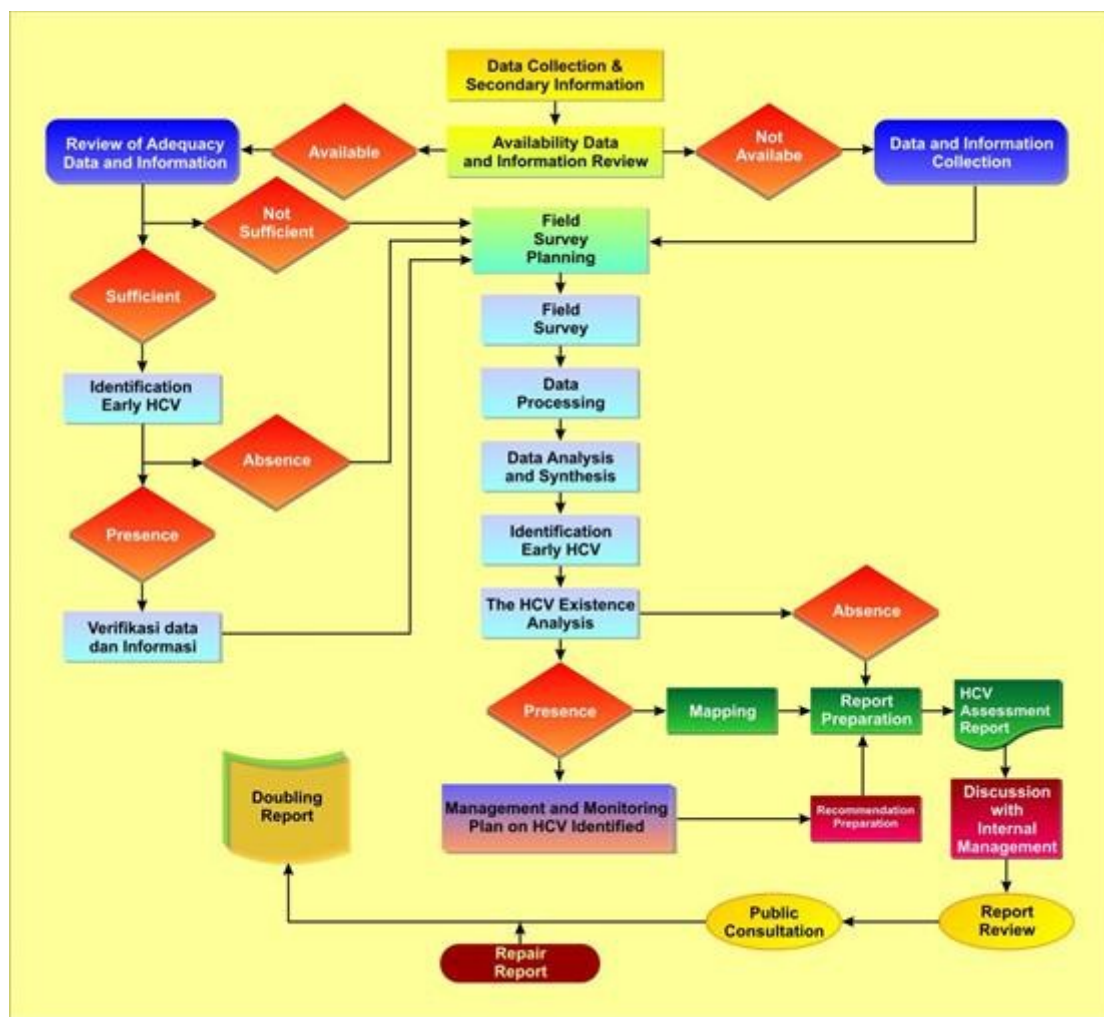


Figure 8. The process and steps of HCV Identification in PT KMS

4. Summary of Assessments Findings

4.1. Environmental Impact Assessment

The development process of oil palm plantation in PT KMS will give some impacts to the environment either positive or negative. The positive impact to the local government or local community include: Local revenue obtained optimally, employment opportunities for community, business opportunities to local community, an increase of infrastructure development in line with the rising incomes of local community, and increasing the wheel of economy society. In addition, activities of plantation development also result in negative impact to the environment on the physical-chemical, biological, social-economic, cultural, and local public health. The implication will be perceived by local people if not managed well.

The Development stages of Oil Palm Plantation activities consist of four important phases, namely: Pre-Construction, Construction, Operational, and Post Operational. All of these activities needed attention from EIA study. Interaction among of environmental components will result in a significant impact either directly or indirectly.

In Pre-Construction phase, the magnitude and significant impacts that need attention in this phase include: FPIC process, land compensation, and employment recruitment. In Construction phase, the magnitude and importance impacts that need attention are: land clearing activities, infrastructure development, land development, and Mill construction activities. The magnitude and importance impacts from these activities include: decrease in air quality and noise levels, decrease in the quality of surface water, land and forest fire potential, decreased in biodiversity level, increase in jobs and business opportunities, increase incomes, changes perception in attitudes as well as decrease in public health. In operational phase come from some activities include: planting, upkeep/ maintenance, harvesting, transporting, FFB hoarding, processing FFB to be CPO, transporting CPO. In Post-Operational phase, the magnitude and importance impact that need attention include: socialization in the end of operational activities, employment handling for dismissal, inventaritation, reclamation or revegetation.

Magnitude and importance impacts that will be managed and monitored in Environmental Management Plan and Environmental Monitoring Plan complied based on the result of evaluation: 1) Physical-chemical ; and 2) Socio-culture and public health.

4.2. SOCIAL IMPACT ASSESSMENT

CHARACTERISTIC OF COMMUNITY

1. Population

Population of villagers around PT KMS 3.497 people it covers 5 villages with the total amount of 923 households. Average family member in all villages about 3-4 people.

Table 6. Number of people in the villages around PT KMS (Census 2009)

No	Village	Number		Number of Peoples	Number of Households
		Males	Females		
1	Tumbang Keminting	354	310	664	186
2	Tanah Haluan	127	132	259	76
3	Tumbang Penyahuan	698	628	1.326	343
4	Tumbang Payang	558	485	1.043	270
5	Tewei-hara	104	83	187	48
	Total	1841	1.638	3.479	923

2.Landownership and land legality

The 86,13% number of the total five villagers in PT KMS (923 households) have lands and only 13,87% are landless. Most of households have a land between 0,5-2 hectares wide (61,65%). The big landscape of villages and very cheap land make land occupancy in this area is very wide (more than 2 ha). Kind of trees and agriculture product that planting by local people are field rice, rubber trees, rattan, corn, crops, and fruits.

