RSPO

ROUNDTABLE ON SUSTAINABLE PALM OIL

New Planting Procedure

Summary Report

Social and Enviromental Impact and High Conservation Value

PT. Andes Sawit Mas

Subsidiary : Alpha Capital Limited

Ketapang District
West Kalimantan
Indonesia

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List of Abbreviations

HCV	High Conservation Value
HCVMA	High Conservation Value Management Area
AMDAL	Analisis Mengenai Dampak Lingkungan
EIA	Environmental Impact Assessment
SIA	Social Impact Assessment
SEIA	Social Environmental Impact Assessment
ASM	Andes Sawit Mas
RTRWP	Rencana Tata Ruang Wilayah Propinsi
HGU	Hak Guna Usaha
AMDAL	Analisis Mengenai Dampak Lingkungan
LUCA	Land Use Change Analysis
MoU	Memorandum of Understanding
APL	Area Penggunaan Lain
GIS	Geographycal Information System

1. Executive Summary

This report represents the executive summary of the final results of the High Conservation Values (HCV) and Social Impact Assessment (SIA) that carried out by Daemeter Consulting in January – November 2015 and in April – December 2015 for **PT. Andes Sawit Mas (ASM)**.

PT. ASM begins to implement new planting plans for palm oil production of 5.483,72Ha. These plans are to expand an area of 1829,17 Ha of **Sungai Tempayak Estate (STKE)** and expand an area of 3.654,55 Ha of **Danau Ratu Estate (DRUE)** in PT. ASM (Inti).

Permitted area for PT. ASM was approved by Ketapang regency on 11 November 2008, No. 119 year 2008 and Extension on location permit for palm oil plantation and palm oil mill development on 30 December 2009, No. 531 year 2009. The plantation permit was issued by Ketapang regency on 27 May 2010, Cultivation Business Permit (IUP) No. No. 307 year 2010 (± 12.515 ha). New planting area of 5.483,72 Ha inti is within permitted area for PT. ASM (± 16.100 ha) It is appertained to and managed under Sungai Tempayak Estate and Danau Ratu Estate of PT. ASM.

PT. ASM Land title (HGU) was in progress based on letter to Kepala Badan Pertanahan Nasional Provinsi Kalimantan Barat No.011/ASM-BPN/XII/2015 dated 02/12/2015. The letter related to application for supervision/survey on boundary poles in PT Andes Sawit Mas. The letter received by the BPN Office on 03/12/2015. The proposed land bank to be certified is for company-owned Plantation 4,213.28 Ha; Mill and housing infrastructure 64.72 Ha; Koperasi Bagan Lempahung 829.01 Ha; and Koperasi Danau Ratu 523.94 Ha.

Additionally, in the Statement Letter for issued by BPKH region III, West Kalimantan Province No.S.355/VII/BPKH-III/2009 dated 14 August 2009, it is stated that as shown by digital assessment on forest and waters map No. 259/Kpts-II/2000, the area of PT. ASM is located in Other Purposes Land (Area Penggunaan Lain, APL). When overlaid with the most recent forest and waters map of West Kalimantan Province Decree No. 733/Menhut-II/2014, PT.ASM area is located in Other Purposes Land (APL).
Map of PT. ASM when overlay against “Peta Indikatif Penundaan Izin Baru untuk Hutan Primer dan Gambut” based on SK Menhut No.5285/Men-LHK-PKTL/IPSDH/2015 (Revisi IX) dated 20/11/2015, the concession is located under Other Purposes Land (APL).

The result of HCV assessment that carried out by Daemeter Consulting in 2015 shows that there is no primary forest in new planting areas of inti. New planting areas are within classification of other land-use. Based on LUCA in PT. ASM, result also shows that there is no primary forest in the new planting areas. The satellite imagery on March 2016 showed that new development area in a largely deforested landscape which consist of open land (11,25%),mixed agroforestry and scrub (71,67%) and secondary forest (11,25%). In the areas intended for new planting, no peat soils were identified. This assessment was carried out from map of soil of the region and during HCV assessment by Daemeter Consulting in 2015.

PT. ASM AMDAL’s was approved on 2009 by Governor of West Kalimantan, West Kalimantan Governor No 547. AMDAL was prepared by an accredited AMDAL consultant and included

consideration of both negative as well as positive social and environmental impacts. The scope of AMDAL included assessment of impacts associated with land development, infrastructure, road access, mill operations and transportation. AMDAL also included assessment of the suitability of soils, topography and drainage and analysis of the land cover vegetation. AMDAL assessed the impacts on natural ecosystems and water resources.

