

RSPO

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

PT Agro Indomas (East Kalimantan)

**Penajam Paser Utara Regency
East Kalimantan
Indonesia**

I. Executive Summary

PT Agro Indomas-East Kalimantan (PT AIEK) is a subsidiary of Goodhope Asia Holdings Ltd., which has been registered as RPSO member, committed to develop a sustainable palm oil management system. PT AIEK has conducted the Social Environment Impact Assessment (EIA/AMDAL), High Conservation Value (HCV) identification and Social Impact Assessment (SIA) as required base on RSPO Principle and Criteria.

PT. AIEK is located in District of Sepaku, Penajam Paser Utara, East Kalimantan Province and surrounded by some villages: Pemaluan, Bumi Harapan, Sukaraja, and Tengin Baru. Based on Head of Penajam Paser Utara Decree No. 460.1/129/BPN-44.4/2004, PT Agro Indomas-East Kalimantan received location permit that covering around 17.500 ha. Location Permit was revised and extended several times. The latest extension of location permit was made on 18th January 2010 by the decree No. 545/049-INLOK/1/2010 covering the area of 5.151 ha, and revised again with the decree of Penajam Paser Utara No. 522/193-INLOK/EKONOMI/VII/2011 on 5th July 2011 that covering the area about 6.767 ha. PT AIEK did not need logging permit, because the potential logging timber is less than 20% within the area PT AIEK Location Permit and the land had already cleared prior to the issuance of IPK regulation from Minister of Forestry.

Based on Provincial Land Use Spatial Plan, the land status of all location permits of PT. AIEK is under Non-Forest Development Area (KBNK), means that this area can be developed as palm oil plantation. Where as under decree of forestry ministry, these location permit are part of Other Land Use Purpose Category (APL) and Forest Production Areas (HP). For the area which is under Forest Production Areas status, PT. AIEK still on going progress to obtain a forest release permit in the term of cadastral mapping with a review of forest areas against PT. AIEK location permit based on Letter from The Central Forest Region IV (BPKH), Ministry of Environmental and Forestry, No. S.25/BPKH IV-2/ 2015 dated 14 January 2015.

PT. AIEK has conducted a Social and Environment Impact Assessment (AMDAL). The AMDAL document was approved by The Regent of Penajam Paser Utara through the Decree No. 660/342/2009 dated 15 December May 2009. PT. AIEK has also conducted High Conservation Value (HCV) identification and Social Impact Assessment (SIA) The HCV and SIA assessment has been conducted by the Faculty of Forestry, Institut Pertanian Bogor (IPB), Consultants Team; (Key person is

RSPO approved consultant). 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 development.

The High Conservation Value Area (HCVA) Assessment of PT. AIEK was prepared by Assessor from Faculty of Forestry, Institut Pertanian Bogor (IPB). The team was consist of 4 (Four) RSPO-Approved assessors and led by Ir. Nyoto Santoso, MS. The assessment was carried out from October to November 2009, The locations of study has included villages of Pemaluan, Bumi Harapan, Sukaraja and Tengin Baru. Methodology of HCV identification was in accordance with the Toolkit for the High Conservation Values Identification in Indonesia version 2 (2008) and the RSPO Principles and Criteria. The HCVA assessment has identified that there is no primary forest and peat soil in the location permit of PT AIEK. The result has also indicated that there are 7 (seven) type of HCVA that had been identified, namely HCV1 (HCV1.1 and HCV1.3), HCV2 (HCV2.2 an HCV 2.3), HCV3 and HCV4 (HCV4.1 and HCV4.3) with total HCVA 2270,27 Ha (33,55% of PT. AIEK concession area.

PT. AIEK has already conducted Social Impact Assessment (SIA) in the year 2009. The SIA Assessment was conducted by an expert team from Faculty of Forestry, Institut Pertanian Bogor. The assessor team were 8 (eight) persons led by Ir. Nyoto Santoso. The result of this assessment identified that PT. Agro Indomas-East Kalimantan influence positive impact to the surrounding community such as realization of plasma program, employment opportunity, better social facility and improvement for the quality and facility of clean water. The SIA assessment has also recommended for the company to involves Government officials, customary leaders, land owners or cultivated land owners in the compensation process, and the corporate social activity's plan should be focused to develop public villages facilities and other productive activities. The assessment has found that the company identified local people lands and implemented concept of FPIC process before carrying out land compensation.

List Of Abreviation

BPN = National Land Authority

CSR = Corporate Social Responsibility

EHS = Environmental, Health and Safety

EIA = Environmental Impact Assessment (*Analisis Mengenai Dampak Lingkungan*)

FGD = Focus Group Discussion

FPIC = Free, Prior, Inform, Consent

HCV = High Conservation Value

HGU = Land Use Title (*Hak Guna Usaha*)

HTI = Industrial Plantation Forest (*Hutan Tanaman Industri*)

IPB = Bogor Agricultural University (*Institut Pertanian Bogor*)

IUP = Plantation Business Permit (*Izin Usaha Perkebunan*)

KBK = Forest Cultivation Area

KBNK = Non-Forest Cultivation Area

MCK= Public Toilet (*Mandi Cuci Kakus*)

NGO = Non-Governmental Organization

NPP = New Planting Procedure

PMA = Foreign Investment (*Penanaman Modal Asing*)

PT. AIEK= PT. Agro Indomas East Kalimantan

RSPO = Roundtable on Sustainable Palm Oil

SIA = Social Impact Assessment

II. Scope of EIA, SIA and HCV Assessment

II.1 Organizational Information and Contact Person

Table 1. PT. Agro Indomas-East Kalimantan Company Profile and Information

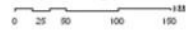
Profile	Information
Company name	PT. Agro Indomas
Subsidiary of	Goodhope Asia Holdings Ltd.
RSPO Membership Number	1-0175-14-000-00
Deed of Establishment	Notary Enirmaya Agoes Suwarno, SH No. 69 dated 28 th September 1995
Capital Status	Foreign Investment (PMA)
Taxpayer Notification Member	01.548.959.4-057.000
Company address	Menara Global, 5th Floor, Jl. Jend. Gatot Subroto Kav. 27 Jakarta 12950
Type of Business	Oil Palm Plantation and Processing
Contact Person	Wilton Simanjuntak Email: wiltons@goodhope-id.com
Site Location	Sepaku District, Penajam Paser Utara Regency, East Kalimantan Province
Geographical Location	115 ⁰ 40'00" – 115 ⁰ 50'00" E 0 ⁰ 45'00" – 1 ⁰ 20'00" S (see the Fig. 1)



Figure 1. PT. AIEK Location in the Indonesian Region



PT AIEK Location in Kalimantan Island



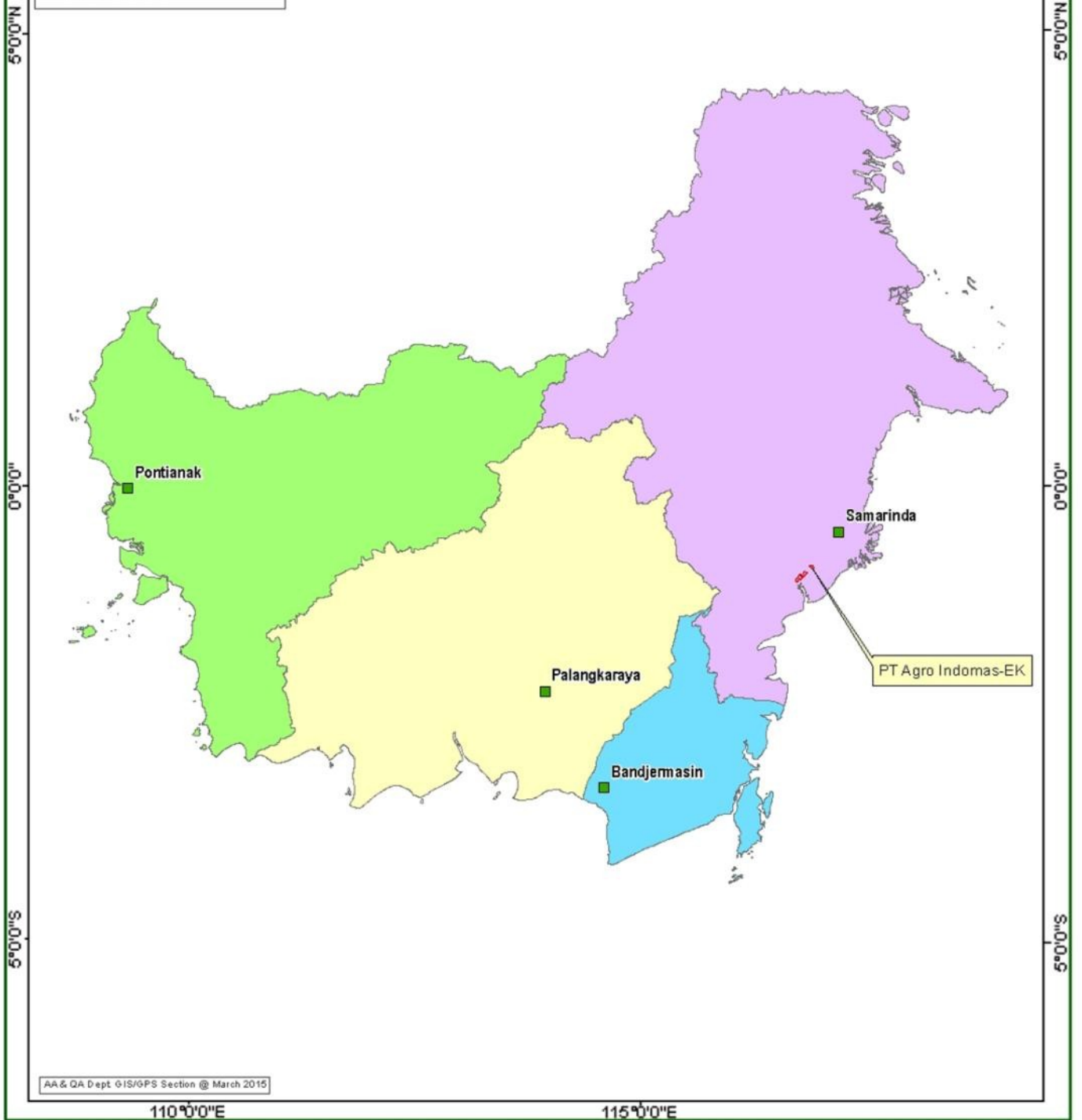
110°0'0"E

115°0'0"E

Legend

- Ibu kota provinsi
- Kalimantan Barat
- Kalimantan Selatan
- Kalimantan Tengah
- Kalimantan Timur

Source Map :
PTAIEK Geodatabase



AA & QA Dept GIS/GPS Section @ March 2015

110°0'0"E

115°0'0"E

Figure 2. PT. AIEK Location in the Kalimantan Island

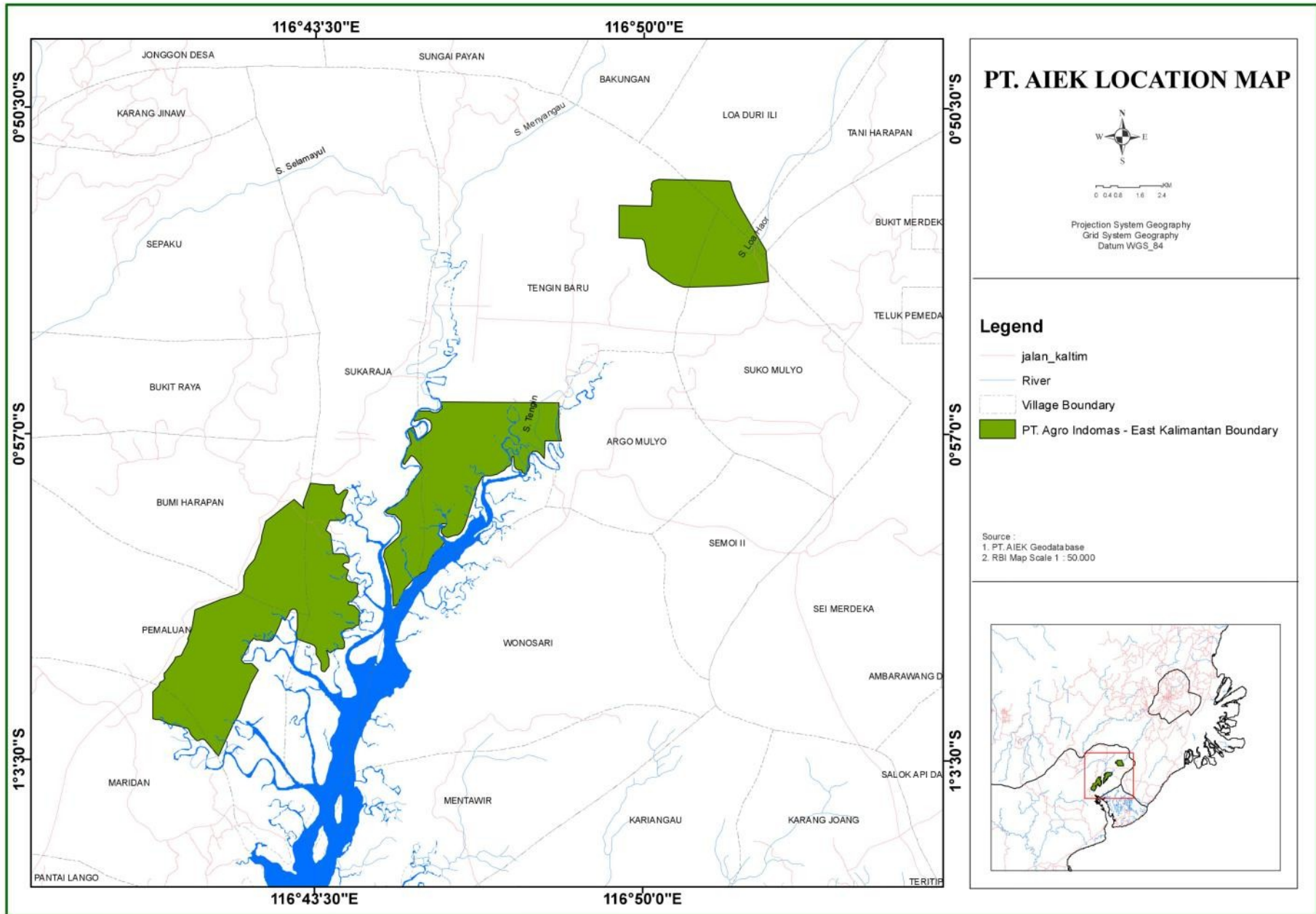
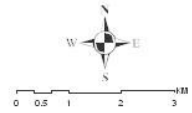