3.Cost of Living Index (CLI)

CLI values in those five villages, indicated the occurrence of inequality in expenses and living costs. The lowest CLI value is in Tumbang Payang village (41,7) and this includes as a village with low living cost category. While the highest CLI value is in Tumbang Keminting Village (75,1) and this includes as a village with high living cost category. The difference of CLI values in those five villages are made by difference in family's income levels in each village.

STRATEGIC ISSUES

1. Land Tenure

Problems identified related to tenure in those three villages are a) The narrowing of land ownership; b) existence of multiple claims by villager; c) unclear village boundaries; and d) public requires clarity about the location that will be compensated from land seller and company.

2. Environment

River water pollution due to land clearing activities is one of issued which concerned the community. Best practices of fertilizer and chemical use is highly expected by community to avoid pollution. They expected company will implement best management practices in oil palm plantation that consistently maintain protected areas and rehabilitated degraded area.

3.Socio-Economic

Main issues related to the socio-economic in five vilages are: land dispute, Lack of communications and coordination between company and community, Lowland productivity caused by lack of skills and knowledge of village community in agriculture technicue, Lack of public health services, lack of educational facilities, and high dependency of communities to the river/watershed.

Positive impacts of most people to perception the activities of PT KMS are: accessibility, business oportunity, and employment opportunity. The social risk if not aticipated early will accumulate and bring collective actions to communities. Design for strategic communications between company and community is need so that social activities can be carried out effectively without disrupting production process. Some of recomendations to the company are: Build the social communication strategy to surrounding communities, Land tenure issues (etc. Land Compensation/land dispute) should be involving all stakeholders (governemt official, costumary leader, land owner), Develope CSR programme that focused to develope public facilities or improve productive activities of villager, education, and community development.

STAKEHOLDER IDENTIFICATION AND ANALYSIS

It is identified that there are 67 relevant stakeholders with tenure issues, community development, environment and health as well as NGOs and mass media. Stakeholders identified give varied appreciations and supports positive. Harmonious relationship has been established between PT. KMS with trade union, with the surrounding communities, with other oil palm plantations, with community leaders, with village government and international communities. Other positive supports are also received from DPRD, local governments and NGOs and this make positive public image of PT KMS built in the international community and mass media.

Table 7. List of PT KMS Stakeholder based on Social Impact Assessment

Institution Level	Stakeholder
International	<ol style="list-style-type: none"> 1. PBB 2. WWF 3. RSPO 4. Global Society
National	<ol style="list-style-type: none"> 1. Indonesian Government 2. Ministry of Forestry 3. Ministry of Agriculture 4. National Land Agency
Provinsi	<ol style="list-style-type: none"> 1. Government of Central Kalimantan Province 2. Forestry Agency of Central Kalimantan Province 3. Nature Conservation Agency (BKSDA) of Central Kalimantan Province 4. Manggala Agni of Central Kalimantan Province
Regency	<ol style="list-style-type: none"> 1. People Representative Council of Kotawaringin Timur 2. Regency Court of Kotawaringin Timur 3. Regency Attorney of Kotawaringin Timur 4. Government of Kotawaringin Timur 5. Regional Agency for Planning and Development of Kotawaringin Timur 6. Regency Revenue Agency of Kotawaringin Timur 7. Regency Controlling Agency of Kotawaringin Timur 8. Forestry and Plantation Agency of Kotawaringin Timur 9. Environmental Agency of Kotawaringin Timur 10. Health Agency of Kotawaringin Timur 11. Educational and Sport Agency of Kabupaten Kotawaringin Timur 12. Pengurus Daerah Lembaga Musyawarah Masyarakat Dayak dan Daerah Kalimantan Tengah Kabupaten Kotawaringin Timur 13. Yayasan Dayak Bersatu 14. Gabungan Serikat Buruh Industri Indonesia 15. Forum Reformasi Masyarakat Dayak Daerah Kotawaringin Timur 16. Lembaga Peduli Masyarakat Desa dan Pelestarian Fungsi Hutan Kotawaringin Timur 17. Forum Peduli Masyarakat Kotawaringin Timur 18. Bakti Nusa Kotawaringin Timur 19. Forum Peduli Hutan dan Lingkungan Kotawaringin Timur 20. Persatuan Purna Bhakti DPRD Kotawaringin Timur 21. Forum Peduli Lingkungan dan SDA Kotawaringin Timur 22. Barisan PAM Swakarsa Tambun Bungai Kotawaringin Timur 23. Pemberdayaan Masyarakat Pedesaan 24. SP Kahutindo 25. Pelopor Pembangunan dan Pahaga Petak Danum Habaring Hurung P4DHH 26. Livestock and Agricultural Agency of Kotawaringin Timur 27. Industrial and Trading Agency of Kotawaringin Timur 28. Mining and Energy Agency of Kotawaringin Timur 29. Cooperative and Micro Business Agency of Kotawaringin Timur 30. Labour and Transmigrant Agency of Kotawaringin Timur 31. Public Service Agency of Kotawaringin Timur 32. Marine and Fisheries Agency of Kotawaringin Timur 33. Tourism Agency of Kotawaringin Timur 34. Civil Empowerment Agency 35. Regency Police of Kotawaringin Timur

Institution Level	Stakeholder
	36. Village Government Department 37. Governance Department 38. Economical Department 39. Law Department 40. University 41. NGO 42. Mass Media 43. Regency Military Army
District	1. Bukit Santuai District Government 2. Bukit Santuai District Police 3. Bukit Santuai District Military Army 4. Kademangan Bukit Santuai
Local	1. The village government of Tumbang Keminting, Tanah Haluan dan Tumbang Panyahuan, Tumbang Payang dan Teweihara 2. Cultural Society 3. Youth and society organization 4. Supplier 5. Independent Smallholder 6. Local NGO 7. Local Health Service
Internal Company	1. Staff and Labor 2. Company Management

Stakeholders associated with PT. KMS can be classified into three groups, i.e. primary direct stakeholders who receive direct benefits, primary indirect stakeholders who receive indirect benefits, and secondary stakeholders who are not included in groups 1 and 2, but they have interests towards PT KMS. The result of stakeholder public consultation shows that some stakeholder is giving a supportive perception related to the development of PT KMS Plantation. The others, give a netral perception related to the development of PT KMS Plantation.