Social Impact Assessment (SIA) that carried out by Daemeter Consulting in 2015 was oriented to reach reliable social impact which potentially arises due to development of PT. ASM project. The villages of PT. ASM was dominated by local population, there is Ethnic of Dayak Jelai and Ethnic of Dayak Kendawangan, West Kalimantan.

HCV Assessment that conducted by Daemeter Consulting in 2015 have identified HCV areas in different categories. The assessment was carried out covering new planting areas at PT. ASM. The assessment identified 5 types of HCV. These HCVs are HCV 1, HCV 3, HCV 4, HCV 5 and HCV 6. The assessment also provides recommendation for the company in managing the HCV area. HCV areas are outside of those intended for planting plant of PT. ASM.

2. Scope of the Planning and Management

2.1. Organizational information and contact persons

Table 1. Organizational information and contact persons

Company Name	PT Andes Sawit Mas
Subsidiary	Alpha Capital Limited (RSPO Membership Number : 1-0199-16-000-00)
Company address	Periangan Village, Deranuk Village, Perigi Village,Teluk Runjai Village, Tangerang Village, Riam Batu Gading Village, Runjai Jaya Village Marau Sub District, Jelai Hulu Sub District Ketapang District West Kalimantan, Indonesia
Geographical Location	North : $110^0$48’37” E ; $01^0$58’37” S West : $110^0$42’37” E ; $02^0$2’35” S East : $110^0$50’28” E ; $02^0$4’23” S South : $110^0$48’44” E ; $02^0$5’55” S
Capital Status	Foreign Investment (PMA)
Type of business	Palm oil plantation and milling
Status of land ownership	PT. ASM own land (Inti) Ketapang Regent Decree No. 531 (± 12.515 Ha)
Contact Person	President Director – Anthony Yeow

	Email Address: Anthony_Yeow@cargill.com Group Sustainability Manager – Yunita Widiastuti Email Address: Yunita_Widiastuti@cargill.com
Total area of new planting	5.483,72Ha

2.2. Personnel involved in planning and implementation

Planning and implementation plan for new planting involves Estate Department, Agronomy Service Department, GIS and Sustainability Department. The overall personnel are shown below.

Table 2. Personnel involved in planning and implementation

Name	Position	Roles & Responsibility
Anthony Yeow	President Director	General Manager
Yunita Widiastuti	Group Sustainability Manager	RSPO NPP Process
Taufik Nasution	Chief Estate Manager	Evaluate & Monitor Project , Report to President Director
Ahmad MS	Senior Estate Manager PT. ASM	Manage New Development Project for All Estates, Report To CEM
Yogi Wicaksono	Sustainability Manager	HCV Management & Monitoring,HCS Ass.Report To Sustainability Manager
Andreas Sinukaban	Estate Manager DRUE	Identification of Land Owner, Negosiation, Land Compensation, Land Clearing, Palm Oil Planting at DRUE, Report To SEM
Purnomo	Estate Manager STKE	Identification of Land Owner, Negosiation, Land Compensation, Land Clearing, Palm Oil Planting at STKE, Report To SEM
Herwandi Agustian	Agronomy Service Department Manager	Quality Control, Report To CEM
Marulak Simanjuntak	GIS Coordinator	HCS & HCV Mapping, Mapping of Land Compensation, Report To CEM