Fig 3. Map of PT. AIEK Location in Penajam Paser Utara Regency, East Kalimantan



MAP OF SURROUNDING ENTITIES PT AIEK



116°49'30"E

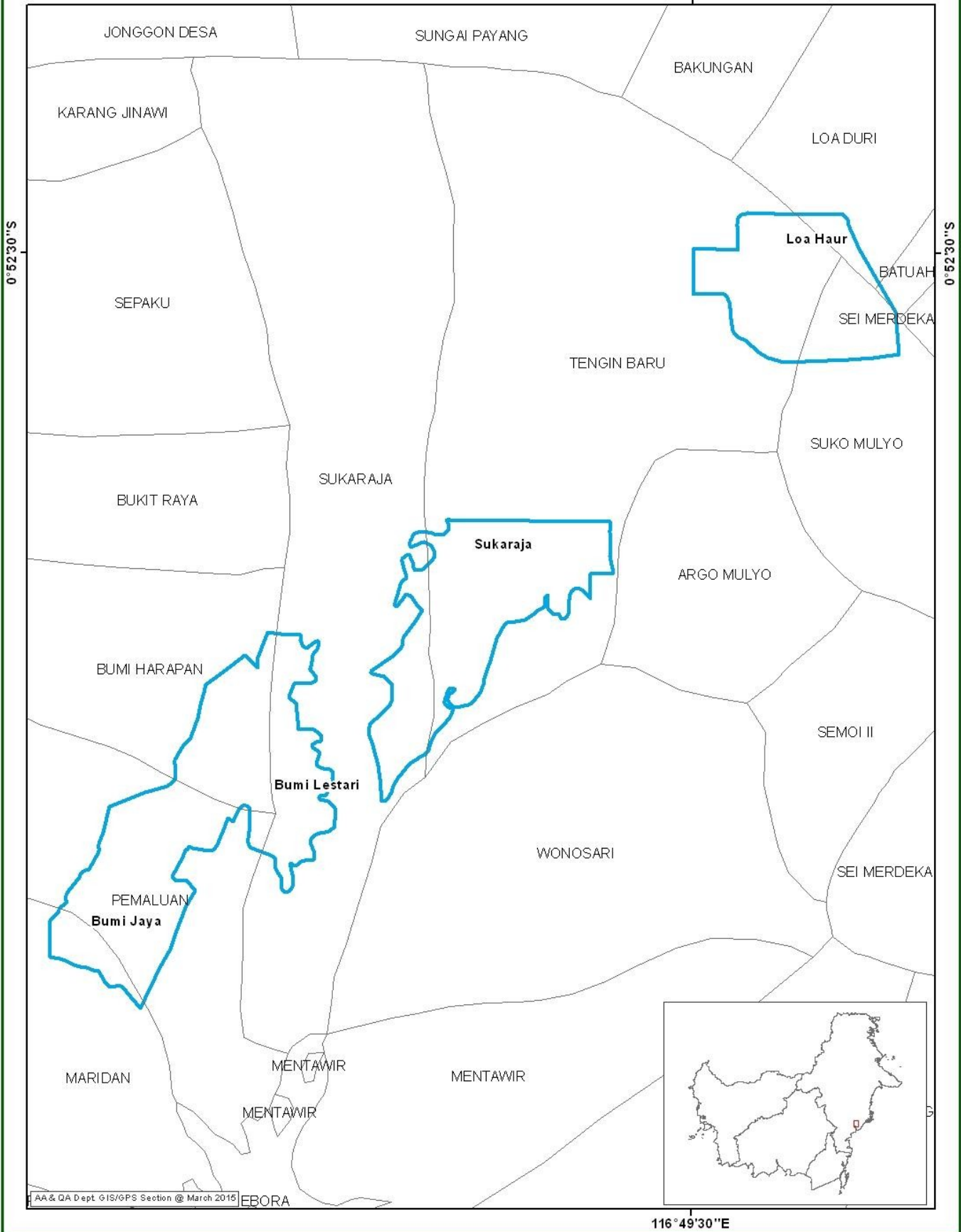


Fig 4. Map of PT. AIEK Location with surrounding entities

II.2. List of Legal Documents and regulatory permits related to new development

The List of Legal Documents and regulatory permits related to the New Planting Procedure are listed below.

Table 2. List of legal documents and regulatory permits related PT. AIEK new development

No.	License and Recommendation	Issued By	Number	Note
1.	Deed of Establishment	Notary Enirmaya Agoes Suwarno, SH	No. 69	28 th September 1995
2.	Location Permit	Head of Penajam Paser Utara	No. 460.1/129/BPN-44.4/2004 with total area 17.500 Ha	06 th July 2004
3.	Revised Location Permit	Head of Penajam Paser Utara	No. 460.1/437/Tu-Pim/702/Eko/VII/2007 with total area 5.796 Ha	07 th July 2007
4.	Revised Location Permit	Head of Penajam Paser Utara	No. 500/218/ Ekonomi/ VII/2008 with total area 5.151 Ha	07 th July 2008
5.	Revised Location Permit	Head of Penajam Paser Utara	No. 545/049- INLOK/EKONOMI/I/2010 with total area 5.151 Ha	18 th January 2010
6.	Plantation Business Permit (IUP)	Head of Penajam Paser Utara	No. 11 Year 2006 with total area 5.796 Ha	20 th December 2006
7.	Environmental Permit	Head of Penajam Paser Utara	No. 660/342/2009 with total Area 5.151 Ha	15 th December 2009
8.	Environmental Permit	Head of Penajam Paser Utara	No. 660.1/199/2015 with total Area 6.767 Ha	28 th May 2015
9.	Revised Location Permit	Head of Penajam Paser Utara	No. 522/193- INLOK/EKONOMI/VII/2011 with total area 6.767 Ha	05 th July 2011
10.	Review of Forest Area Against PT. AIEK Location Permit	The Central Forest Region IV (BPKH), Ministry of Environmental and Forestry	No. S.25/BPKH IV-2/ 2015	14 th January 2015

II.3. Area and time-plan for new plantings

PT AIEK proposed new planting area in the area of this Location Permit. At the time of this report made, the company is in ongoing activities for clearing and planting. The company started planting since the March, year 2007, and 1.747,85 Ha has been planted until 2009. Beginning from the year 2010, company had practiced selective planting for 878,7 Ha without endangering identified HCV area. The process of land development and planting have followed the RSPO New Planting Procedures (NPP). The Company still have land within its location permit to develop in the future with total area is 1.355,18 Ha and there is no identified HCV areas being included in the new proposed development plan (see the new planting plan map below-Fig 7).

The company also had already develop plasma area in its existing planted areas with total size around 315 Ha, which consists of 130 Ha plasma located in the Loa Haur Division and 185 Ha located in the Bumi Lestari Division (see figure 5). Furthermore, there will be an additional plasma area around +-64 Ha included in the proposed new planting plan area. The Detail of new planting area is showed in the following table and figure.

Table 2. PT. AIEK Planting during the year 2007-2009

PT. AIEK Concession	Year				Total (Ha)
	2006	2007	2008	2009	
6.767	-	673,46	289,94	784,45	1.747,85

Table 3. Summary of plantings between 2010-2013

PT. AIEK Concession	Year				Total (Ha)
	2010	2011	2012	2013	
6.767	603,59	121,50	145,98	7,63	878,70

Table 4. Summary of PT AIEK New Planting Plan Area

PT AIEK Concession (Ha)	PT AIEK Planted Area (Ha)	PT AIEK HCV Area (Ha)	PT AIEK New Planting Plan Area (2016-2020) (Ha)
6.767	2.626,55	2.270,27	1.355,18