CONCLUSSION AND RECOMENDATION

Conclusion

1. The peoples around the PT. Karya Makmur Sejahtera has the condition of education facilities are limited and uneven, they low in education and skill, access roads is still minimal and rely on river transport, health facilities and infrastructure are spread evenly, the majority of the population are Hindu Kaharingan, dayak dominant tribe, and the work force dominated by the informal sector (fishermen, farm, labor and others).
2. CLI in Tumbang Keminting, Tanah Haluan, Tumbang Panyahuan, Tumbang Payang and Teweihara shows the imbalance of population and the cost of living expenses between the five villages. This value is compared to other regions nationwide, including in the category of people with low to high expenditure.
3. The main problems faced by communities around in PT. Karya Makmur Sejahter are: (1) the persistence of tenurial conflicts caused by, among others: there is still a land compensation has not been completed, land claims by residents of another village, who allegedly forged the legality of land, village borders are unclear, (2) pollution of river water, (3) socioeconomic: the smaller the land tenure, low education, mastery of the low agricultural cultivation techniques, game becomes elusive, there is still a lack of business opportunity, the occurrence of anxiety society, flooding, poor sanitation, etc. (4) Cultural, and (5) Employment.

4. Stakeholders associated with PT. Karya Makmur Sejahtera divided into stakeholder-related problems of tenure, community development, environment and health as well as stakeholders belonging to the NGOs and the media. While based on the importance dikalisfikasikan into 3 groups, namely: primary indirect (primary indirect) of stakeholders who receive indirect benefits from PT. Karya Makmur Sejahtera, secondary (secondary) that stakeholders are not included in groups 1 and 2, but have an interest in PT. Karya Makmur Sejahtera.
5. Communities have felt the positive benefits of the presence of oil palm plantation company PT. Karya Makmur Sejahtera aksesibilitas form a smooth, employment and business opportunities, the village became crowded. However, in certain villages, the benefits received by low and still encountered problems of land tenure, labor relations, health, education, infrastructure and facilities, etc.
6. The negative impact of Karya Makmur Sejahtera is a perception that the company's activities have an impact on river water quality degradation, and declining air quality. Besides the behavior of an increasingly consumerist society, increasing land conflicts between communities due to the increasing value of land, a land conflict between the community and the company, changes in livelihood patterns of society, the social gap between indigenous communities and the migrants, the public perception of the land acquisition likely to do more first, while the affairs of the recent settlement of land status and perceptions among rural communities feel pitted by the company.

Recommendation

1. To accelerate change in perception among the citizens of surrounding communities (Tumbang Keminting, Tanah Haluan, Tumbang Panyahuan, Tumbang Payang and Teweihara), then the PT. Karya Makmur Sejahtera should immediately undertake communication and dissemination of development plans and compensation of land that will be implemented by the PT. Karya Makmur Sejahtera openly.
2. Need to immediately identify the location of the development plan Plasma Scheme (site identification, development plans, the rights and obligations of the plasma and the company, calculation of profit sharing and management).
3. it is necessary to make a communication and socialization about the perceptions of the environmental pollution caused by activities of PT. Karya Makmur Sejahtera. It can be done by showing the results of monitoring water quality to the communities. The Communication between Management of PT. KMS and the Environment Agency and the Forestry and Plantation of East Kotawaringin Regency had been done for this section.
4. Need to build an intensive communication with the Institute Village (Village Head, BPD, customary institutions) in developing CSR programs, including in the implementation.
5. Health service activities and improving the quality of education needs to be done by PT. Karya Makmur Sejahtera by copying the Superior School curriculum built PT. Karya Makmur Sejahtera Central Kalimantan.

4.3. HIGH CONSERVATION VALUE ASSESSMENT

According to Ministry of Forestry Decree, the location permits of PT KMS is classified as non-forest land (Other Land Use /APL), Convertible Production Forest (HPK), Production Forest (HP) and Limited Production Forest (HPT). The study revealed that there are no primary forest areas left within the location permits and there is no peatland in this location. There are four types of HCV occur in the location permit of PT KMS, i.e. HCV 1 (HCV 1.1, HCV 1.2, HCV 1.3); HCV 2 (HCV 2.3); HCV 4 (HCV 4.1, HCV 4.2); and HCV 6 covering a total area of 1.870,6 ha of the total of study area (13.000 ha).

Physical Condition

The Concession area of PT. KMS has five land cover types namely: natural forest, secondary forest, scrubland and open area, plantation forest and rubber plantation. The Air temperature of PT. KMS concession area is ranged between 25⁰ C- 34⁰C with relative humidity is ranged between 82-87%, The highest relative humidity is occurred at December. Based on rainfall data and rain days, it could be described the average monthly rainfall was 245,5 mm/month. The physiography of PT. KMS concession area could be categorized into 3 (three) types of topography, namely: nearly level to level topography (0-8% slope level), gently sloping or undulating topography (8-15% slope level), moderately sloping or rolling topography (15-25% slope level) and strong hilly or mountainous topography (25-40%) (figure 11). The soil types of PT. KMS concession area is dominated by Yellow-Red Podzolik, whereas the land system is consist of 4 types namely: HJA, JLH, PLN and GRK.