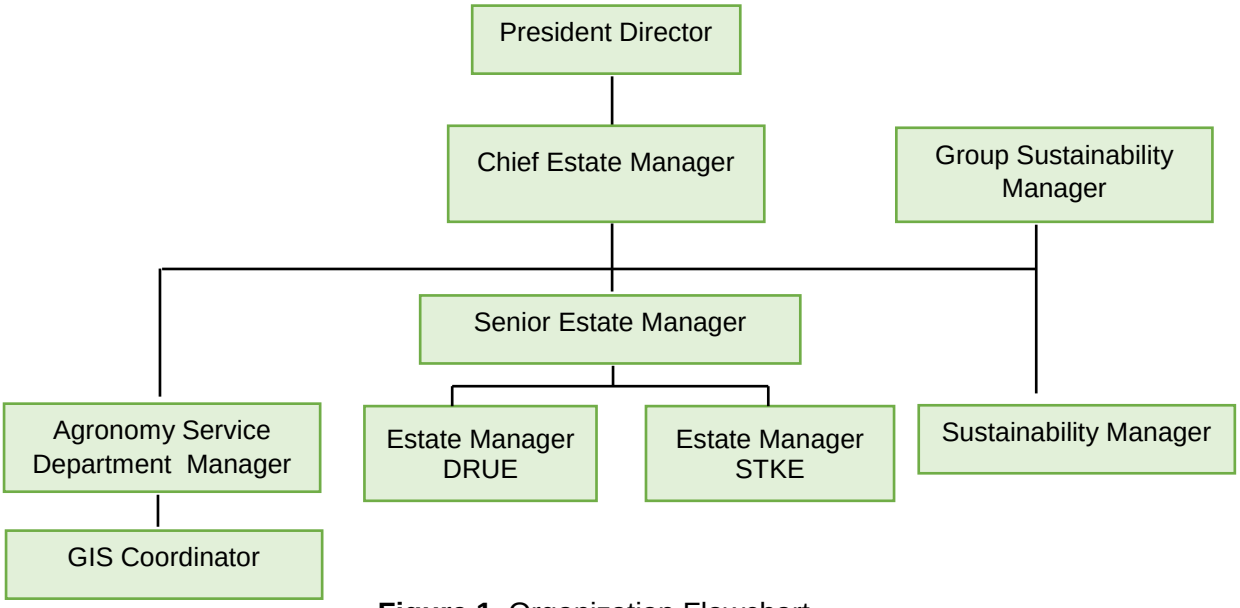

Figure 1. Organization Flowchart

2.3. List of Legal documents, regulatory permits and property deeds related to the areas assessed

2.3.1. List of Reports

- Environmental Impact Assessment (AMDAL document) of PT. ASM on 2009 (West Kalimantan Governor on 2009
- Report of Identification and Analysis of High Conservation Value of PT. ASM by Daemeter Consulting on January – November 2015
- Social Impact Assessment (SIA) by Daemeter Consulting on April – December 2015

2.3.2. List of Legal Documents

Table 3. List of legal document

Legal Documents	Issued by	Number and date
Taxpayer Notification Number (NPWP)	Ministry of Finance Directorate General of Taxation, Republic Indonesia	02-546-133-6-703-001
Location Permit	Ketapang Regent	Ketapang Regent Decree No. 119 (19.900 ha) 26 March 2007
Location Permit (Revision of Ketapang Regent Decree No. 119 Year 2007)	Ketapang Regent	Ketapang Regent Decree No. 419 (16.100 ha) 11 November 2008
Extension on location permit	Ketapang Regent	Ketapang Regent Decree No. 531 (16.100 ha) 30 December 2009
Cultivation Business Permit (Izin Usaha Perkebunan)	Ketapang Regent	Ketapang Regent Decree (12.515 ha) May 2010