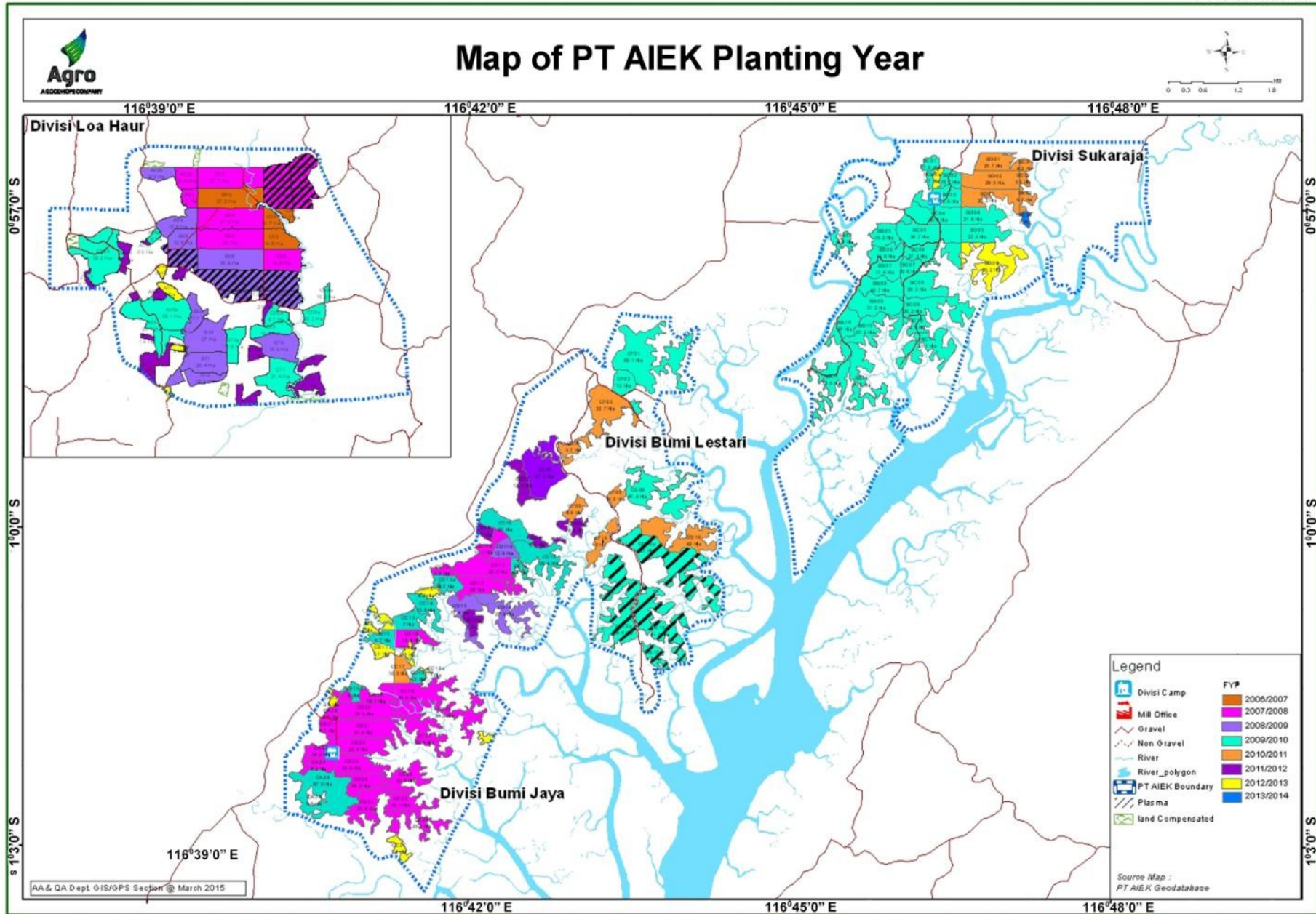


Figure 5. Maps of PT AIEK Planting Area



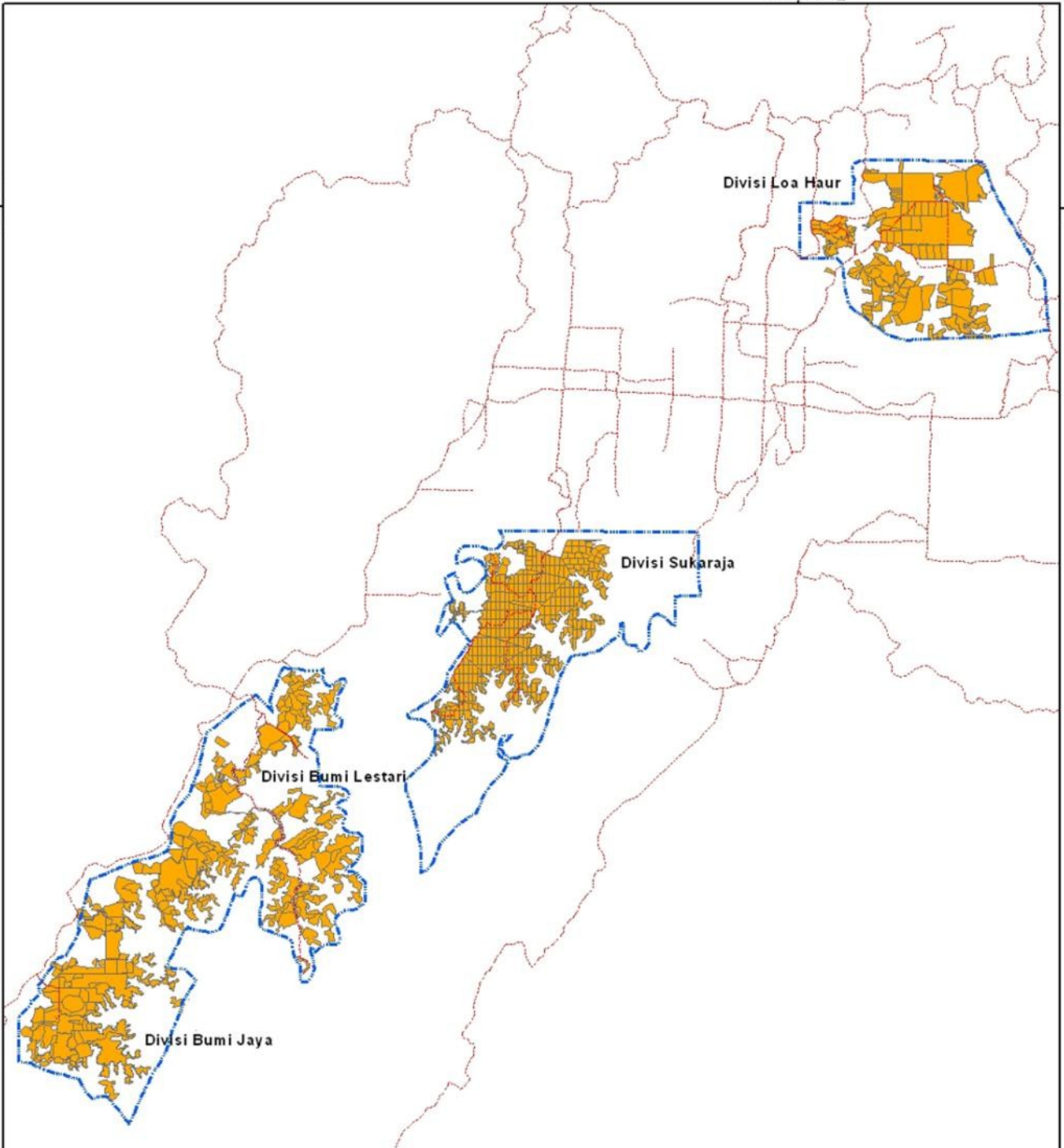
Land Compensation Map PT AIEK



116°49'30"E

0°52'30"S

0°52'30"S



Legend

- Road
- Location Permit 6767 Ha
- Land Compensation

Source Map :
PTAIEK Geodatabase

AA & QA Dept GIS/GPS Section @ March 2015

116°49'30"E

Figure 6. Maps of PT AIEK Land Compensation

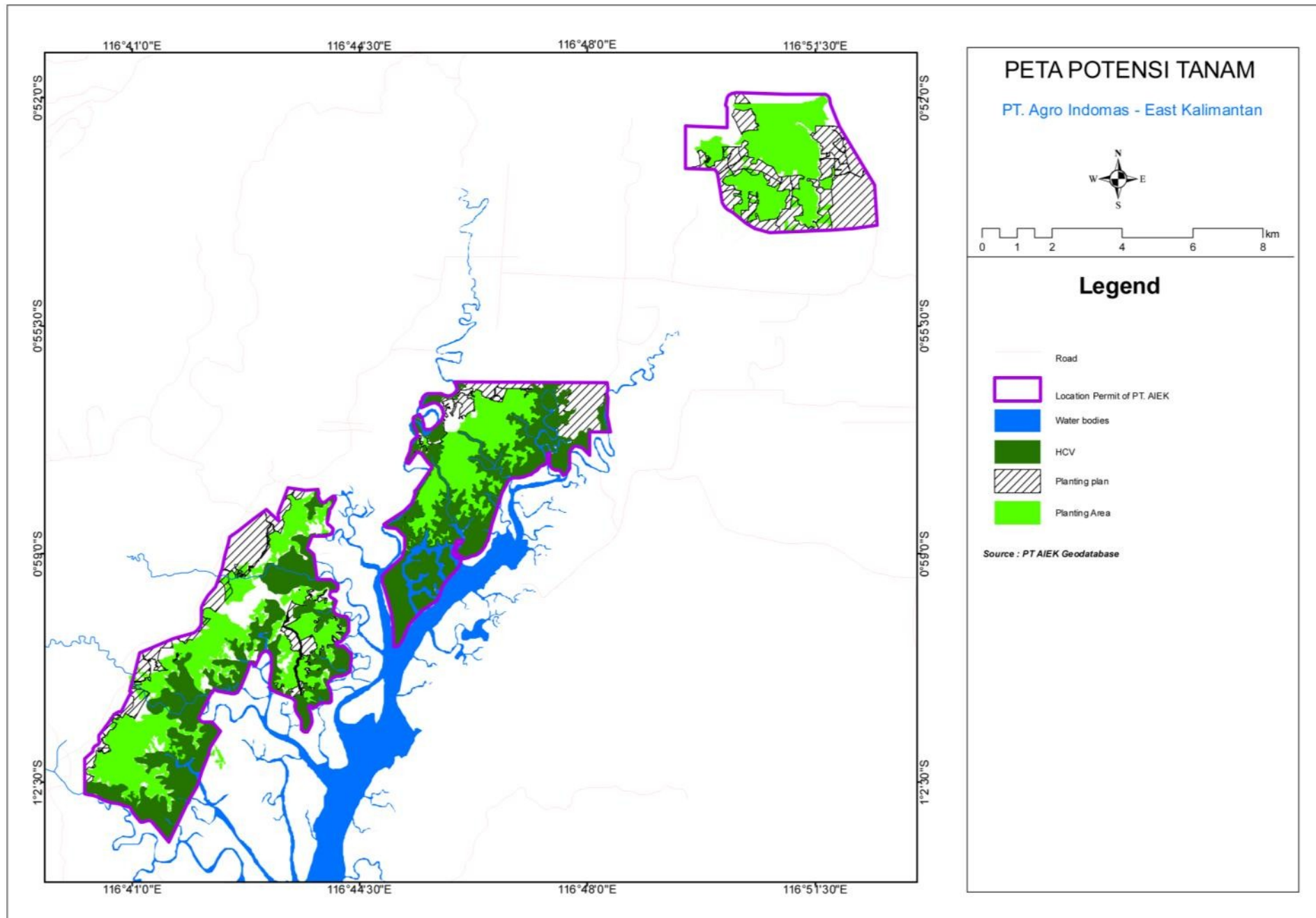


Figure 7. Map of New Planting Plan Area of PT AIEK

III. Assessment and Procedure

III.1 Environment Impact Assessment

a. Process and Procedure of Environmental Impact Assessment (SEIA) - (AMDAL)

The Social Environment Impact Assessment (AMDAL) of PT. AIEK has covered all the area of development and its impact to the environment and stakeholders. The AMDAL Assessment was carried out by CV. Agronusa Consultant, with address at Jl. Dayak Bahau No.3. Komplek Perumahan Unmul Sempaja, Samarinda, East Kalimantan. (Telephone No: 0541 – 746336). The key consultants conducting the assessments are accredited by The Indonesian National Association of Professional Consultants, their Competency certificates are approved. The consultant team are as follows:

Table 5. Expert team of EIA for PT. AIEK

Team composition	Name	Specification	Competence Certificate
Team Leader	Ir, Hamsyin, MP	Agriculture (AMDAL A, B & C)	Team Leader
Sub Team Physic – Chemist	Irvan Fahlepie, ST.	Environmental Engineering (AMDAL A & B)	Member
	Ir. Heru Trichayono	Irrigation Engineering (AMDAL A & B)	Member
Sub Team Biology	Fachruddin Azwari ST, MSi	Environmental Engineering	Member
	Sigit Hidayat Kurniawan, SP	Agriculture	Member
Sub Team Leader of social culture-community health	Mery Darviani, SP	Agricultural Socio-Economy	Member
	Yuyun Aryani, SP	Agriculture	Member
	Abd. Azim Hefeni, SKM, MKes	Public Health	Member

b. Assessment Methods

The AMDAL Assessment has covered 4 (four) surrounding village near PT. AIEK concession and it was conducted based on primary data and secondary data. Those primary and secondary data were collected through 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. The assessment data collected were accurate and reliable that can be used to analyze, measure and observe the environmental components which were predictively affected by the Corporate operation and. The following table are data collected :

Table 6. Type of data collected for PT. AIEK AMDAL assessment

No	Component Aspects	Data Collected
1.	Physic-Chemist	Climate; Air Quality; Noise; Hydrology; Soil
2.	Biology	Vegetation; Animals and Water Biota
3.	Socio-Economic-Cultural	Demography; Population; Social; Economic; Cultural

Methodology for AMDAL assessment consists of 2 (two) methods, they are:

1. Formal Methods

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

2. Informal Methods

a. Environmental Standards

The environmental standards method can be used to predict the future impacts of various activities by using the quality standard that had been registered for the agricultural sector (national, or regional regulation).

b. Analogy

The Analogy method is used to identify the environmental impact which possibly occur in proposed area as a result of various activities. The identified impact will be used as a base and consideration to predict the impacts which could arise in surrounding location with the same ecosystem.

c. Professional Judgement

The Professional Judgement methods used to predict the impact based on experience of experts. This method will be used if there is a limited data and information in the field and lack of understanding of the impact.

III.2 Social Impact Assessment

a. Process and Procedure of Social Impact Assessment (SIA)

The Social Impact Assessment (SIA) of PT. AIEK conducted in November 2009 at the area of 4 (four) villages namely Bumi Harapan, Pernaluan, Sukaraja and Tengin Baru. The SIA was carried out by the Faculty of Forestry, Institut Pertanian Bogor (IPB), The assessor Team with the key consultants have been accredited and approved by RSPO. The assessors are from: Faculty of Forestry, Institut Pertanian Bogor IPB Darmaga Campus

Bogor, Bogor Regency – West Java Province Indonesia 16001 (Phone.: 62-251- 621947, Fax: 62-251-6219470). The SIA assessor team were 6 (six) persons, they are:

Table 7. Team member of PT. AIEK SIA Assessors

No.	Name	Information
1.	Ir. Nyoto Santoso, MS	Team Leader
2.	Ir. Siswoyo	Member
3.	Handian Purwawangsa, S Hut, MSi	Member
4.	Udi Kusnidar, S Hut	Member
5.	Yanti Aprianti, S Pi	Member
6.	Sulfan Ardiansyah, S Hut	Member

Ir. H. Nyoto Santoso, MS – Lead Assessor

Born in Banyuwangi, 15th March, 1962. He is the team leader of Faculty of Forestry HCV & SIA Team, Bogor Agricultural University (IPB). Experts in the Management and Biodiversity Conservation. Holds a Master Degree in the Natural Resources and Environment Management from IPB in 1992. The experience in the environment and biodiversity section has been started since 1987, with studies of Environmental Impact Assessment, Mangrove Ecosystem Management, Inventory Flora & Fauna Mangrove Forest Ecosystems, Forest Peat , Tropical Moist Forests and Biodiversity Management Planning in Plantation Forest and Forest Management Planning Conservation Area.

Ir. Siswoyo, Msi- Team Member

Born in Purbalingga, February 8, 1965. He is a member of the team of the Faculty of Forestry SIA team with expertise as Ecologist Flora. Holds a Master of Science in Forestry Management Science Program, Graduate School of IPB in 1999. Experience in the field of HCV study started since 2000, especially in terms of Ecology Flora. In addition, he is also a lecturer at the Faculty of Forestry, with courses held is Conservation of Natural Resources, Conservation of Medicinal Plants, Ethnobiological, Biodiversity Conservation and Ex-situ Conservation.

Handian Purwawangsa, S.Hut, MS- Team Member

Born in Cipanas, January 1st, 1979. He is a member of a team of Faculty of Forestry SIA Team, as an expert in social and cultural fields. Holds a Master of the Bogor Agricultural University in the Forestry Sciences Program in 2008. Experience in social studies began in 2002.

Udi Kusdinar, S. Hut- Team Member

Born in Ciamis, Maret 13, 1984. He is a member of the team of the Faculty of Forestry SIA team with expertise as Cultural and Social Assessor. Holds a Degree in Forest Resources Conservation and Ecotourism, Faculty of Forestry IPB in 2009. Experience in the field of SIA study started since 2009, especially in terms of Cultural and Social Aspect.

Yanti Aprianti, S.Pi- Team Member

Born in Bogor, April 24, 1984. She is a member of the team of the Faculty of Forestry SIA team with expertise as social assessor. Holds a Degree in Fishery, Faculty of Fishery and Marine Science, IPB in 2007.

Sulfan Ardiansyah, S. Hut- Team Member

Born in Jember, August 27, 1986. He is a member of the team of the Faculty of Forestry SIA team with expertise as Cultural and Social Assessor. Holds a Degree in Forest Resources Conservation and Ecotourism, Faculty of Forestry IPB in 2008. Experience in the field of SIA study started since 2009, especially in terms of flora ecological aspect.

b. Assessment Methods

Social Impact Assessment of PT. AIEK used a framework approach to identify current condition of PT. AIEK, especially to socio-economic aspects and its impacts toward surrounding communities and public perception. The study also prepared the corporate social management plan, containing social activities required to meet the expected condition based on existing condition.

The SIA study use purposive sampling and simple random sampling. For the purposive sampling, samples were determined based on researcher's assessment which is considered as the most appropriate samples to fulfill required data. While simple random sampling used to give an equal opportunity to be taken for every element of the population. Population representation was considered in determining the samples distribution on this random sampling. Framework approach of this assessment is presented below.