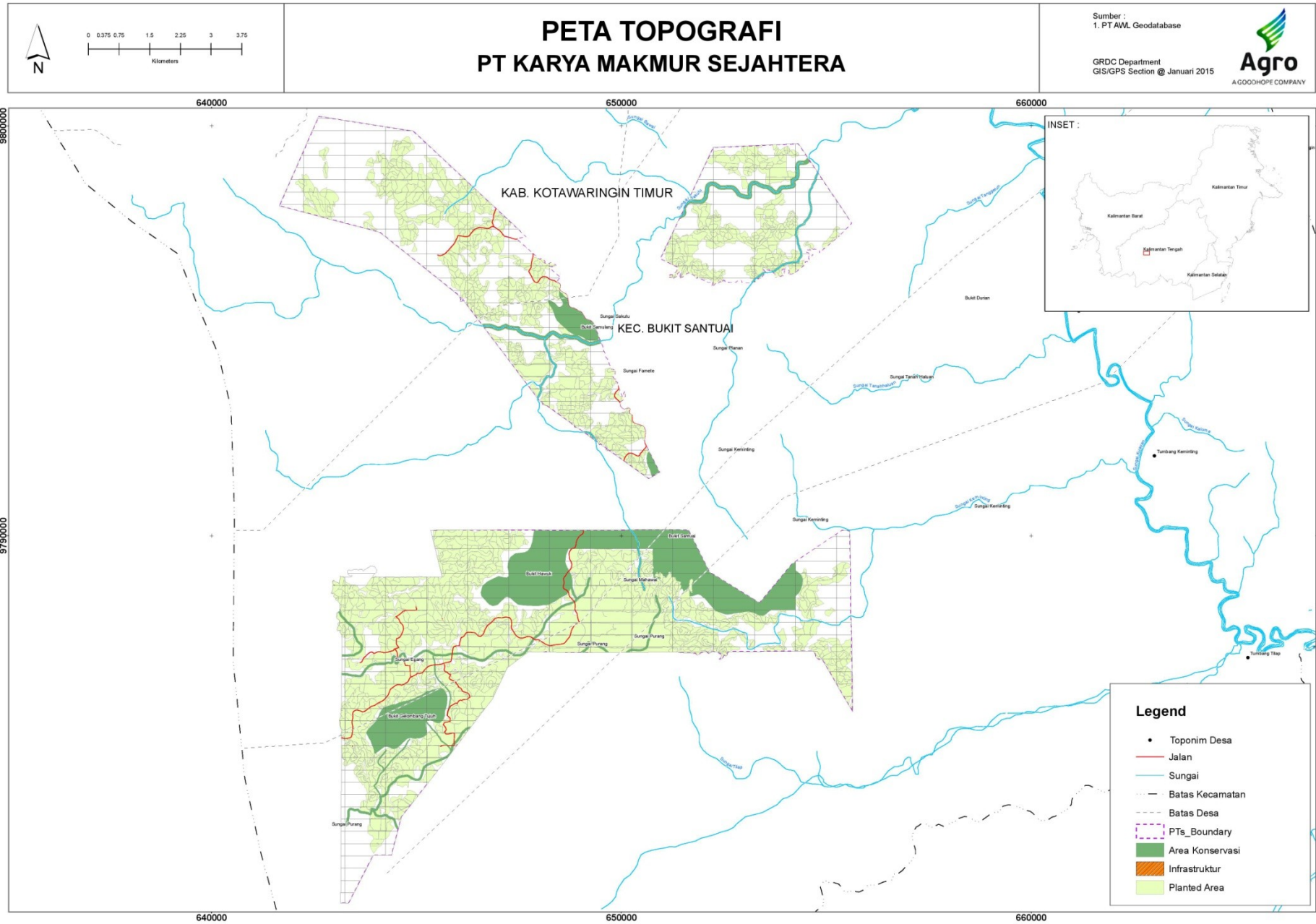
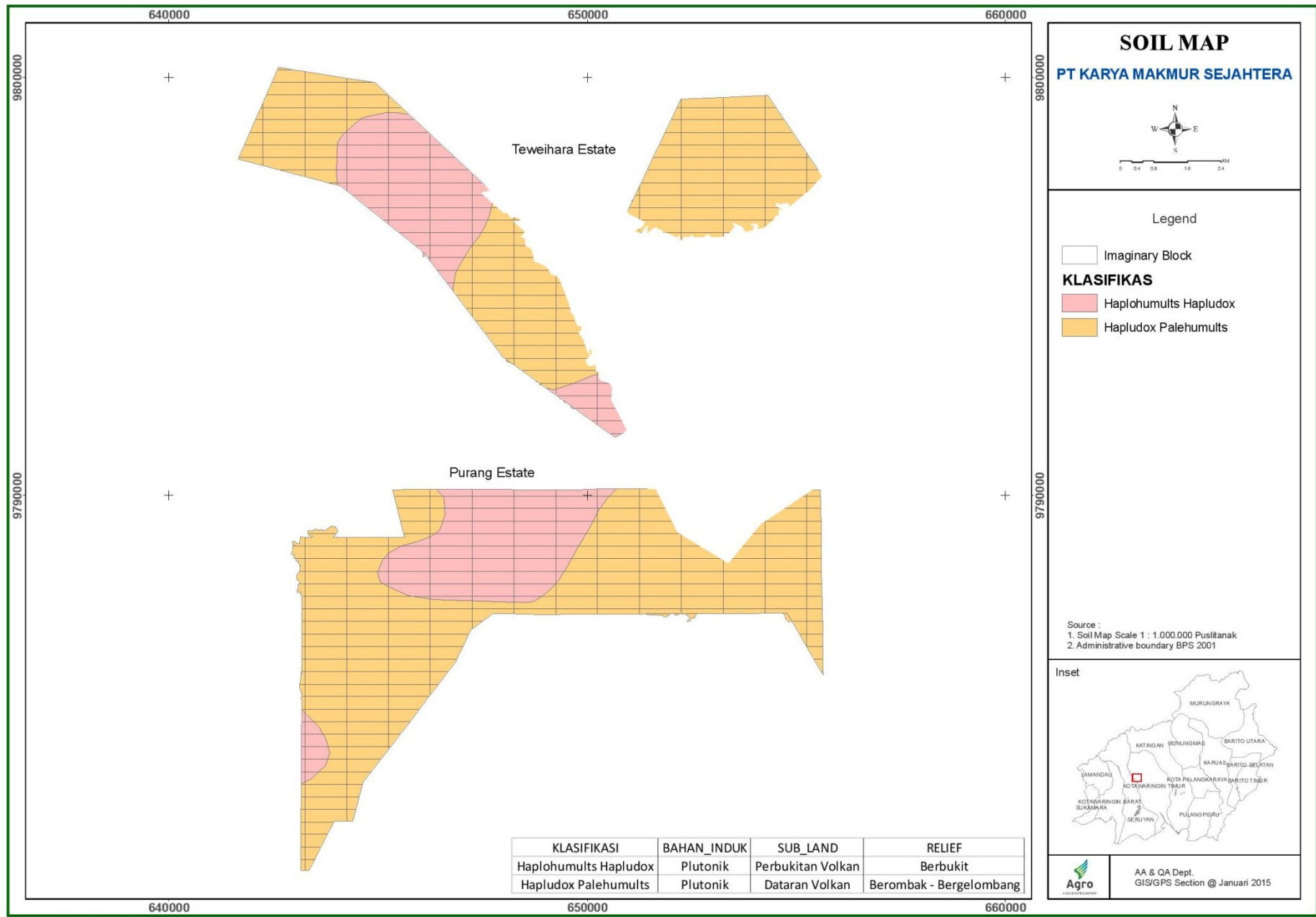