2.4. Location Maps

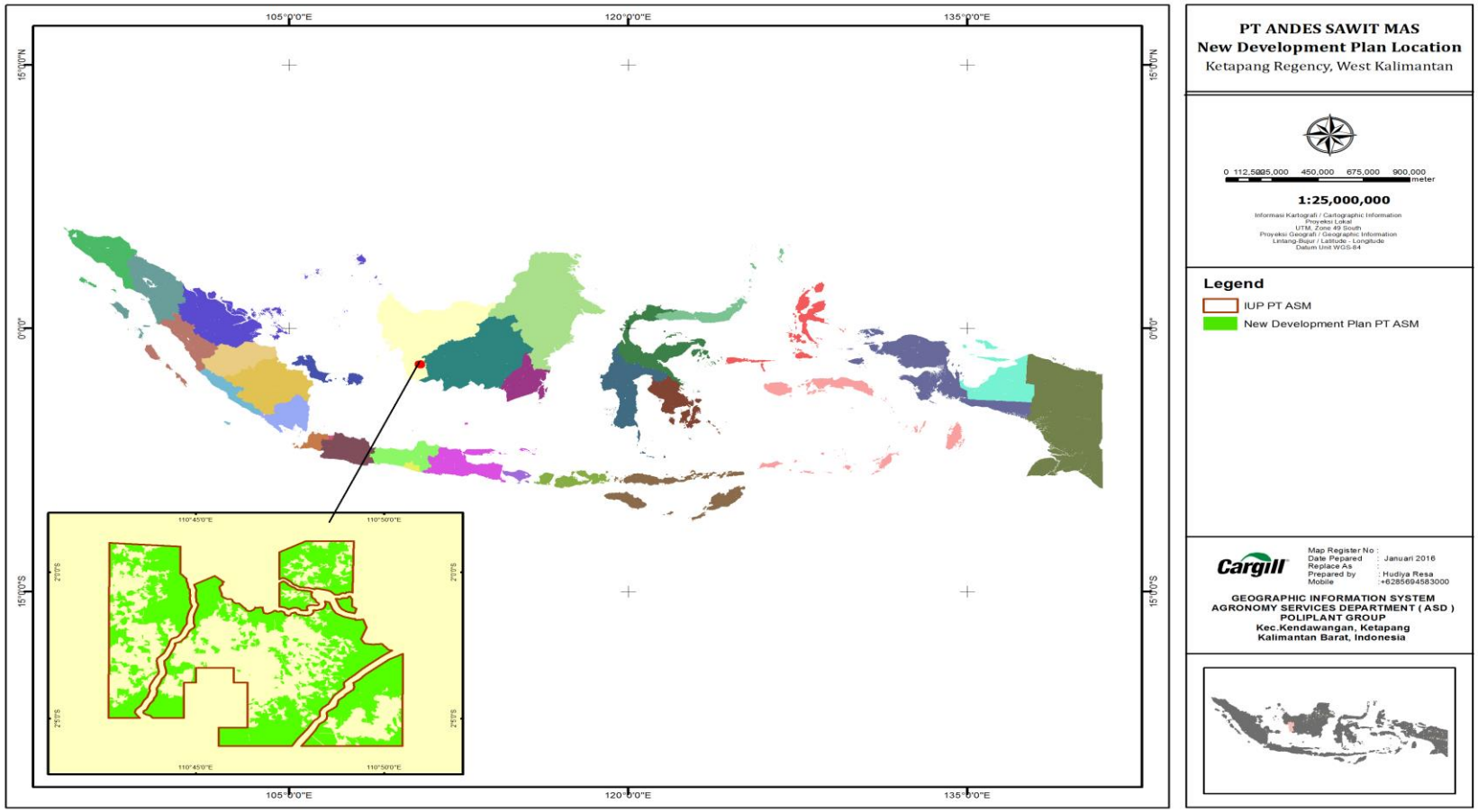

Figure 2. New Development Map of PT. ASM in Indonesia