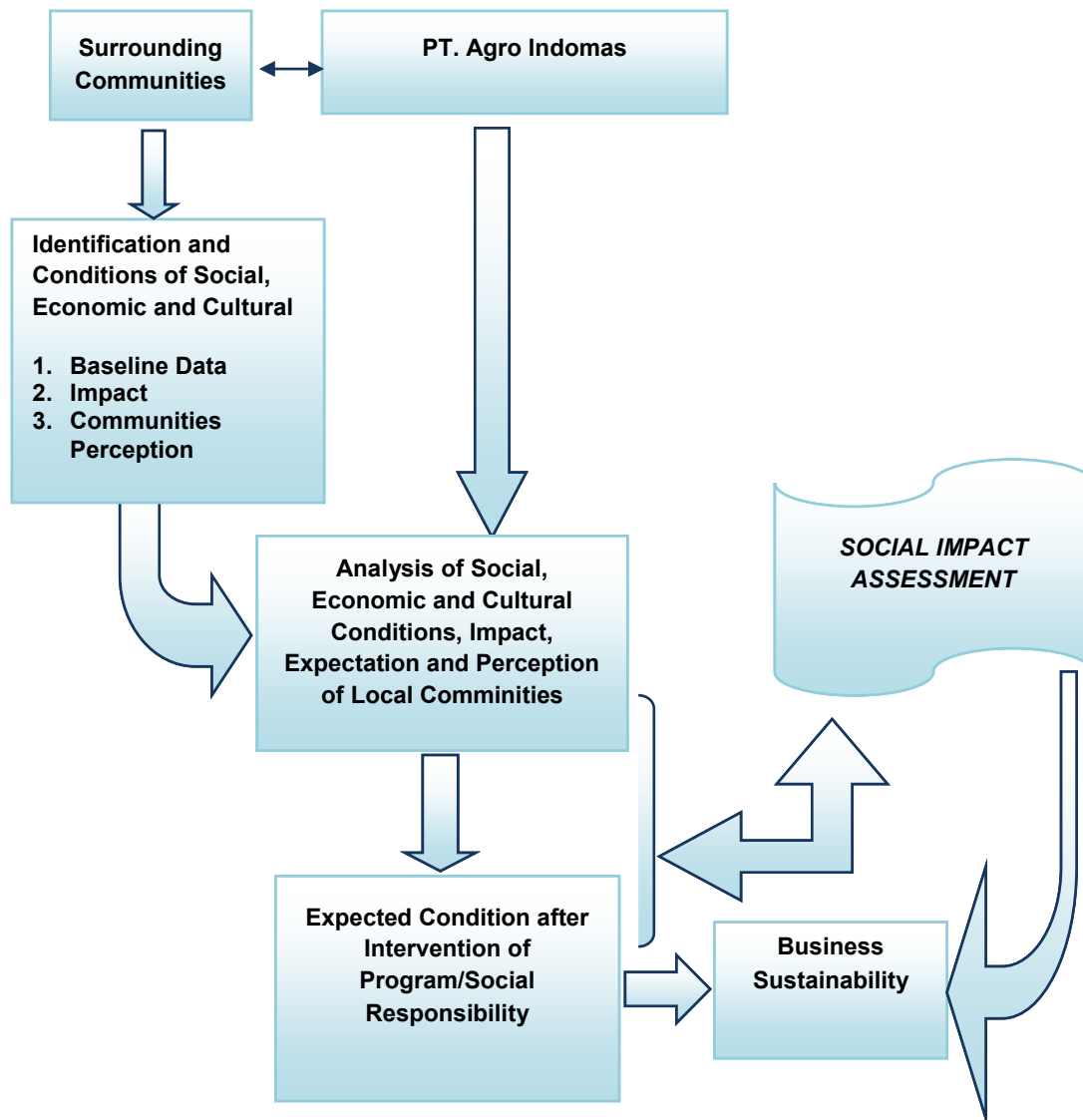


Figure 7. The SIA framework approach for PT. AIEK

The AIEK SIA assessment team was collected a primary and secondary data and it has been analyzed by using combination of quantitative and qualitative methods. Qualitative analysis puts more emphasis to describe the facts and relationship between all variable found in the field. Based on the both aspects, three types of analysis were conducted as follow:

- 1) Analysis of Socio-Economic condition of farmers and local communities around PT. AIEK
- 2). Analysis of farmers and public perception
- 3) Analysis of PT. AIEK's impact (positive and negative) to the environment and socio-economic conditions.

III.3 High Conservation Value Area (HCVA) Assessment

a. Process and Procedure of High Conservation Value Area (HCVA) Assessment

The HCVA Assessment of PT. AIEK was prepared by Assessor from Faculty of Forestry, Institut Pertanian Bogor (IPB). The team consist of 4 (Four) RSPO-Approved assessors, led by Ir. Nyoto Santoso, MS. The assessors are from Faculty of Forestry, Institut Pertanian Bogor, IPB Darmaga Campus Bogor, Bogor Regency – West Java Province Indonesia 16001 (Phone: 62-251- 621947, Fax: 62-251-6219470).

Table 8. Team member of PT. AIEK HCVA Assessors

No.	Name	Information
1.	Ir. Nyoto Santoso, MS	Team Leader
2.	Ir. Siswoyo	Member
3.	Sutopo, S Hut	Member
4.	M. Sayyidina Ali, AMD	Member
5.	Handian Purwawangsa, S.hut, MS	Member

Ir. H. Nyoto Santoso, MS – Lead Assessor

Born in Banyuwangi, 15th March, 1962. He is the team leader of Faculty of Forestry HCV Team, Bogor Agricultural University (IPB). Experts in the Management and Biodiversity Conservation. Holds a Master Degree in the Natural Resources and Environment Management from IPB in 1992. The experience in the environment and biodiversity section has been started since 1987, with studies of Environmental Impact Assessment, Mangrove Ecosystem Management, Inventory Flora & Fauna Mangrove Forest Ecosystems, Forest Peat , Tropical Moist Forests and Biodiversity Management Planning in Plantation Forest and Forest Management Planning Conservation Area.

Ir. Siswoyo, Msi- Team Member

Born in Purbalingga, February 8, 1965. He is a member of the team of the Faculty of Forestry HCV team with expertise as Ecologist Flora. Holds a Master of Science in Forestry Management Science Program, Graduate School of IPB in 1999. Experience in the field of HCV study started since 2000, especially in terms of Ecology Flora. In addition, he is also a lecturer at the Faculty of Forestry, with courses held is Conservation of Natural Resources, Conservation of Medicinal Plants, Ethnobiological, Biodiversity Conservation and Ex-situ Conservation.

Handian Purwawangsa, S.Hut, MS- Team Member

Born in Cipanas, January 1st, 1979. He is a member of a team of Faculty of Forestry HCV Team, as an expert in social and cultural fields. Holds a Master of the Bogor Agricultural University in the Forestry Sciences Program in 2008. Experience in social studies began in 2002.

M. Sayidina Ali, Amd- Team Member

Born in Brebes, April 6th, 1983. He is a member of the team of the Faculty of Forestry HCV team with expertise in the field of GIS. Obtained a bachelor's degree (D3) in the course Ecotourism, Department of Forest Resources Conservation and Ecotourism Faculty of Forestry - IPB in 2005. The experience in the study of HCV as GIS personnel since 2007. We are currently continuing education Tier 1 at the Faculty of Forestry - University Nusa Bangsa - Bogor.

Sutopo, S.Hut- Team Member

Born in Purbalingga, July 18, 1983, as a member of the Faculty of Forestry HCV team with a role as assistant to wildlife experts. He earned a Bachelor of Forestry in the Department of Forest Resources Conservation and Ecotourism, Faculty of Forestry - IPB in 2008. The first HCV review was done at KPH Madiun in 2007 with a concentration in the field of wildlife as well as a thesis with the title "Biodiversity Birds On Multiple Habitat Type The Forest Management Unit (FMU) Madiun" - Perhutani Unit II of East Java.

b. Assessment Methods

PT. AIEK HCVA assessment was taken with in 2 month, starting from October until November 2009. The HCVA assessment conducted by using a *High Conservation Value Toolkit* year 2008, published by The Konsorsium Revisi HCV Toolkit Indonesia, as a guidance to assess the presence of HCV area in the concession of PT. AIEK. Some materials was used for identification and analysis of HCVA process that include: Map of the areas of PT. Agro Indomas East Kalimantan; *Landsat* Image; Slope Class and Topography Maps; Forest Land Use Maps; Land System Maps and river network Maps as well as materials for field surveys (Alcohol 70%, used newspaper, label papers (to give the code/name of the local herbarium specimens), Field Guide Book (Birds of Java, Bali, Sumatra and Kalimantan-BirdLife) and Field Guide to the Mammals of Borneo (Payne et al., 1985-published by WWF Malaysia, Kuala Lumpur), Social and Questionnaires on Social and

Culture and the field book. Some tools was used in this assessment include: GPS, compass (Brunton), 50 meters of plastic ropes (which was marked at 2, 5, 10 and 20 meters), meter (diameter), camera, binoculars, computers, and stationery (rulers, pencils, and pens).

Data collection was conducted in accordance with the relevant guidelines, documents, report and maps. There were primary data collection and secondary data collection. Secondary data collection includes: information gathering of the location, boundaries of the surrounding area, topography, social-economic and cultural conditions. Besides using the Indonesia HCV Toolkit, the assessment team referred to the relevant laws of Indonesia, IUCN, CITES and other relevant guidelines to ensure the assessment complies to the RSPO requirement.

The HCVA assessment of PT. AIEK used two determining factors in the implementation of the study, they are: (1) the availability of reasonably sufficient and up to date data (both secondary and primary); and (2) proper stages and systematic activities as stipulated in the tool kit. The availability of data and information were determined by conducting a systematic, adequate and well planned field survey activities. The review on the current documents/reports and maps and initial identification of HCV was carried out, in order to conduct a field survey. Proper stages and systematic activities as stipulated by tool kit was followed in the identification and analysis of the HCV. It includes field surveys, data processing, analysis and synthesis of data, identification and analysis of HCV, and mapping. The framework approach of study is presented below.

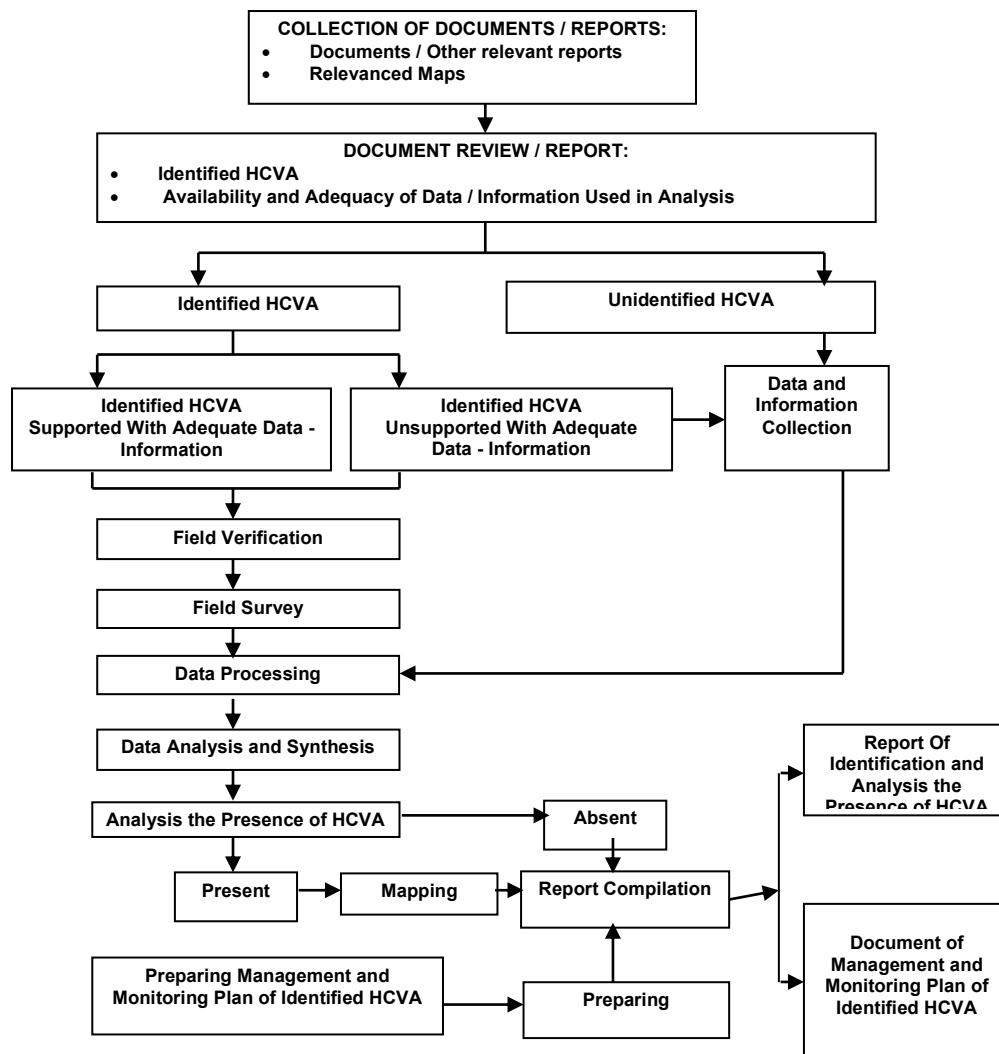


Figure 8. The HCVA assessment framework approach for PT. AIEK

HCV Stakeholders Consultation

Stakeholder consultation related to HCV findings was conducted on 24th September 2010. The following table is the list of stakeholders attended the public consultation:

Table 9. List of stakeholders attended the public consultation.

No	Participants	Institution
1	Government	Bumi Harapan Village Government
		Sukaraja Village Government
		Pemaluan Village Government
		Tengin Baru Village Government
		Police Sector Sepaku District
		Forestry and Plantation Agency
2	Community Leader	Cultural Leader of Community
		Village Elder
		Village Head
		Sub-Village Head (RT)
3	Community	Local communities

No	Participants	Institution
		GAPOKTAN (Unity of Planter Group)
4.	NGO	Local NGO
5	Plantation Management	Management of Plantation Public Relation Sustainability Team
6.	Assessor	HCV Assessment Team

List of Legal, Regulation and other guidance referred for the assessment.

The following table are list of reference (legal, regulation and other guidance used in the assessment)

Table 10. List of Legal, Regulation and other guidance referenced for the assessment.