Figure 9. Topographic Map of PT. Karya Makmur Sejahtera Concession Area



ISO A3 Landscape Model 1 - General - 2012

Figure 10. Soil Map of PT. Karya Makmur Sejahtera Concession Area

Biological Condition

Flora

The number of Plant species that found in PT. KMS concession area is 305 species. From that number, 193 species of plant could be identified, while the other 112 species were not identified. All of those species that had been identified, could be categorized into 61 families. The richest number of plant species was found at Bukit Santuai and Bukit Onyang with total number species is 138 species and 93 species. There is 10 species of plant in the PT. KMS concession area is listed in IUCN redlist. The following table shows the list of protected plant species that found in the PT. KMS concession area.

Table 8. List of Plants Species Based on Their Status of PT. KMS Concession Area

No.	Botanical Name	Local Name	Location	Decree of Agriculture Minister No: 54/Kpts/Um /2/1972	Status		
					PP No. 7 /1999	CITES	IUCN
1	<i>Combretocarpus rotundatus</i>	Umit	1				VU
2	<i>Dipterocarpus grandifloras</i> Blanco	Keruing	1,2,3,4,5,6				CR
3	<i>Hopea mengerawan</i> Miq	Emang	7				CR
4	<i>Shorea accuminatissima</i> Dyer.	Bunyit	2,3,4,6,7				CR
5	<i>Shorea Kunsleri</i> King.	Mahadirang	6,7				CR
6	<i>Eusideroxylon zwageri</i> T. et. B	Ulin	1,2,3,4,5,6,7		D	App. II	VU
7	<i>Shorea pauciflora</i> King.	Kelapis	1,2,3,6,7				EN
8	<i>Shorea lamellate</i> Foxw	Pakit	1				CR
9	<i>Shorea leprosula</i> Miq.	Lantang Nasi	2,3,4,5,7				EN
10	<i>Shorea hopefolia</i> (Heim.) Sym	Meranti asam	2,3				CR
11	<i>Diospyros korthalsiana</i> Hiern	Purik	1,4,6,7	D			
12	<i>Diospyros</i> sp.	Garang	1	D			
13	<i>Scorodocarpus borneensis</i> Berc.	Kulim	4	D			
14	<i>Spathoglottis plicata</i> Blume.	Suli Lembak	4	D		App. II	
15	<i>Pterospermum diversifolium</i> Blume.	Bayur	7	D			

Location Note:

1: Bukit Hawuk 2: Bukit Hawuk and Santuai Corridor 3. Bukit Gelombang Tujuh
 4. Riparian of Egang River 5. Riparian of Purang River 6. Bukit Onyang 7.

Protection status notes

D= Protected; CR= Critically Endangered; EN= Endangered; VU= Vulnerable; App.= Appendix

Wildlife Diversity

Base on observation, it was found 24 species of mammals, 70 species of birds and 4 species of reptiles. From those number, it can be categorized 11 species of mammals and 15 species of birds are protected according to Government regulation No. 7 Year 199. There was also 11 species of mammals and 9 species of birds are listed in the CITES appendix. For the scarcity status, there was found 6 species of wildlife were listed in the IUCN red list.

Table 9. List of Wildlife Species in the Areas of PT. KMS Based on Their Status

No.	Scientific name	Local name	Protection Status		Category of scarcity (IUCN)
			Government Regulation No. 7, year 1999	CITES	
A.	Mammals				
1.	<i>Cervus unicolor</i>	Rusa/payau (deer)	Protected		VU
2.	<i>Muntiacus atherodes</i>	Kijang emas	Protected		LC
3.	<i>Felis bengalensis</i>	Kucing akar	Protected	App. II	LC
4.	<i>Hylobates agilis</i>	Owa	Protected	App. I	EN
5.	<i>Hystrix brachyura</i>	Landak (porcupine)	Protected		VU
6.	<i>Manis javanica</i>	Trenggiling (ant-eater)	Protected	App. II	EN
7.	<i>Presbytis rubicund</i>	Kelasi (a kind of monkey with a snout)	Protected	App. II	LC
8.	<i>Presbytis cristata</i>	Buis		App. II	LC
9.	<i>Tragulus javanicus</i>	Kancil (mouse deer)	Protected		DD
10.	<i>Pongo pygmaeus</i>	Orang utan	Protected	App. I	EN
11.	<i>Helarctos malayanus</i>	Beruang madu (honey bear)	Protected	App. I	VU
12.	<i>Sus barbatus</i>	Babi hutan berjenggot (bearded pig)	Protected		VU
13.	<i>Neofelis nebulosa</i>	Macan dahan	Protected	App II	VU
14.	<i>Macaca nemestrina</i>	Buis (Pig tailed macaque)	Protected	App II	VU
15.	<i>Macaca fascicularis</i>	Bangkoi (Long tailed macaque)		App II	LC
16.	<i>Tupaia glis</i>	Tupai akar (Common tree shrew)		App II	LC
B.	Aves		Protected		
1.	<i>Elanus caeruleus</i>	Elang tikus	Protected	App II	LC
2.	<i>Spilornis cheela</i>	Elang ular	Protected	App II	LC
3.	<i>Spizaetus chirrhatus</i>	Elang brontok	Protected	App II	LC
4.	<i>Alcedo meninting</i>	Bintik	Protected		LC
5.	<i>Pelargopsis capensis</i>	Pekaka emas	Protected		LC
6.	<i>Anthracoceros malayanus</i>	Kangkareng hitam	Protected	App II	NT
7.	<i>Aceros undulatus</i>	Julang emas	Protected	App II	
8.	<i>Buceros rhinoceros</i>	Rangkong badak	Protected	App II	NT
9.	<i>Rhinoplax vigil</i>	Eggang raja	Protected	App II	NT
10.	<i>Rhipidura javanica</i>	Kipasan belang	Protected		LC
11.	<i>Anthreptes malacensis</i>	Burung madu kelapa	Protected		LC
12.	<i>Anthreptes singalensis</i>	Burung madu belukar	Protected		LC
13.	<i>Arachnothera langirostra</i>	Burung pinjantung	Protected		LC
14.	<i>Nectarina sperata</i>	Burung madu hutan	Protected		LC
15.	<i>Aethopyga siparaja</i>	Burung madu merah	Protected		LC
16.	<i>Psittacula longicauda</i>	Betet ekor panjang		App II	LC
17.	<i>Loriculus galgulus</i>	Serindit		App II	LC

The result of HCV presence in PT KMS

Based on the field survey and maps review, it can be concluded that HCVA in the areas of PT. KMS is 1,870.60 ha. These HCV is consists of 7 value that is HCV 1.1, HCV 1.2, HCV 1.3, HCV 2.3, HCV 4.1, HCV 4.2 and HCV 6. The following table shows the result of HCV Assessment.