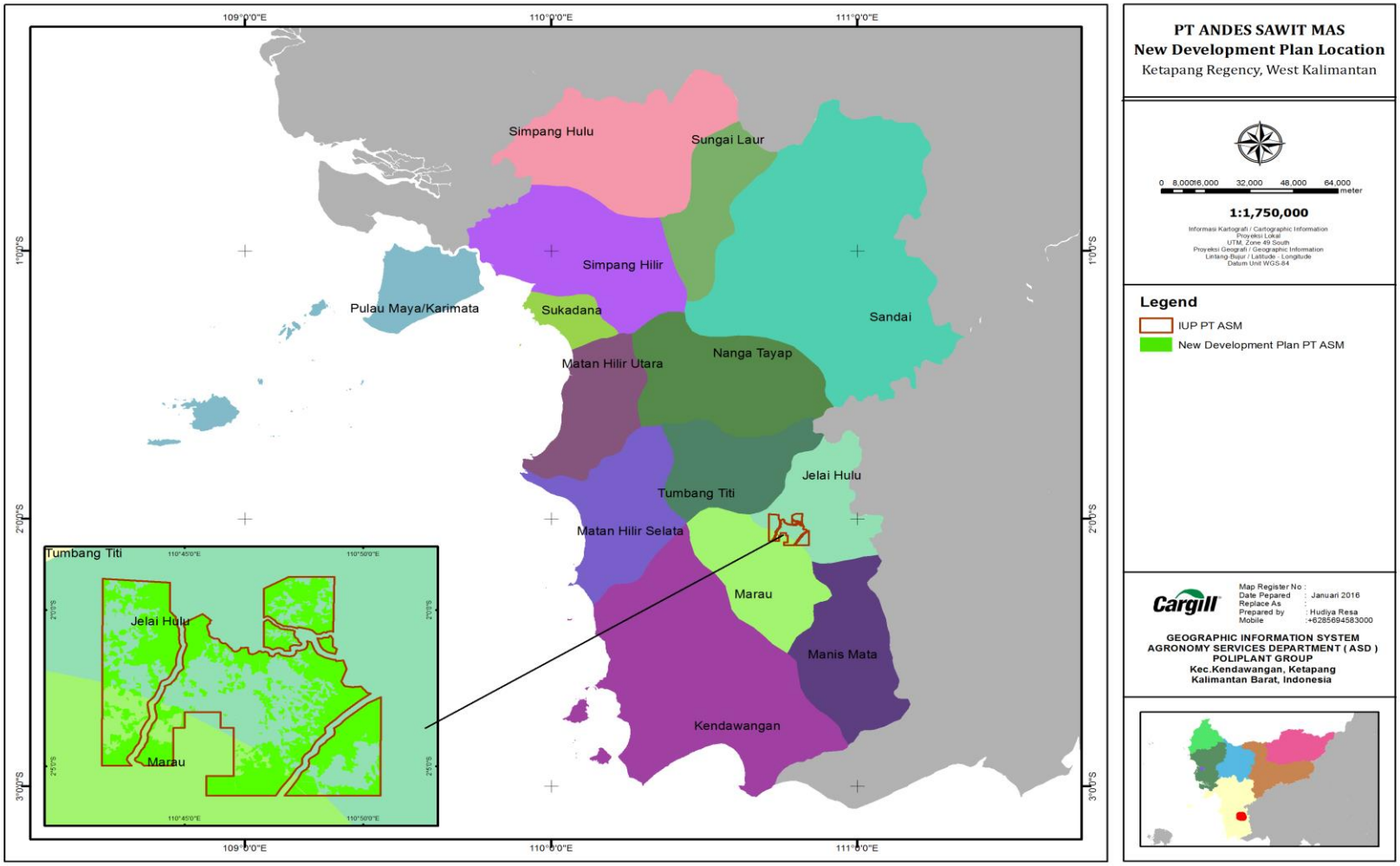

Figure 3. New development map of PT. ASM in Ketapang Regency, West Kalimantan.