No.	Reference	Details
1	Status of vulnerability according to the world Conservation Union (IUCN) Red list	Vulnerability of plants and wildlife
2	Convention on International Trade in Endangered Species (CITES)	Rule on trade (usage) of plants and wildlife
3	HCV Toolkit	Guidance on High Conservation Value Area Identification in Indonesia version 2 (2008)
4	Indonesian Law No. 32 year 2009	Environmental Protection and Management
5	Indonesian Law No. 41 year 1999	Forestry
6	Government Regulation No. 27 year 1999	Environmental Impact Assessment
7	Indonesian Law No. 5 year 1990	Conservation of Natural Resource and Ecosystem
8	Government Regulation No. 7 year 1999	List protected of plants and wildlife
9	Indonesian Law No. 23 year 1997	Environmental Management
10	Government Regulation No. 35 year 1991	River
11	Government Regulation No. 68 year 1998	Nature reserve management
12	Presidential Decree No. 32 th 1990	Management of Protected Area

IV. Summary of Assessment Findings

IV. 1 Social-Economic Impact (SEI) Assessment Finding

1. Communities Characteristic

a. Land Ownership in The Surrounding Communities

Based on the study, the village community has 3 (three) type of land ownership, they are: (1) Legally certified land; (2) Inheritance land from ancestor and (3) Rental Land. Legality of Land ownership in the surrounding community were proved by land certificate from government. Most of the villagers utilize their land for agricultural activities, with the paddy field as a main commodity.

b. Health Indicator and Services

Parameter used in measuring the village community's health indicator is the community's houses, location of public toilet, clean water availability and community preferences for medical treatment. In general, health indicator of surrounding communities is quite good condition and it is indicated by the adequate condition of houses, availability of toilet inside their houses, using river water as clean water sources and using Public Hospital/ Puskesmas/ Doctor services for their medical treatment. Actually the the public health condition of the community is relatively low, because of limited knowledge and availability of health facilities.

C. Socio Economic Aspects

Most of the PT. AIEK surrounding communities fulfill their livelihoods by an agricultural activity especially by farming their land. The study also found that there is another job activity for local community to fulfill their livelihoods such as: entrepreneur/ own business, traders, merchant, civil employees, employee, soldiers, breeders, traditional medicine man, engineer. Majority of the local people lives with basic education, limited to elementary school (40 % of them were elementary school level.)

2. Social Issue

Based on the Focus Group Discussion (FGD) process with the village community, there was some social issue that have been arised related to the development of PT. AIEK. The following table shows, the social issue that has been identified.

Table 11. The Social Issues that had been identified through assessment process

No.	Social Issue	Description
1.	Land Tenurial	<ul style="list-style-type: none"> • Potential land tenure conflict among villagers are almost not found in all surrounding villages • Potential land conflict between company and community may be occurred in the land compensation and land clearing process
2.	Environmental	<ul style="list-style-type: none"> • Most of surrounding villagers of PT. AIEK stated that the establishment of oil palm plantation by PT. AIEK would not generate negative impact on the availability and quality of ground and river water.
3.	Socio Economics	<ul style="list-style-type: none"> • Many local communities have not been absorbed as workers
		<ul style="list-style-type: none"> • Unclear concept and realization of plasma program
		<ul style="list-style-type: none"> • Local community lives with basic education background
4.	Socio Cultural	Acculturation had occurred between indigenous people (Dayak) and immigrant community, but there were still potential horizontal land conflict among them especially related to land tenure for ancestor land in Sukaraja Village
5.	Regional and Community Development	Local community expect the company to provide clean water facilities and improve village public facilities and educational facilities

3. Stakeholders Identification Analysis

The stake holders identification was started through writing a list of all potential stakeholders, from local to the regional level related to the development of PT. AIEK. In this process, all the stakeholders that cause impacts directly or indirectly, from all level are listed on the following tablet.

Table 12. List of potential stakeholders that related to PT. AIEK

No	Institutional Level	List of Stakeholder
1.	Global and International	WWF
		RSPO
		Global Society
		International NGO
2.	National	National Official Government

No	Institutional Level	List of Stakeholder
		Ministry of Forestry
		Ministry of Agriculture
		National Land Authority
3.	Province	Official Government of East Kalimantan Province
		East Kalimantan Forestry Agency
		East Kalimantan Nature Conservation Agency
		East Kalimantan Manggala Agni
4.	Regency	Official Government of Penajam Paser Utara (PPU)
		Development Planning Agency (BAPPEDA)
		Health Agency
		District Attorney
		District Court
		People Representative Council (DPRD)
		Forestry and Plantation Agency
		Internal Audit Agency (BAWASDA)
		Education and Sport Agency
		Industrial and Trading Agency
		Cooperatives Small and Medium Enterprises Agency
		Manpower and Transmigration Agency
		Public Work Agency
		Fisheries Agency
		Regency Police Commands
		University
		NGO
		Mass Media
		Regency Military Commands
5.	District	Government of Sepaku District
		Police Command of Sepaku District
		District Military Commands
		Kademangan Sepaku
6.	Local	Official Government of Tengin Baru Village, Bumi Harapan Village, Pemaluan Village and Sukaraja Village
		Cultural Community
		People Care Forum of Sepaku
		Society and Youth Organization
		Service Provider
		Community Plantation
		Local NGO
		Tim 9
7.	Corporate Internal	Employee and Labor
		Corporate Management
		Smallholder planter

The next process of the stakeholders identification analysis is dividing PT. AIEK stakeholders priority based on socio-economic issues. The stakeholders will be divided into 4 (four) segmentation, they are: (1) Stakeholders that are related to the tenurial issues; (2) Stakeholders that are related to the Community Development Issues; (3) Stakeholders that are related to the health and environmental issues and (4) Stakeholders that are related to the mass media and NGO

Analysis of Stakeholders Interest

Stakeholders that associated with PT. AIEK can be classified into three groups, they are: primary direct stakeholders who received benefits directly, primary indirect stakeholders who received benefits indirectly and secondary stakeholders that have interest towards PT. AIEK.

The primary direct stakeholders, include internal corporate and local level, consist of: employee, indigenous people and village government. The primary indirect stakeholders consist of service providers for business opportunity, community's plantation for better accessibility and local government for the income of PT. AIEK. The secondary stakeholders that have interest towards PT. AIEK include university and international communities.

4. Conclusion and Recommendation

1. Majority of the local people lives with basic education, limited to elementary school. Public health quality is also relatively low, due to limited knowledge and lack of health facilities.
2. Land tenure conflict are almost not found between village community members, potential conflict of land between companies and communities should be considered, especially in the process of land compensation and land clearing. The main socio economic problems are jobs availability, educational level, inadequate availability of clean water, electricity and the poor road and bridges condition.
3. In general, the surrounding community supported the PT. AIEK's oil palm development with their expectation to actualize plasma program, employment opportunity, improved public infrastructure and clean water supply facilities.
4. Prominent social issues arise are land compensation, settlement of land conflict, plasma realization and increased employment opportunities for local communities.
5. Management strategy for PT. AIEK to create social support and community development are aimed at addressing the tenure issues, CSR programs, plasma plantation development and communication with relevant stakeholders.

The assessment have also recommended that (1) The involvement of Government officials, customary leaders, land owners or cultivated land owners in the land compensation process, (2) Corporate social activity's plan should be focused on the development of public villages facilities and other productive activities.

IV. 2 High Conservation Value Area (HCVA) Assessment Finding

Physical Condition of Area

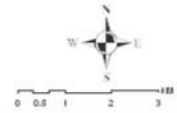
Average rainfall of PT AIEK on the 1998 – 2007 periods is about 2.563 mm/year; with the average number of rainy days is 208 days/year (data processed based on AMDAL information of PT AIEK). Based on Climate classification Schmidt and Fergusson, climate type of this area is grouped in A Type (very wet), with the make $Q = 0, 12$.

PT AIEK lies between 25-50 m above sea level altitude, with physiographic land around between flat to very steep (slope 0->40%). Based on ANDAL data of PT AIEK in 2009, geological formation in PT AIEK consist of 4 geological formation, namely: Alluvial Deposit, Bebulu Formation, Palau balang Formation, and Pemaluan Formation. Soil types that exist in this area consist of five different types of soil, namely: Hapludults, Haplaquepts, Sulfaquents, Hydroquents, and Tropohumults. It shows there is no peat soil inside PT. AIEK concession.

PT AIEK, administratively located in Sepaku district, Penajam Paser Utara Regency, East Kalimantan Province. Based on provincial spatial plan of East Kalimantan, PT AIEK is located at non-Forestry Development Area (KBNK) covering area around 6.767 ha. Land cover in PT AIEK, largely composed of Mangrove and Oil Palm.