Table 10. The result of HCV Assessment in PT. KMS

HCV/ components	Existence / presence of HCV	Location	Area size (Ha)
HCV 1. Areas which have important level of biodiversity.			
HCV1.1. Areas which possess or provide supporting function for biodiversity of protection area or conservation area	Exist (present)	Riverside zone of S. Egang	189,80
		Riverside zone of S. Keminting	20,25
		Riverside zone of S. Mahawai	4,30
		Riverside zone of S. Pametehan	14,67
		Riverside zone of S. Pelanan	19,52
		Riverside zone of S. Purang	102,92
		Riverside zone of S. Sekutu	118,89
		Riverside zone of S. Anak Purang	14,80
		Lakeside zone of Tajahan	1,00
HCV1.2. Spesies which is nearly extinct	Exist (present)	Koridor Bukit Santuai-Bukit Hawuk	97,32
		Bukit Santuai	677,52
		Bukit Gelombang Tujuh	167,60
		Sempadan Sungai Egang	*)
		Sempadan Sungai Purang	*)
		Bukit Onyang	81,47
HCV1.3. Areas which provide habitat for population of species which are threatened, limited in their distribution, or protected, which are still able to survive.	Exist (present)	Koridor Bukit Santuai-Bukit Hawuk	*)
		Bukit Santuai	*)
		Bukit Hawuk	*)
HCV1.4. Areas which provide habitat which is used temporarily by species or group of species .	Non existent (absent)		
HCV2. Areas of landscape which is important for natural ecological dynamics.			
HCV2.1. Areas of extensive landscape which possess capacity to maintain natural ecological dynamics and process.	Non existent (absent)	-	
HCV2.2. Natural areas which contain two or more ecosystems with continuous (not broken) boundary lines.	Non existent (absent)	-	
HCV2.3. Areas which contain population of representative natural species which are able to survive	Exist (present)	Koridor Bukit Santuai-Bukit Hawuk	*)
		Bukit Santuai	*)
		Bukit Hawuk	*)
HCV3. Areas which possess ecosystem which is rare or threatened with extinction.	Non Existent		
HCV4. Areas which provide natural environmental services.			
HCV4.1. Areas or ecosystems which are important as water supplier and flood control for downstream community.	Exist (present)	Riverside zone of S. Egang	*)
		Riverside zone of S. Keminting	*)
		Riverside zone of S. Mahawai	*)
		Riverside zone of S. Pametehan	*)
		Riverside zone of S. Pelanan	*)

HCV/ components	Existence / presence of HCV	Location	Area size (Ha)
		Riverside zone of S. Purang	*)
		Riverside zone of S. Sekutu	*)
		Riverside zone of S. Anak Purang	*)
		Lakeside zone of Tajahan lake	*)
HCV4.2. Areas which are important for erosion and sedimentation prevention.	Exist (present)	Bukit Santuai	*)
		Bukit Hawuk	*)
		Bukit Semulang	74,73
		Bukit Gelombang Tujuh	*)
		Bukit Onyang	*)
HCV4.3. Areas which function as natural barrier to prevent the expansion of forest and land fire.	Non existent (absent)	-	
HCV5. Areas which possess important function for fulfilling the basic need of local community.	Non existent (absent)	-	
HCV6. Areas which possess important function for cultural identity of local community.	Exist (present)	Sacred cemetery of Tajahantang	0,01
Total area size of HCV			1.870,60