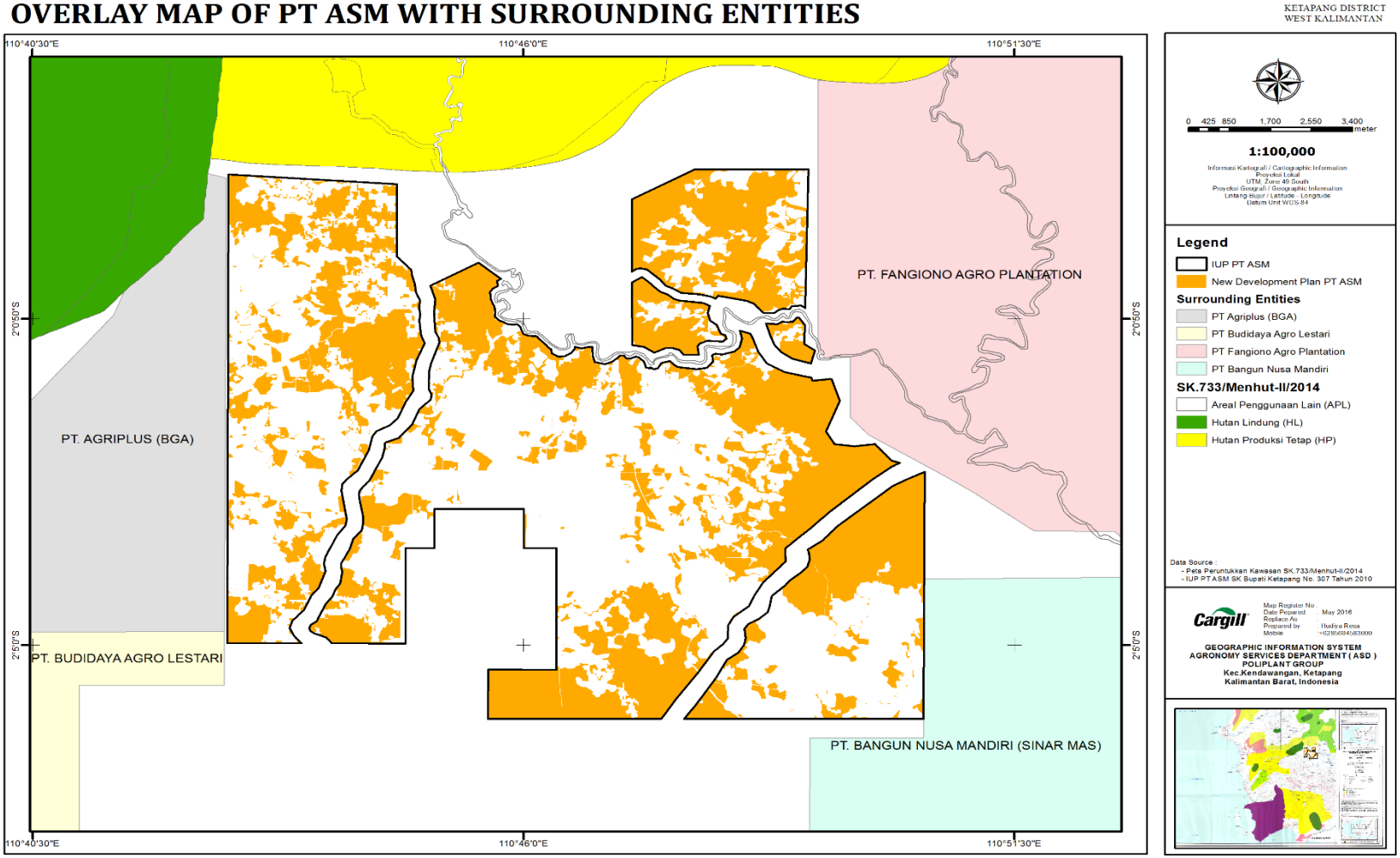

Figure 4. Overlay Map of PT. ASM with Surrounding Entities

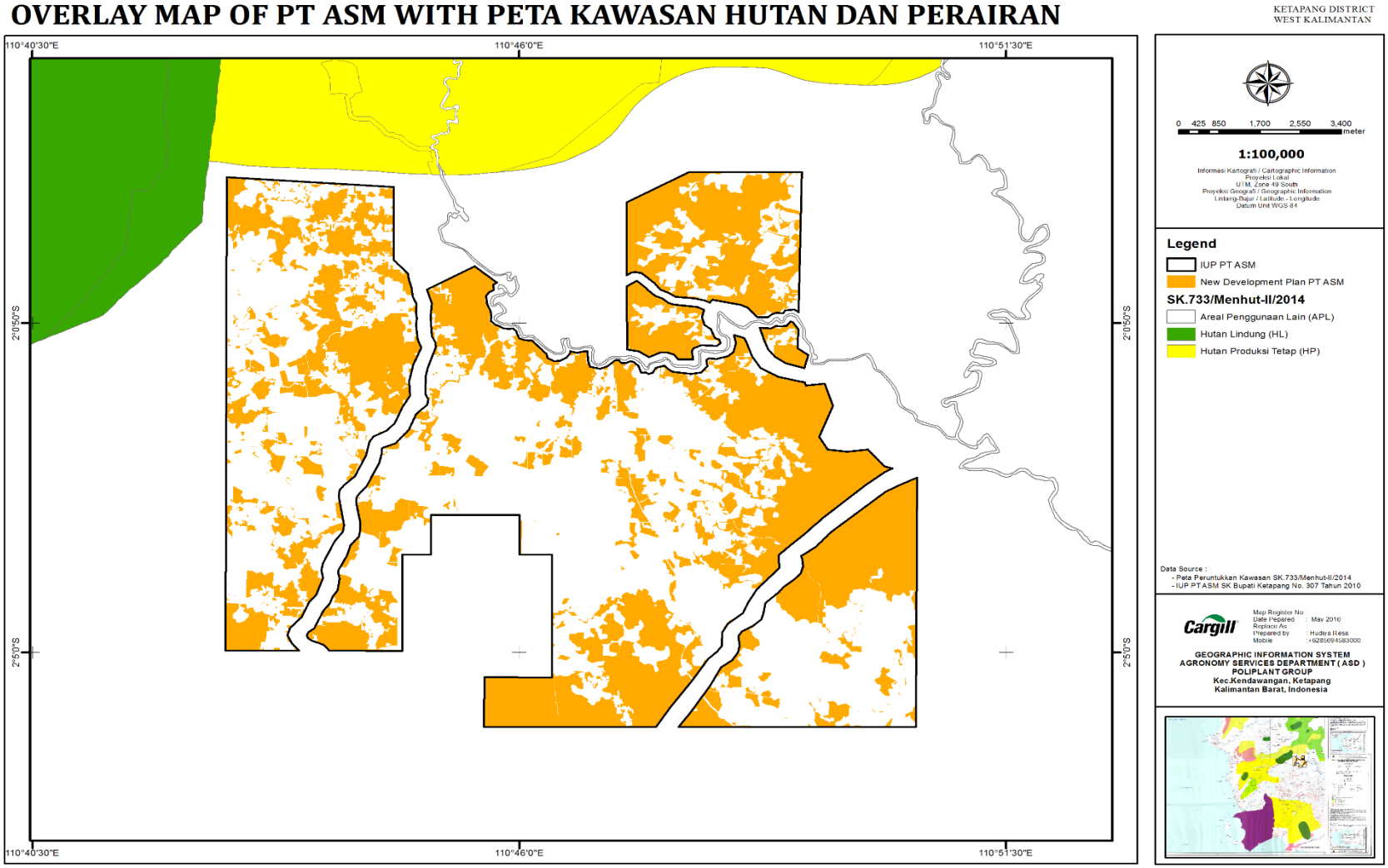

Figure 5. Overlay Map of PT.ASM with Forest