Topographic Map of PT AIEK



116°49'30"E

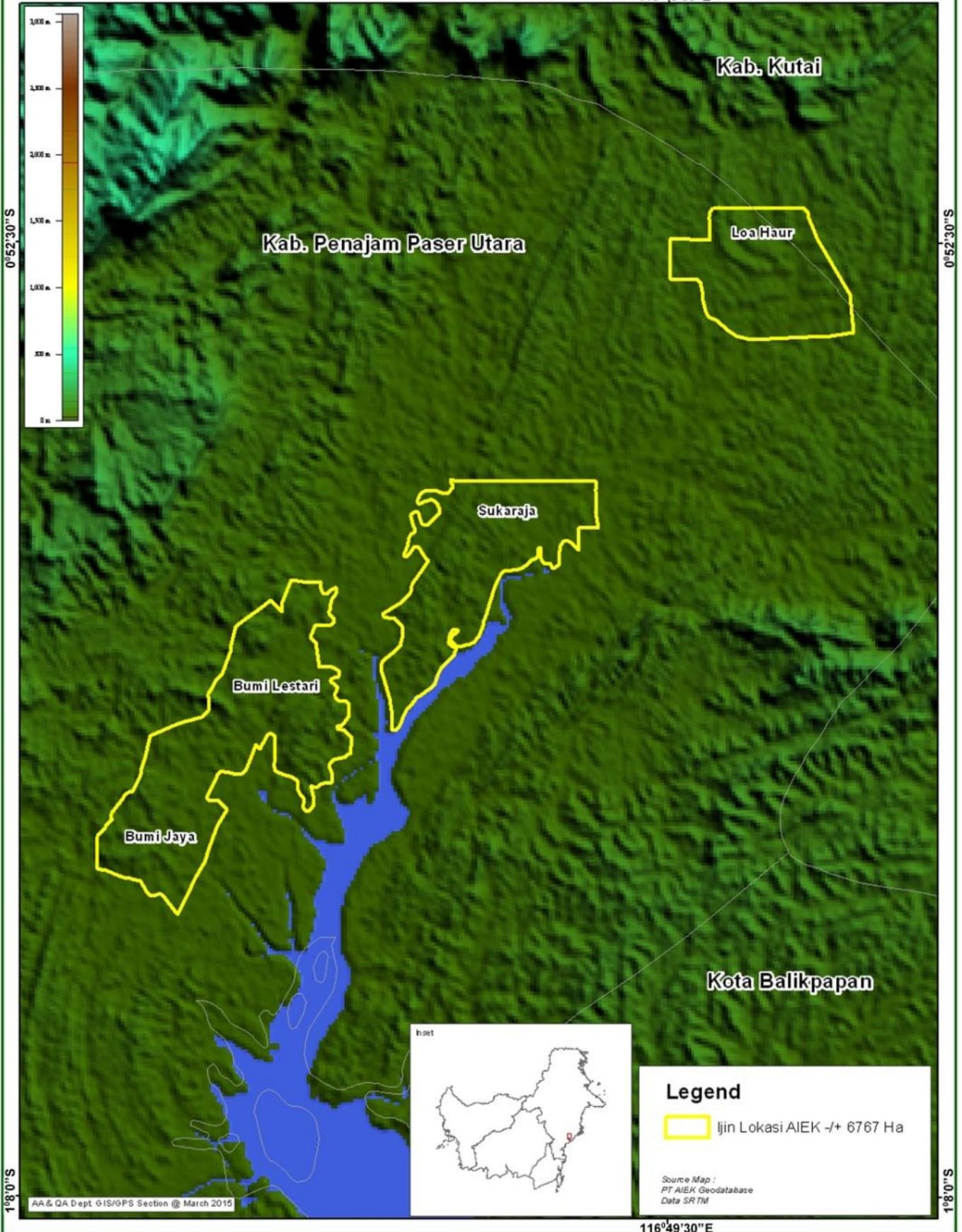


Figure 8. PT. AIEK topography map

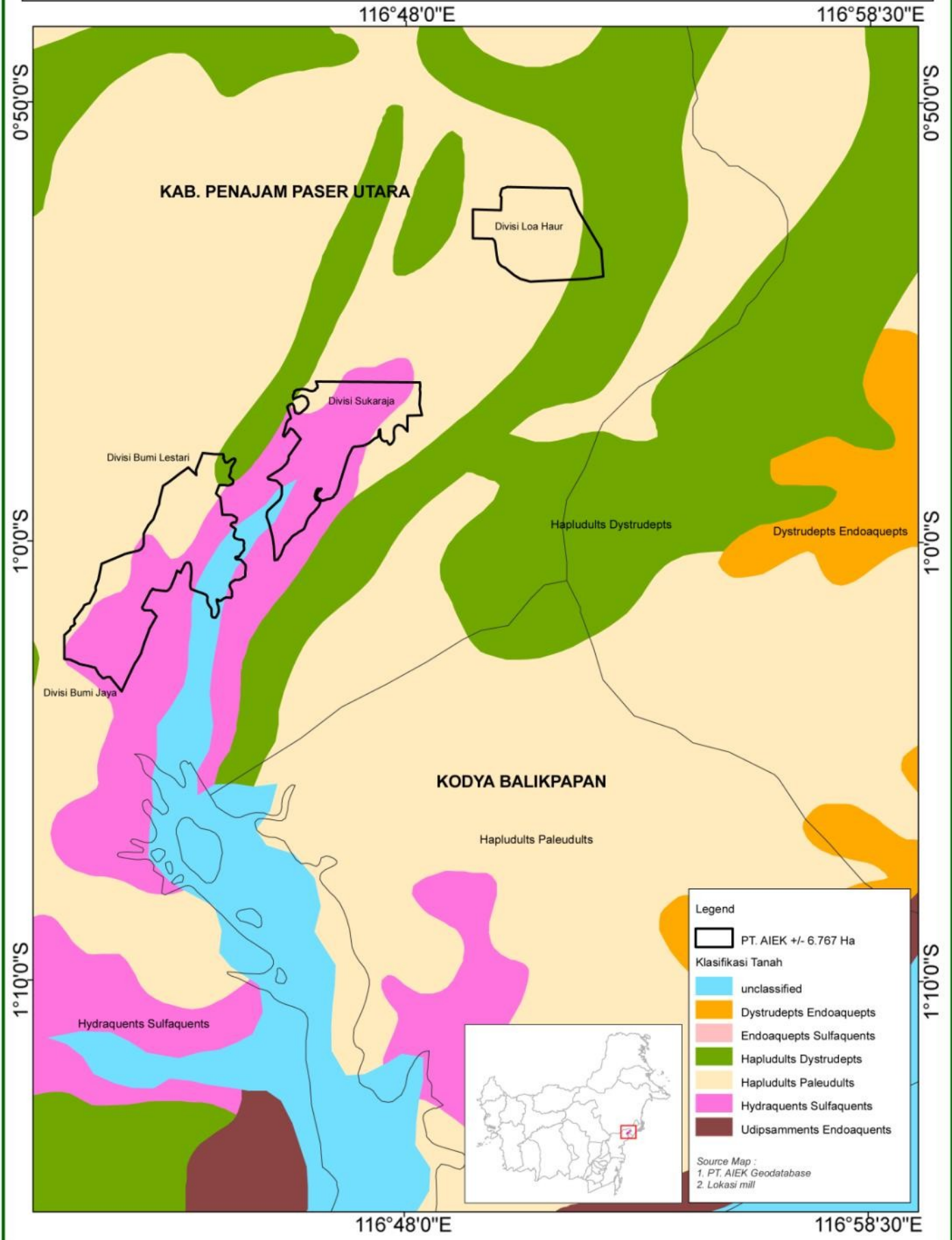


Figure 9. PT. AIEK soil types map

Biological Conditions

Flora

Number of plant species found in PT AIEK is about 319 species, of which 278 species have been identified the scientific name and 41 species unidentified. From 278 species that have been identified, all of these species were grouped in 76 families. Based on Division location, the highest vegetation composition was found in Pemaluan Division, with 201 species and 64 Families. Based on habitus type, vegetation composition in PT AI-East Kalimantan can be grouped into 7 (seven) kinds of habitus: Tree, Herb, Liana, Bush, Epiphyte, Palm, and Bamboo. Based on habitus distribution, tree habitus is the highest species richness.

Loa Haur Division

Total number of species found in Loa Haur Division (Riparian of Sepaku River) is 89 species, of which 88 species have been identified the scientific name and 1 species unidentified. From 89 Species that have been identified, all of these species could be grouped in 47 families. The family of Poaceae is the highest number of family group in this area (7 species). Based on habitus, vegetation composition in PT AIEK could be grouped into 7 (seven) kinds of habitus: Tree, Herb, Liana, Bush, Epiphyte, Palm, and Bamboo. Plant species diversity in Loa Haur Division ranged between 1,802 to 2,509. Based on the growth level, the highest plant species diversity is found in Trees (2,509) and the lowest is found in pole (1,802).

Pemaluan Division

Total number of plant species found in Pemaluan Division is 202 species, where 179 species have been identified and 23 species unidentified. From 179 plant species that have been identified was grouped in 63 Families. Based on the location, the highest vegetation composition found in Pemaluan river riparian (73 species in 38 Families). The Arecaceae and Rubiaceae is the highest plant species in the Pemaluan division, both of them were consist of 13 species.

Based on habitus type, vegetation composition in Pemaluan Division was grouped in 7 (seven) kinds of level: i.e. Tree, Herb, Liana, Bush, Ephyphyts, Palm, and Bamboo. Based on habitus distribution, trees are the highest species richness. Plants diversity in Pemaluan Division in oil palm plantation area of PT AIEK, ranges between 0,691 to 3,107.

Sisipan Division

Total number of plant species found in Sisipan Division is 142 species, where 123 species have been identified and 19 species unidentified. From 123 plant species that have been identified was grouped in 54 Families. Based on its location, the highest composition of vegetation was found in Ecoton and Mangrove area (84 species in 37 Families). The family of Arecaceae and Rubiaceae is the highest species with total number 10 species.

Based on habitus, composition of vegetation was grouped into 7 (seven) habitus: Tree, Herb, Liana, Bush, Ephyphyts, Palm and Bamboo. Plants diversity in Sisipan Division in oil palm plantation area of PT AIEK, ranges between 0,687 to 3,120. Based on the growth level, the highest plant species diversity is in Seedling level found in SS Sepaku (2,323), sapling level found in ecoton and mangrove area (3,120), pole level found in ecoton and mangrove area (2,421), trees level found in SS Sepaku (2,670), understorey plants found in SS Sepaku (1,830), ephyphyts and Liana found in SS Sepaku (2,393).

Fauna

Total number of Wildlife species found in PT AI-East Kalimantan area is about 62 species and 42 Families, with the details are: Loa haur Division is about 16 species in 15 families, Pemaluan Division is about 43 species in 29 families, and Sisipan Division is about 34 species in 27 families. The highest species found in Pemaluan Division, it's about 43 species. This result came from rapid assessment during this HCV assessment conducted.

Environmental Services

Areas or Ecosystems Important for the Provision of Water and Prevention of Floods for Downstream Communities

The areas or ecosystem that found in PT AIEK are riparian and wetland; whereas cloud forest ecosystems, ridge line forest, and karts' ecosystems was not found in the area. Riparian ecosystem that found in PT AIEK consists of riverbank. The Riverbank area in Loa Haur Division is Sepaku River; in Pemaluan Division are Semuntai and Trunen River; and in Sisipan Division is Sepaku river, Sambo river, Semoi-1 river creek, and S.Semoi-2 river creek. The Riverbank land cover conditions in PT AIEK, generally can be divided into 5 types: mangrove ecosystem, secondary forest, bush area, open ground, and Oil Palm.

Ecosystems that found in PT AI- East Kalimantan consist of 2 (two) types ecosystem: Mangrove Forest and Lowland Forest. Land classes found in the area consist of six types: BRH, KJP, LHI, LWW, MTL, and TWB. Based on the RePPPProT, there is only one type of Land Class that include in threatened land, ie KJP Land Class in Mangrove Ecosystem.

Potential Erosion Hazard Rate Prediction (TBE)

Based on AMDAL Document of PT AIEK (2009), the hazard level in the area categorized as low (13.72 - 33.88 ton/ha/year). From the analysis of Prediction of Potential Erosion Hazard Level (TBE) in the area, it showed a range number between 68.62 – 337.98 ton/ha/year (Medium to High).

Areas Functioning as Natural Barrier to Prevent the Widespread of Forest and Land Fires

Areas that have a function as natural barriers to the spread of forest and ground fire, is the forest with a good condition, including e.g. intact peat swamp forest, other swamp forest types, open wetland/marshes, other wetland ecosystem types, as well as green belts with various species of fire-resistant plants. In the PT AIEK area, mangrove ecosystem can be categorized as Forest Fire barrier.

Economic Social and Cultural Aspects

The local community in the surrounding area of PT AIEK is dominated by Dayak Paser ethnic. They are the indigenous ethnic group who lives in this area. There are also some migrant ethnic groups who lives in the surrounding area of PT. AIEK, they are: Javanese, Banjarese, and Bugis ethnic. Community religion is dominated by Moslem as majority and the other religions are Christian and Kaharingan. Total number of surrounding village is consists of 4 villages: Bumi Harapan, Pemaluan, Sukaraja, and Tengin baru in Sepaku Sub-district.

Basically most of the community livelihood in this area is a farmer, with the main products of pepper, rubber, and oil palm. There is two types cropping system to planting the pepper or rubber: planted separately and intercropping (*Tumpang sari*). Another livelihood in the area is: Civil employee (PNS), industry, constructions, entrepreneur, transportations, and services. There is no community livelihood through Gathering activity. The following table shows the characteristics of villagers around PT AI-East Kalimantan areas based on basic needs.

Table 18. Peoples' characteristics in around areas of the PT AI-East Kalimantan based on their basic needs

List of basic needs	Utilization/Cultivation	Important level	Specific Location
Carbohydrate	Less sustainable	Low	No Spesific
Animal Protein	Sustainable	Low	No Spesific
Fruits/vegetables	Sustainable	Low	No Spesific
Waters	Sustainable	Low	No Spesific
Clothing's	-	-	-
Houses	Less sustainable	Small	No Spesific
Ships	-	Very Small	No Spesific
Meuble, appliances etc.	Sustainable	Very Small	No Spesific
Fuels	Sustainable	Low	No Spesific
Medicines	Sustainable	Low	No Spesific
Animal feed	Not Utilization	-	No Spesific
revenue	-	Small	No Spesific

Meet The Basic Needs of Local Community

Most of the basic needs of local community in around PT AIEK area (such as: Food, water, clothing, home appliances, firewood, medicines, and fodder), met by purchasing and only small are taken directly from the forest. For all surrounding village of PT AIEK (Tengin Baru, Pemaluan, Sukaraja, Bumi Harapan), most of the villagers fulfill their basic needs (such as Food, Water, materials for building and tools, firewood, and medicines) by cash, donation, or utilize natural resources outside the area of management unit. In the other hand, there is no source of cash income for subsistence needs inside or outside of management unit.

Areas Critical for Maintaining the Cultural Identity of Local Communities

The result for Areas Critical for Maintaining the Cultural Identity of Local Communities was obtained through an interview and discussion with the local community. The interview and discussion was used the indicator zone of cultural rules, distribution of archeological sites, distribution of ritual activities, and distribution of natural resources to meet the cultural needs, The result is presented on following **Table 19**.

Table 19. Local Community cultural area around PT AI-East Kalimantan that associated with HCV6

Villages	Indicator*	Existence**	Extent Quality***	Important levels***
Bumi Harapan	Zone created by cultural rules	Absent	-	-
	Distribution of archaeological sites	Absent	-	-
	Distribution of ritual activity	Absent	-	-
	Distribution of natural resource for	Absent	-	-

Villages	Indicator*	Existence**	Extent Quality***	Important levels***
	basic needs			
Sukaraja	Zone created by cultural rules	Absent	-	-
	Distribution of archaeological sites	Absent	-	-
	Distribution of ritual activity	Absent	-	-
	Distribution of natural resource for basic needs	Absent	-	-
Pemaluan	Zone created by cultural rules	Absent	-	-
	Distribution of archaeological sites	Absent	-	-
	Distribution of ritual activity	Absent	-	-
	Distribution of natural resource for basic needs	Absent	-	-
Tengin Baru	Zone created by cultural rules	Absent	-	-
	Distribution of archaeological sites	Absent	-	-
	Distribution of ritual activity	Absent	-	-
	Distribution of natural resource for basic needs	Absent	-	-

Based on study, there are no cultural rule areas, distribution of archeological sites, distribution of ritual activities, and distribution of natural resources to meet the cultural needs.

The Result of HCV Assessment

The result of the field observations indicates that the area which is containing High Conservation Value (HCV) in the areas of PT. Agro Indomas East Kalimantan is about size 2.270,27 ha, with detail: Divisi Loa Haur 19,58 ha, Divisi Pemaluan 1.185,80 ha, dan Divisi Sisipan 1.064,89 ha as can be seen at **Table 20** to **Table 24**.

Table 20. The Size and Percentage of PT. Agro Indomas East Kalimantan-High Conservation Value Areas.