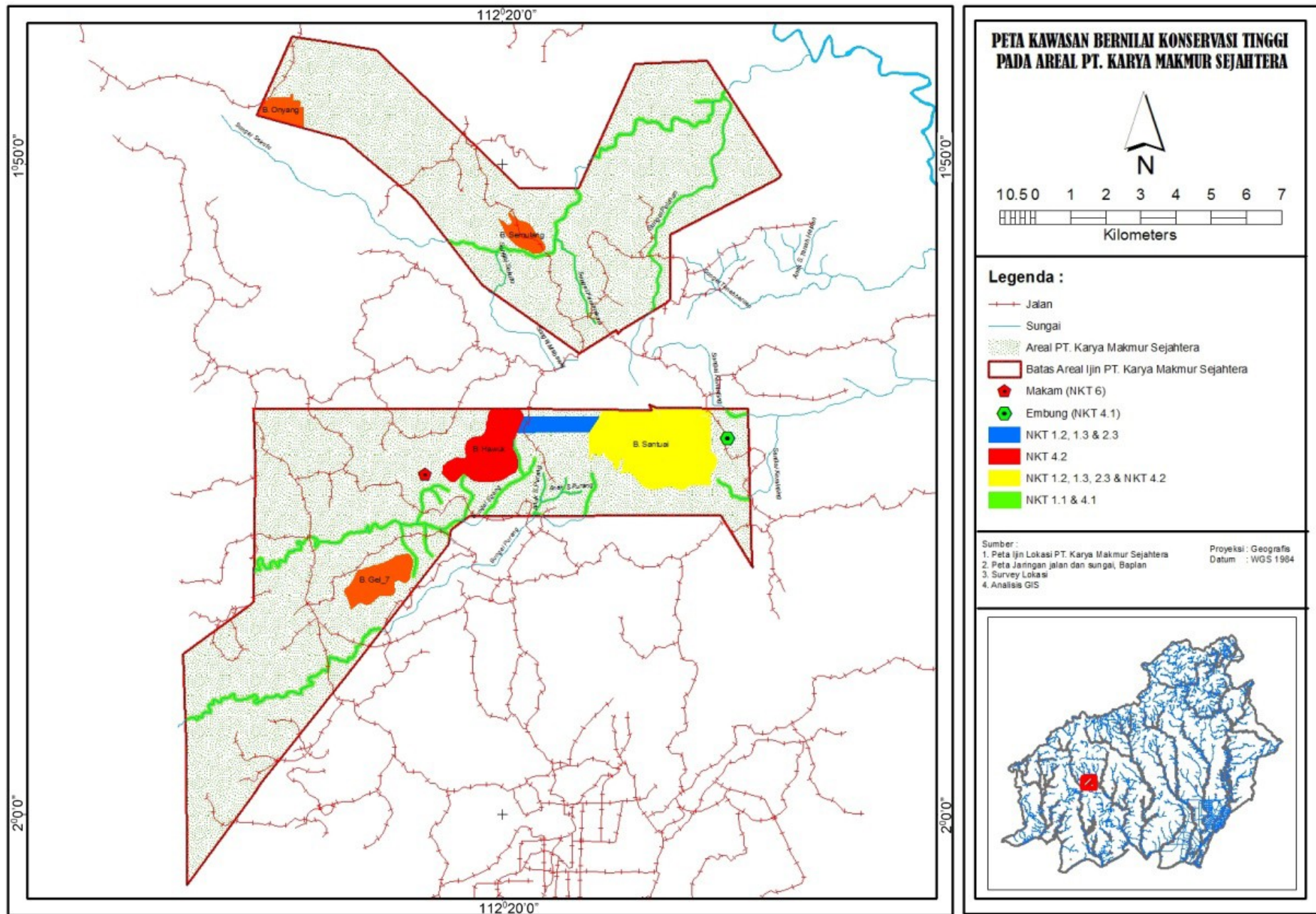


Figure 11. Map of HCV Assessment Result on the PT. Karya Makmur Sejahtera

Summary of Land Use Change Analysis (LUCA)

PT Karya Makmur Sejahtera had been identified its potential liability of HCV loss area through a land use change analysis study. This study was conducted by independent third party consultant namely Mr. Sayidina Ali. The team consisted of Mr Sayidina Ali, A.Md as team leader and Ihsan Nur Akbar S.T as a team member. The study of The Land Use Change Analysis was conducted on September 2015 and covered all estate of PT KMS. The report of PT KMS Land Use Change Analysis is still under review by RSPO Compensation.

The Methods used in the Land Use Change Analysis study of PT KMS includes the initial processing (pre-processing), visual interpretation of satellite imagery and interpretation of re-image of the results of field survey (see the following chart). The time period scope of PT KMS Land Use Change Analysis study is between November 2005-November 2007 and December 2007-December 2009, with a time of High Conservation Value Assessment as a cut-off date of end liability. Based on Land Use Change Analysis result, it concludes that PT KMS has 0 (zero) Hectare liability.

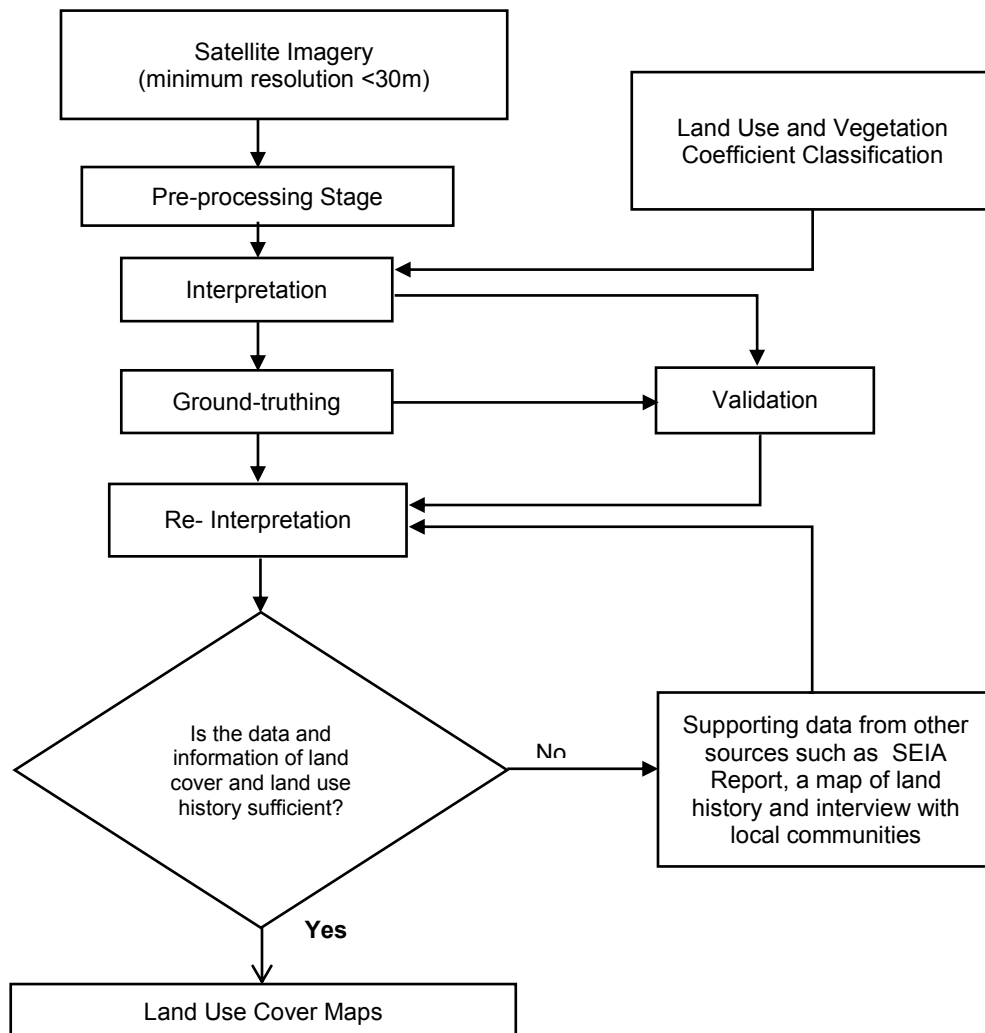
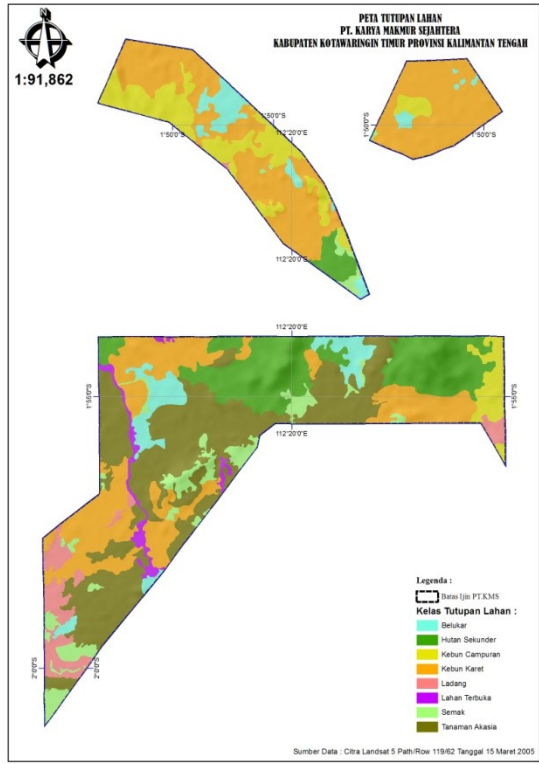
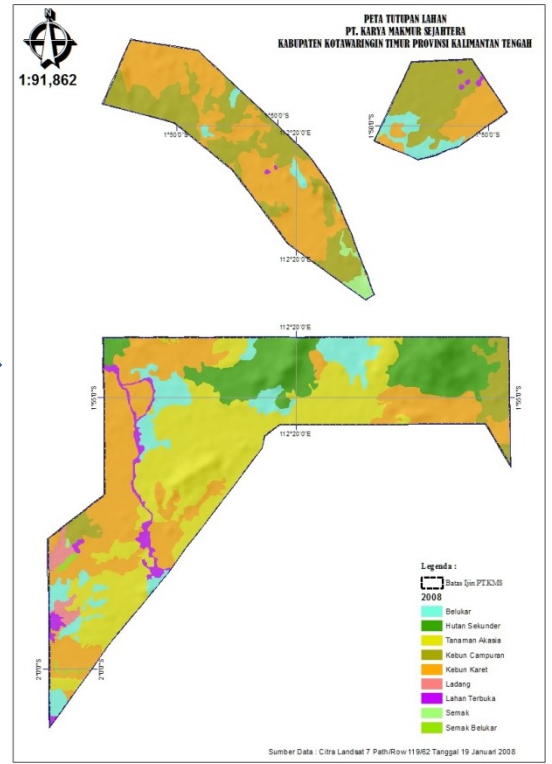