Area and Water Map based on SK.733/Menhut-II/2014

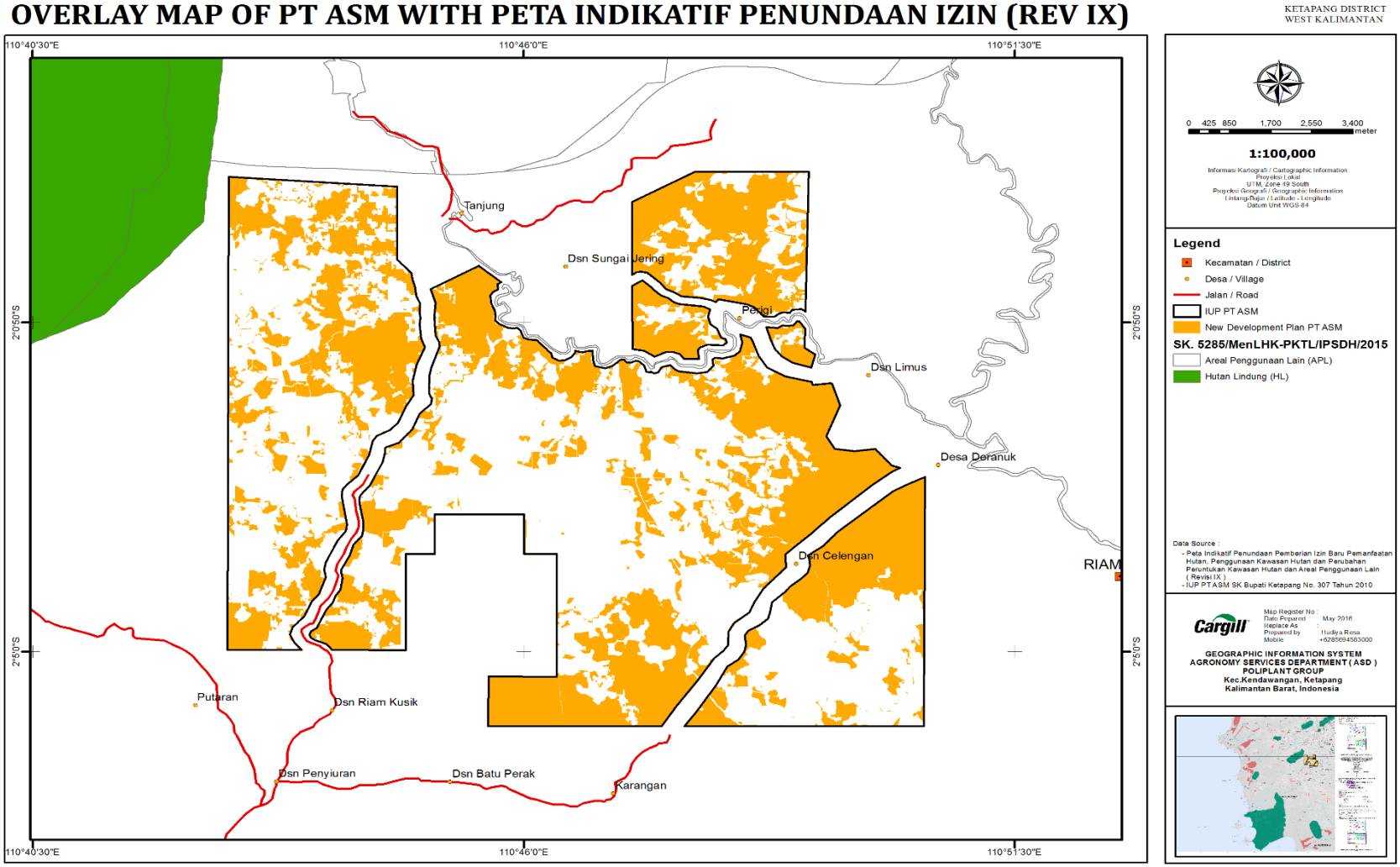

Figure 6. Overlay Map of PT.ASM with Moratorium Map based on SK.5285/MenLHK-PKTL/IPSDH/2015.