No	Division	HCVA	Riparian Widh of (m)	Size (Ha)	Percentage in each division (%)	Percentage to total areas of PT. Agro Indomas-East Kalimantan (%)
1	Loa Haur	Mentoyo River	25	19,58	1,24	0,29
		Total of HCVA in Loa Haur Division		19,58	1,24	0,29
		Width of Loa Haur Division		1.576	100,00	23,29
		Productive areas plan in Loa Haur Division		1.556,42	98,76	23,00
2	Pemaluan	Pemaluan River	25	1,44	0,05	0,02
		Semuntai River	25	5,34	0,17	0,08
		Trunen River	25	6,4	0,21	0,09
		Sabut River				Including in mangrove area
		Sabut River				Including in mangrove area
		Trunen River Creek				Including in mangrove area
		Ecotone and Mangrove areas		1.098,78	35,49	16,24
		Mangrove Buffer	10	73,84	2,38	1,09
		Total of HCVA in Pemaluan Division		1185,8	38,30	17,52
		Width of Pemaluan Division		3.096	100,00	45,75
Productive areas plan in Pemaluan Division		1910,2	61,70	28,23		
3	Sisipan	Sepaku River	25	16,38	0,78	0,24
		Sambu River	25	8,85	0,42	0,13

No	Division	HCVA	Riparian Widh of (m)	Size (Ha)	Percentage in each division (%)	Percentage to total areas of PT. Agro Indomas-East Kalimantan (%)
		Semoi-1 River Creek	25	9,26	0,44	0,14
		Semoi-2 River Creek	25	0,7	0,03	0,01
		River in Blok A11,B11				Including in mangrove area
		River in Blok C11				Including in mangrove area
		Mangrove and Ecotone Area		967,55	46,18	14,30
		Mangrove Buffer	10	62,15	2,97	0,92
		Total of HCVA in Sisipan Division		1.064,89	50,83	15,74
		Width of Sisipan Division		2.095	100,00	30,96
		Productive areas plan in Sisipan Division		1.030,11	49,17	15,22
		Total of HCVA in PT. Agro Indomas East Kalimantan		2.270,27		33,55
		Location Permit of PT. Agro Indomas East Kalimantan		6.767	100,00	100,00
		Productive areas plan in PT. Agro Indomas East Kalimantan		4.496,73		66,45

Table 21. Results of Identification and Analysis of Existence of HCV1 to HCV6 in the Loa Haur Division, PT. AI East Kalimantan

Component of HCV	HCV Present	HCVA	Size (Ha)
HCV1. Areas with Important Levels of Biodiversity			
HCV1.1. Areas that Contain or Provide Biodiveristy Support Functions to Protection or Conservation Areas	Present	Mentoyo River	19.58
HCV1.2. Critically Endangered species	Absent	-	-
HCV1.3. Areas that Contain Habitat for Viable Population of Endangered, Resticted Range or Protected Species	Present	Mentoyo River	*)
HCV1.4. Areas that Contain Habitat of Temporary Use by Species or Congregations of Species	Absent	-	-
HCV2. Natural Landscape & Dynamics			
HCV2.1. Large Natural Landscape with Capacity to Maintain Natural Ecological Processes and Dynamics	Absent	-	-
HCV2.2. Areas that Contain Two or More Contiguous Ecosystems	Absent	-	-
HCV2.3. Areas that Contains Representative Population of Most Naturrally Occuring Species	Present	Mentoyo River	*)
HCV3. Rare or Endangered Ecosystem	Absent	-	-
HCV4. Environmental Services			
HCV4.1. Areas or Ecosystems Important for the Provision of Water and Prevention of Floods for Downstream Communities	Present	Mentoyo River	*)
HCV4.2. Areas Important for the Prevention of Erosion	Absent	-	-

Component of HCV	HCV Present	HCVA	Size (Ha)
and Sedimentation			
HCV4.3. Areas that Function as Natural Barriers to the Spread of Forest or Ground Fire	Absent	-	-
HCV5. Natural Areas Critical for Meeting the Basic Needs of Local People	Absent	-	-
HCV6. Areas Critical for Maintaining the Cultural Identity of Local Communities	Absent	-	-
Total of HCVA			19,58

Note: *) = the current width of the areas is the same as the previous size

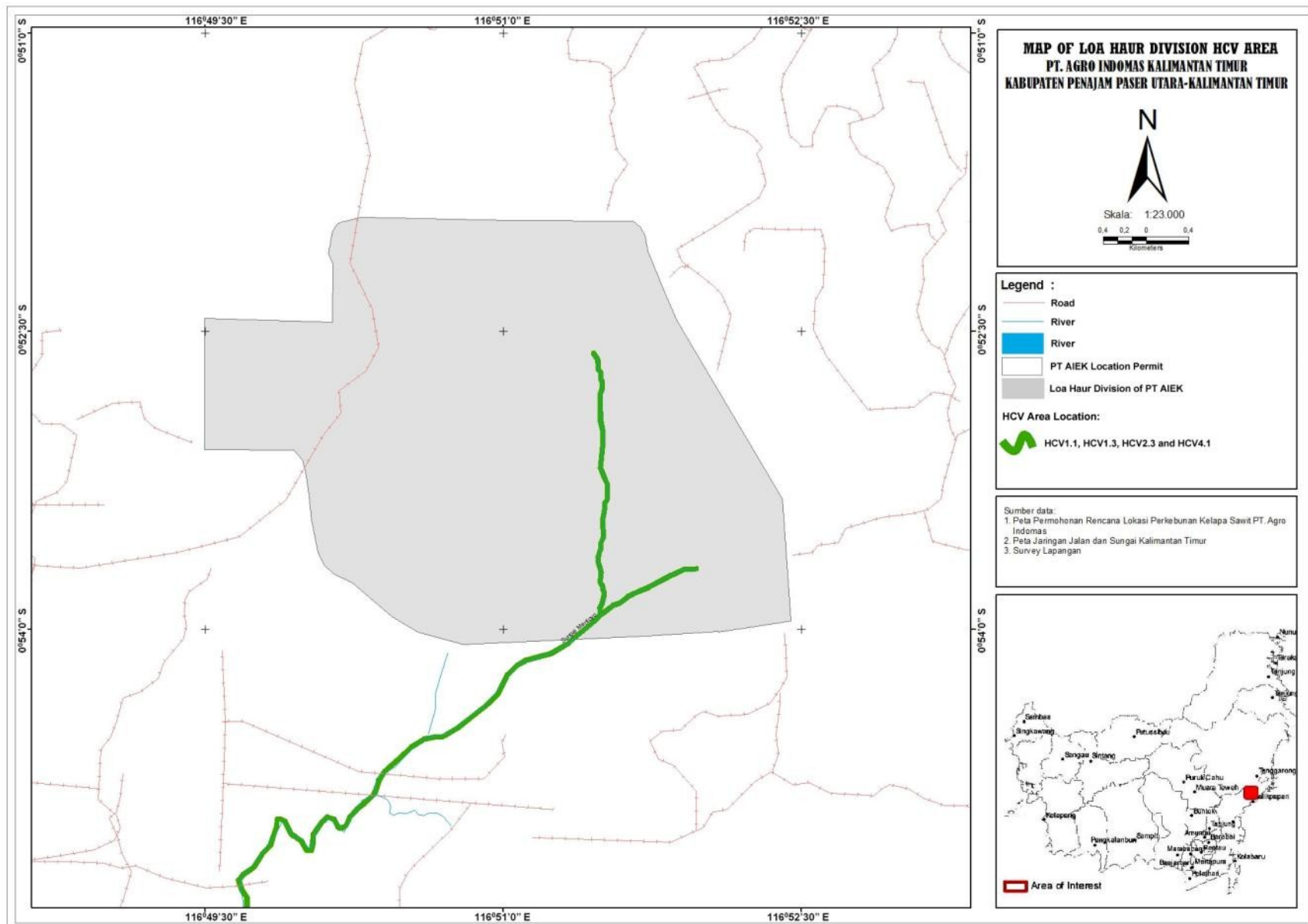


Figure 10. Map of HCV Area in the Loa Haur Division

Tabel 22. Results of Identification and Analysis of HCV1 to HCV6 Existence in the Pemaluan Division, PT. AI East Kalimantan

Component of HCV	HCV Present	HCVA	Size (Ha)
HCV1. Areas with Important Levels of Biodiversity			
HCV1.1. Areas that Contain or Provide Biodiveristy Support Functions to Protection or Conservation Areas	Present	Pemaluan River	*)
		Semuntai River	*)
		Trunen River	
		Sabut River	*)
		Sabut River Creek	*)
		Trunen River Creek	*)
		Mangrove Area	*)
HCV1.2. Critically Endangered species	Absent	-	*)
HCV1.3. Areas that Contain Habitat for Viable Population of Endangered, Resticted Range or Protected Species	Present	Pemaluan River	1,44
		Semuntai River	5,34
		Trunen River	6,4
		Sabut River	Including in Mangrove areas
		S.Sabut River Creek	Including in Mangrove areas
		Trunen River Creek	Including in Mangrove areas
		Mangrove Area	1.098,78
		Mangrove Buffer/Ecoton	73,84
HCV1.4. Areas that Contain Habitat of Temporary Use by Species or Congregations of Species	Absent	-	-
HCV2. Natural Landscape & Dynamics			
HCV2.1. Large Natural Landscape with Capacity to Maintain Natural Ecological Processes and Dynamics	Absent	-	-
HCV2.2. Areas that Contain Two or More Contiguous Ecosystems	Present	Mangrove Area ecotone	*)
HCV2.3. Areas that Contains Representative Population of Most Naturrally Occurring Species	Present	Pemaluan River	*)
		Semuntai River	*)
		Trunen River	*)
		Sabut River	*)
		Sabut River Creek	*)
		Trunen River Creek	*)
		Mangrove and Ecotone areas	*)
		Mangrove Buffer	*)
HCV3. Rare or Endangered Ecosystem	Present	Mangrove and Ecoton areas	-
HCV4. Environmental Services			
HCV4.1. Areas or Ecosystems Important for the Provision of Water and Prevention of Floods for Downstream Communities	Present	Semuntai River	*)
		Trunen River	*)
		Sabut River	*)
		Sabut River Creek	*)
		Trunen River Creek	*)
		Mangrove and Ecotone areas	*)
		Mangrove Buffer	*)
HCV4.2. Areas Important for the Prevention of Erosion and Sedimentation	Absent	-	-
HCV4.3. Areas that Function as Natural Barriers to the Spread of Forest or Ground Fire	Present	Mangrove area Mangrove Buffer	*) *)
HCV5. Natural Areas Critical for Meeting the Basic Needs of Local People	Absent	-	-
HCV6. Areas Critical for Maintaining the Cultural Identity of Local Communities	Absent	-	-
Total of HCVA			1.185,8

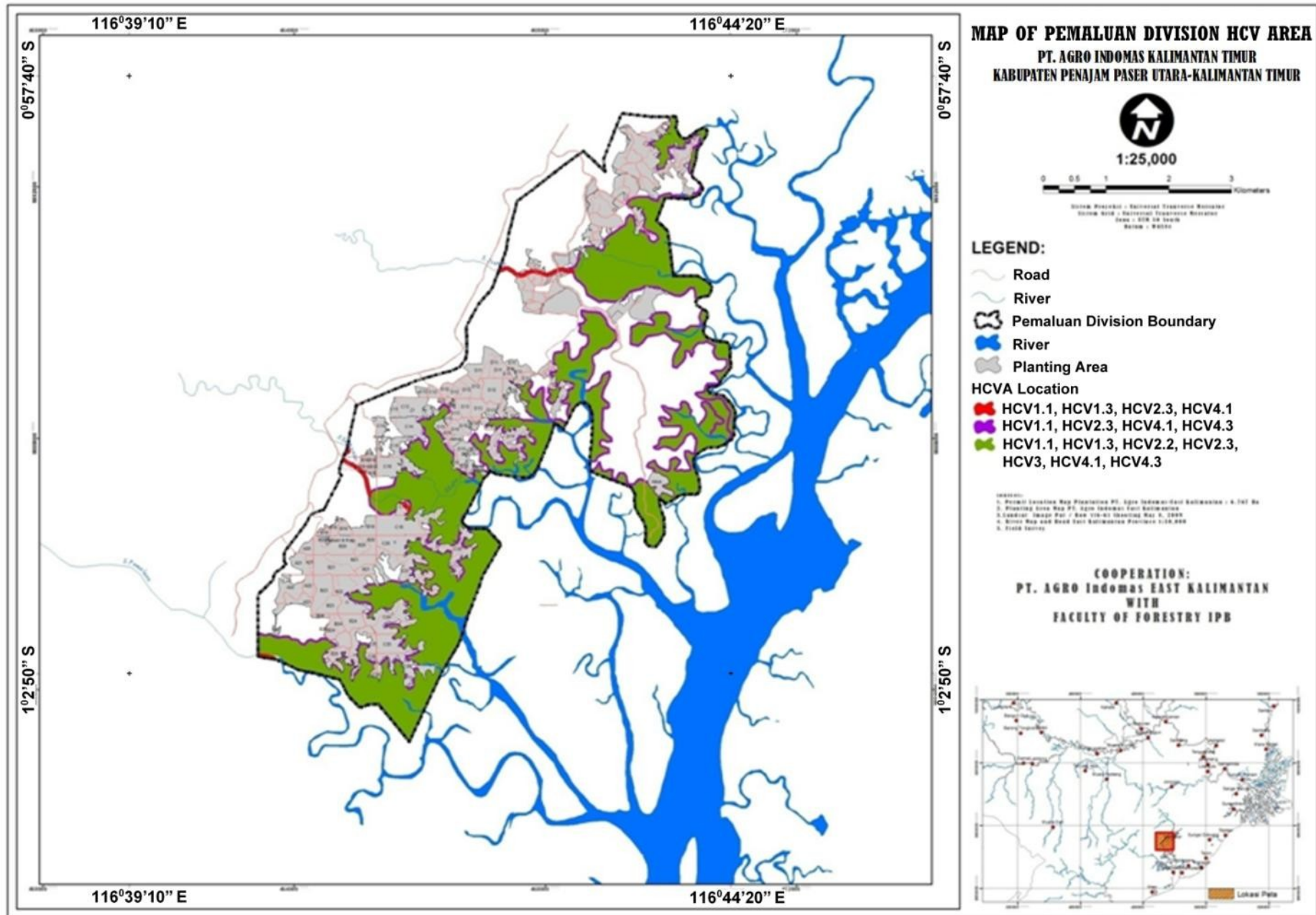


Figure 11. Map of HCV Area in the Pemaluan Division

Tabel 23. Results of Identification and Analysis of HCV1 to HCV6 Existence in the Areas of Sisipan Division, PT. AI East Kalimantan