Figure 12. Flow Chart of PT Karya Makmur Sejahtera LUCA

PT KMS Land Cover March 2005



PT KMS Land Cover January 2008



PT KMS Land Cover December 2010

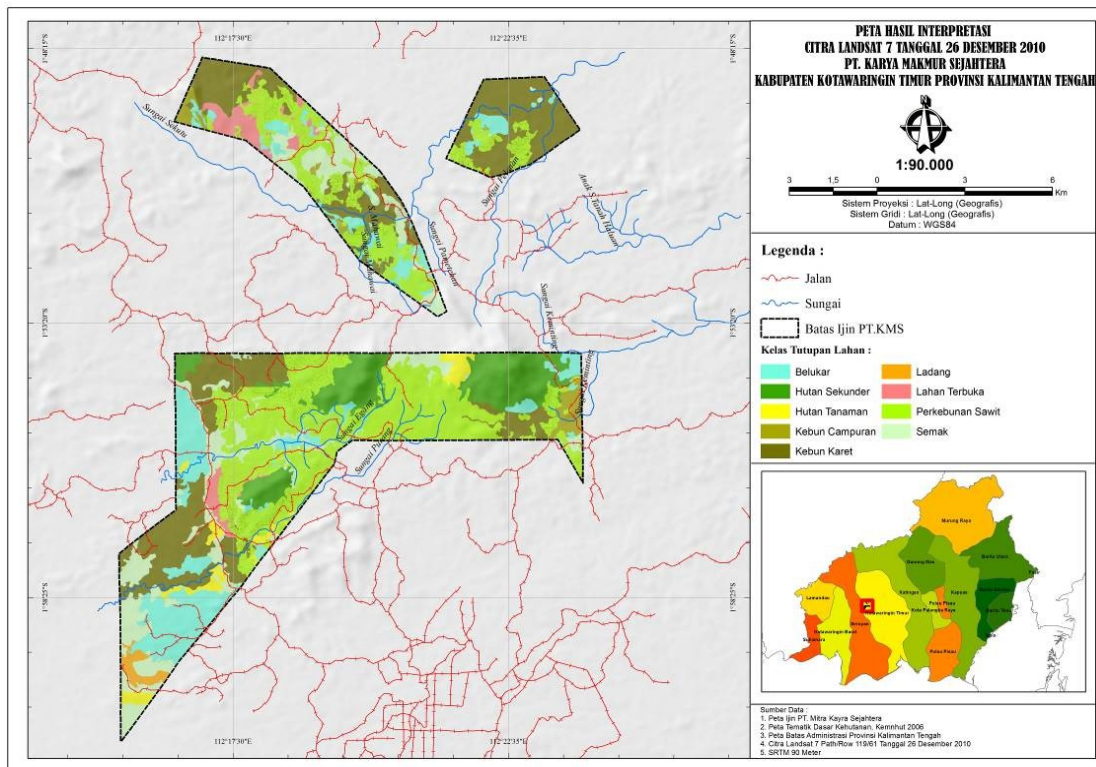


Figure 13. PT KMS Land Cover Change on the 2005-2010 periods

5. Internal Responsibility

Formal sign-off by Assessor and Company



Ir. H. Nycto Santoso, MS
Team Leader of HCV and SIA Assessment

Fakultas Kehutanan, Bogor Agriculture University (IPB – Bogor)

Statement of Acceptance of Responsibility for Assessment

The Assessment result of the HCV and SIA of PT. Karya Makmur Sejahtera by Fakultas Kehutanan, Bogor Agriculture University (IPB – Bogor) will be applied as part of guidelines in developing and managing PT. Karya Makmur Sejahtera

A handwritten signature in brown ink, appearing to read 'Wilton', is written on the page.

Wilton Simanjuntak
RSPO Manager