Component of HCV	HCV Present	HCVA	Size (Ha)
HCV1. Areas with Important Levels of Biodiversity			
HCV1.1. Areas that Contain or Provide Biodiversity Support Functions to Protection or Conservation Areas	Present	Sepaku River	16,38
		Sambu River	8,85
		Semoi-1 River Creek	9,26
		Semoi-2 River Creek	0,7
		River in Block A11,B11	Including in mangrove areas
		River in Block C11	Including in mangrove areas
		Mangrove	967,55
HCV1.2. Critically Endangered species	Absent	-	-
HCV1.3. Areas that Contain Habitat for Viable Population of Endangered, Restricted Range or Protected Species	Present	Sepaku River	*)
		Sambu River	*)
		Semoi-1 River Creek	*)
		Semoi-2 River Creek	*)
		River in Block A11,B11	*)
		River in Block C11	*)
		Mangrove and Ecotone Areas	*)
		Mangrove Buffer	*)
HCV1.4. Areas that Contain Habitat of Temporary Use by Species or Congregations of Species	Absent	-	-
HCV2. Natural Landscape & Dynamics			
HCV2.1. Large Natural Landscape with Capacity to Maintain Natural Ecological Processes and Dynamics	Absent	-	-
HCV2.2. Areas that Contain Two or More Contiguous Ecosystems	Present	Mangrove Area Ecoton	*)
HCV2.3. Areas that Contains Representative Population of Most Naturally Occurring Species	Present	Sepaku River	*)
		Sambu River	*)
		Semoi-1 River Creek	*)
		Semoi-2 River Creek	*)
		River in Block A11,B11	*)
		River in Block C11	*)
		Mangrove and Ecotone Areas	*)
Mangrove Buffer	*)		
HCV3. Rare or Endangered Ecosystem	Present	Mangrove and Ecotone areas	*)
HCV4. Environmental Services			
HCV4.1. Areas or Ecosystems Important for the Provision of Water and Prevention of Floods for Downstream Communities	Present	Sepaku River	*)
		Sambu River	*)
		Semoi-1 River Creek	*)
		Semoi-2 River Creek	*)
		River in Block A11,B11	*)
		River in Block C11	*)
		Mangrove and Ecotone Areas	*)
		Mangrove Buffer	*)
HCV4.2. Areas Important for the Prevention of Erosion and Sedimentation	Absent	-	-
HCV4.3. Areas that Function as Natural Barriers to the Spread of Forest or Ground Fire	Present	Mangrove area	*) *)
HCV5. Natural Areas Critical for Meeting the Basic Needs of Local People	Absent	-	-
HCV6. Areas Critical for Maintaining the Cultural Identity of Local Communities	Absent	-	-
Total of HCVA			1.064,89

Note: *) = the current width of the areas is the same as the previous size

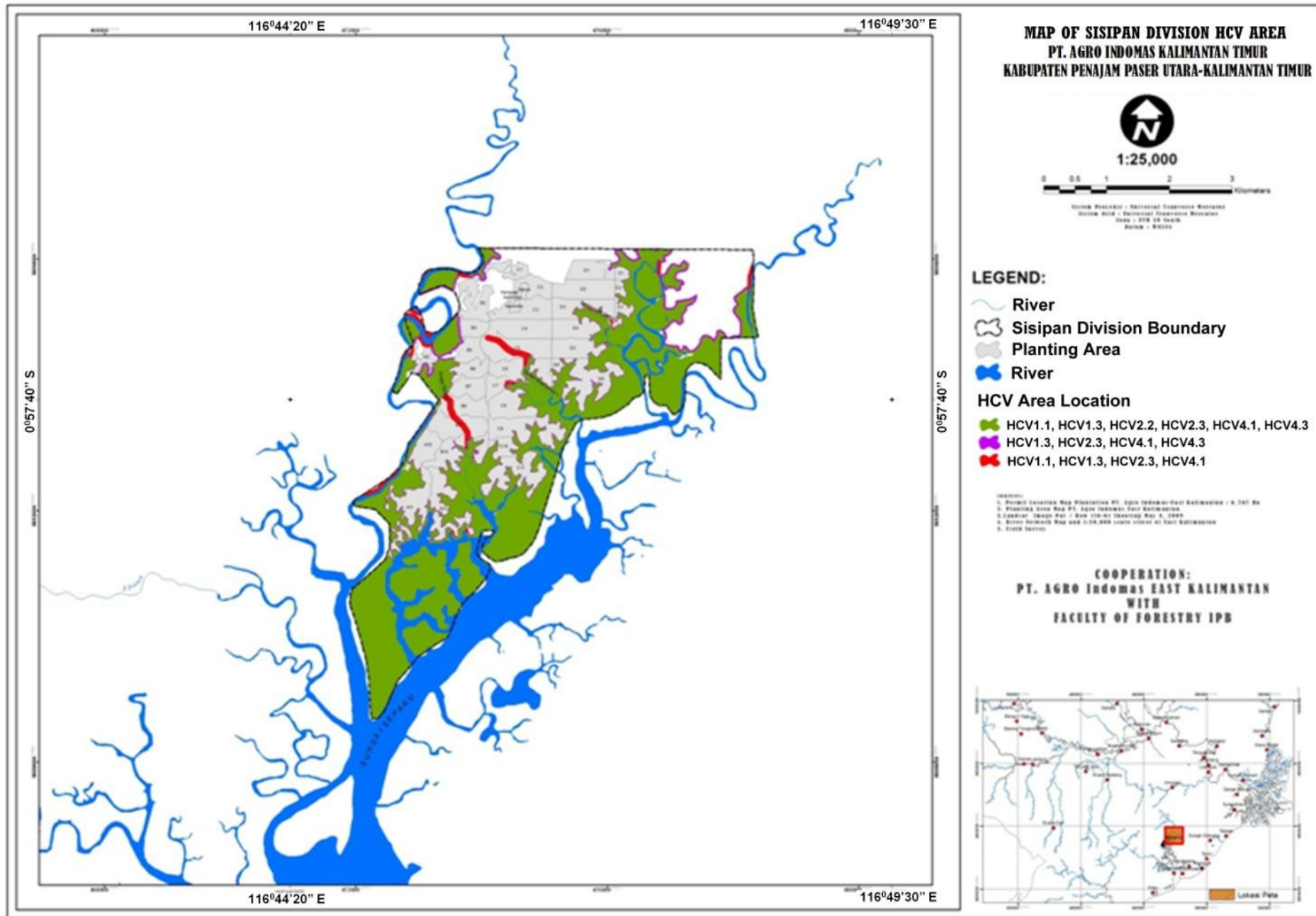


Figure 12. Maps of HCV Area in Sukaraja (Sisipan) Division of PT Agro Indomas-East Kalimantan

Summary of Land Use Change Analysis (LUCA)

PT Agro Indomas-East Kalimantan 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 PT Sinar Hijau Raya Consultant. The team consisted of Ir. Heru B Pulunggono, MSc as team leader and Irham Fauzi S.Hut as a team member. The study of The Land Use Change Analysis was conducted on September 2014 and covered all division of PT AIEK. The report of PT AIEK Land Use Change Analysis had already reviewed by RSPO Compensation.

The Methods were used in the Land Use Change Analysis study of PT AIEK 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 AIEK 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 AIEK has 0 (zero) Hectare liability.

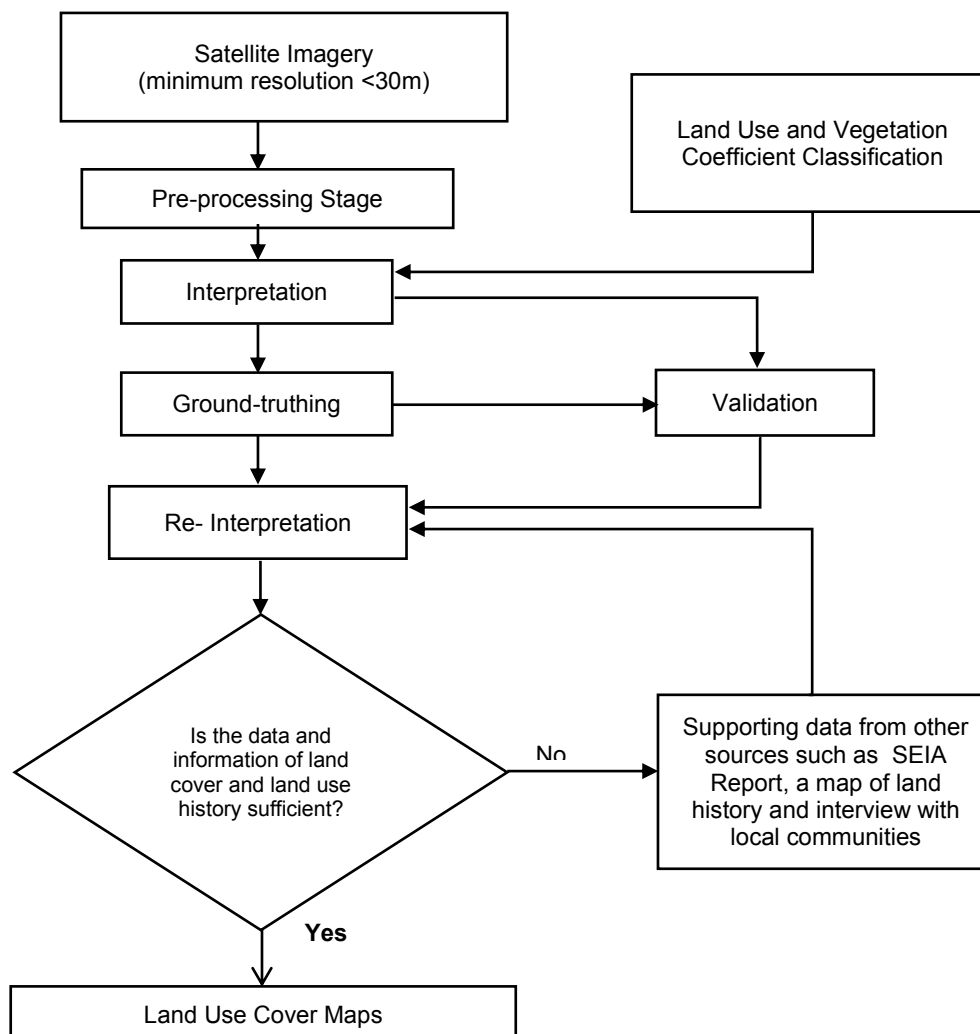


Figure 13. Flow Chart of PT Agro Indomas-East Kalimantan's LUCA

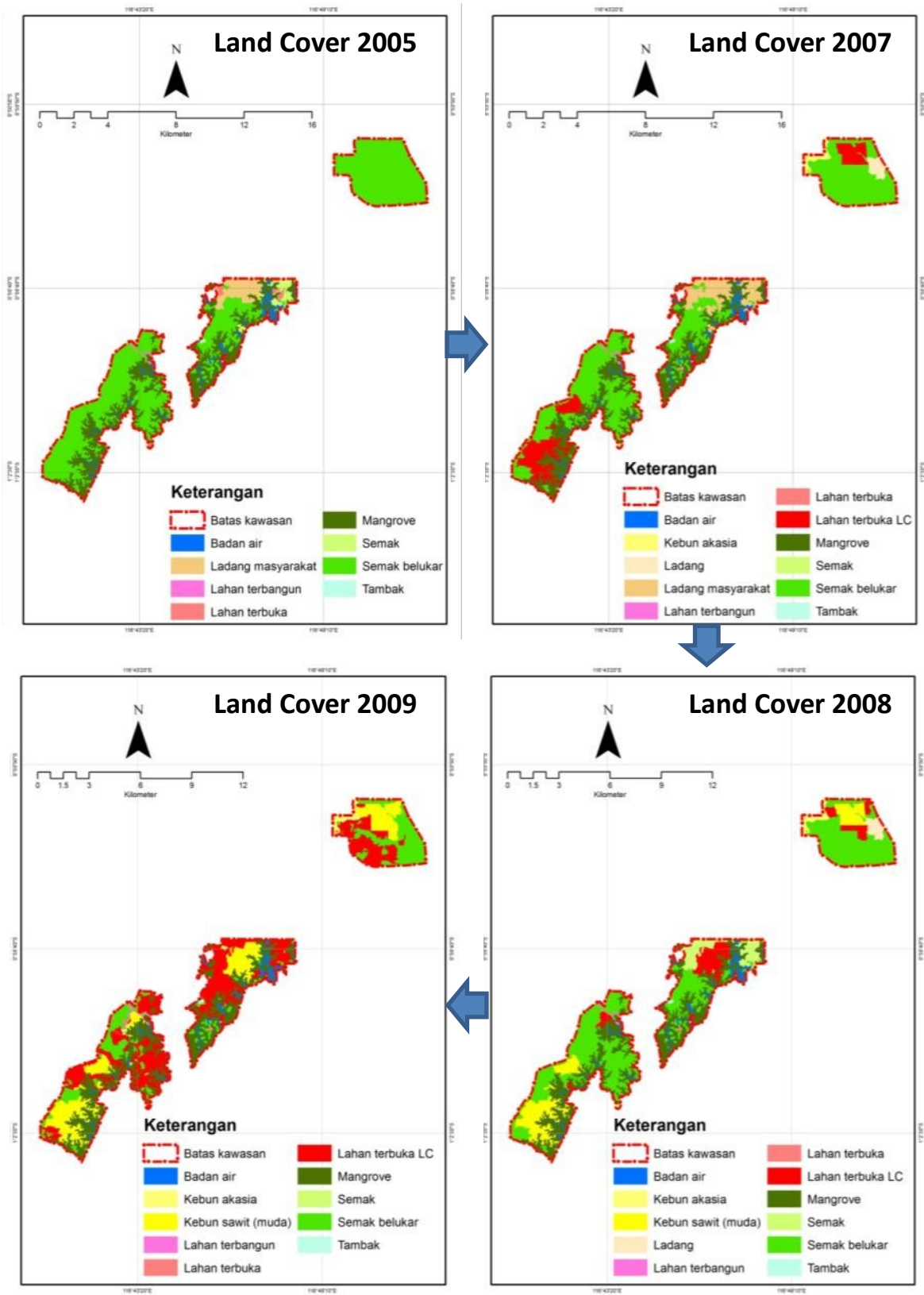


Figure 14. Land cover condition of PT Agro Indomas-East Kalimantan in the year 2005-2009 periods

5. Internal Responsibility

Lead Assessor SEIA (AMDAL)



Ir. Hamsyin, MP

CV Agronusa Consultant

High Conservation Value (HCV) and Social Impact Assessment (SIA) Assessor

Formal sign-off by Assessor and Company



Ir. H. Nyoto 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 Social Environment Impact Assessment (SEIA) by CV Agronusa Consultant and the HCV and SIA of PT. Agro Indomas East Kalimantan by Fakultas Kehutanan, Bogor Agriculture University (IPB – Bogor) will be applied as part of guidelines in developing and managing PT. Agro Indomas East Kalimantan



Wilton Simanjuntak
RSPO Manager