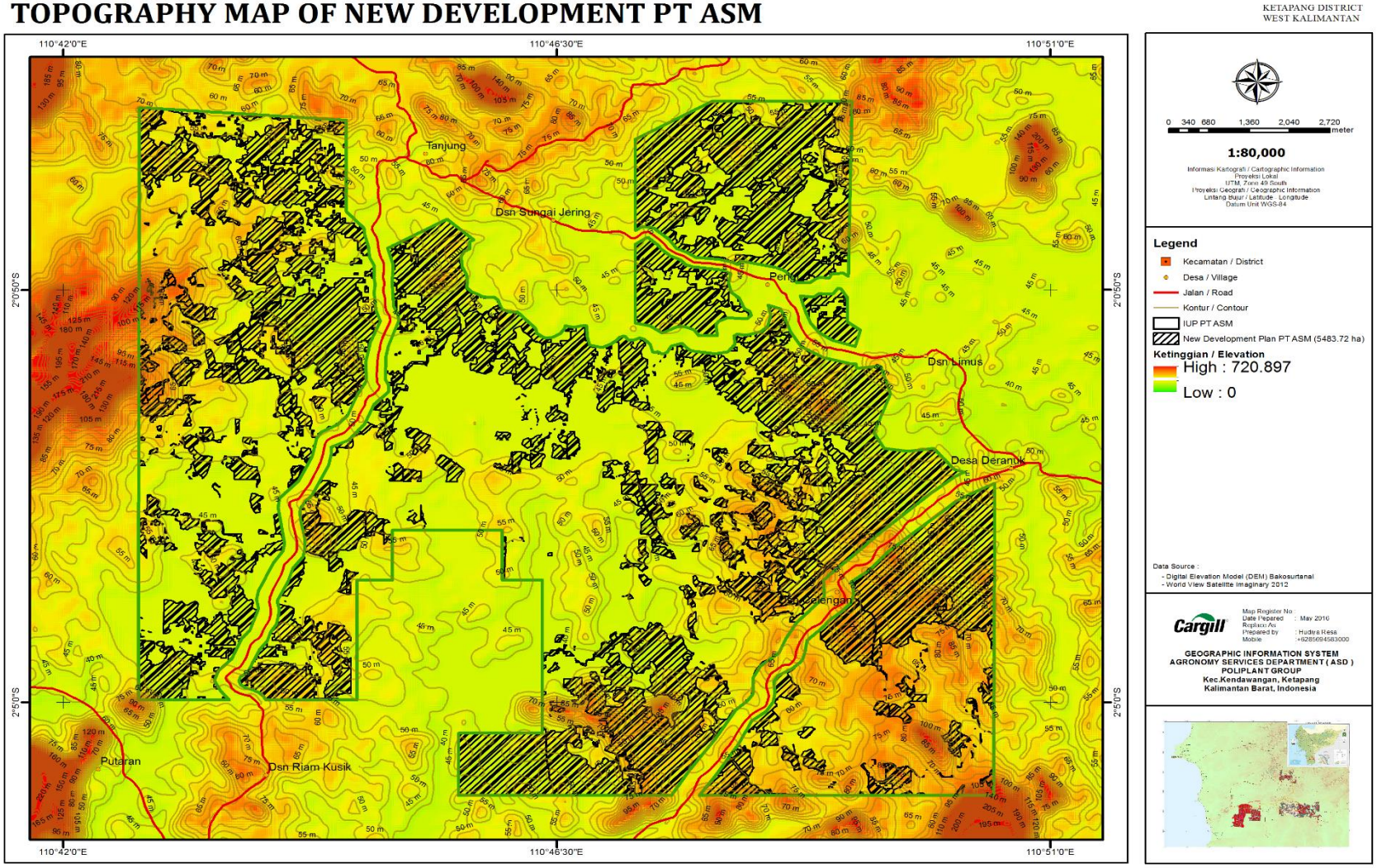

Figure 7. Topography Map of New Development PT.ASM

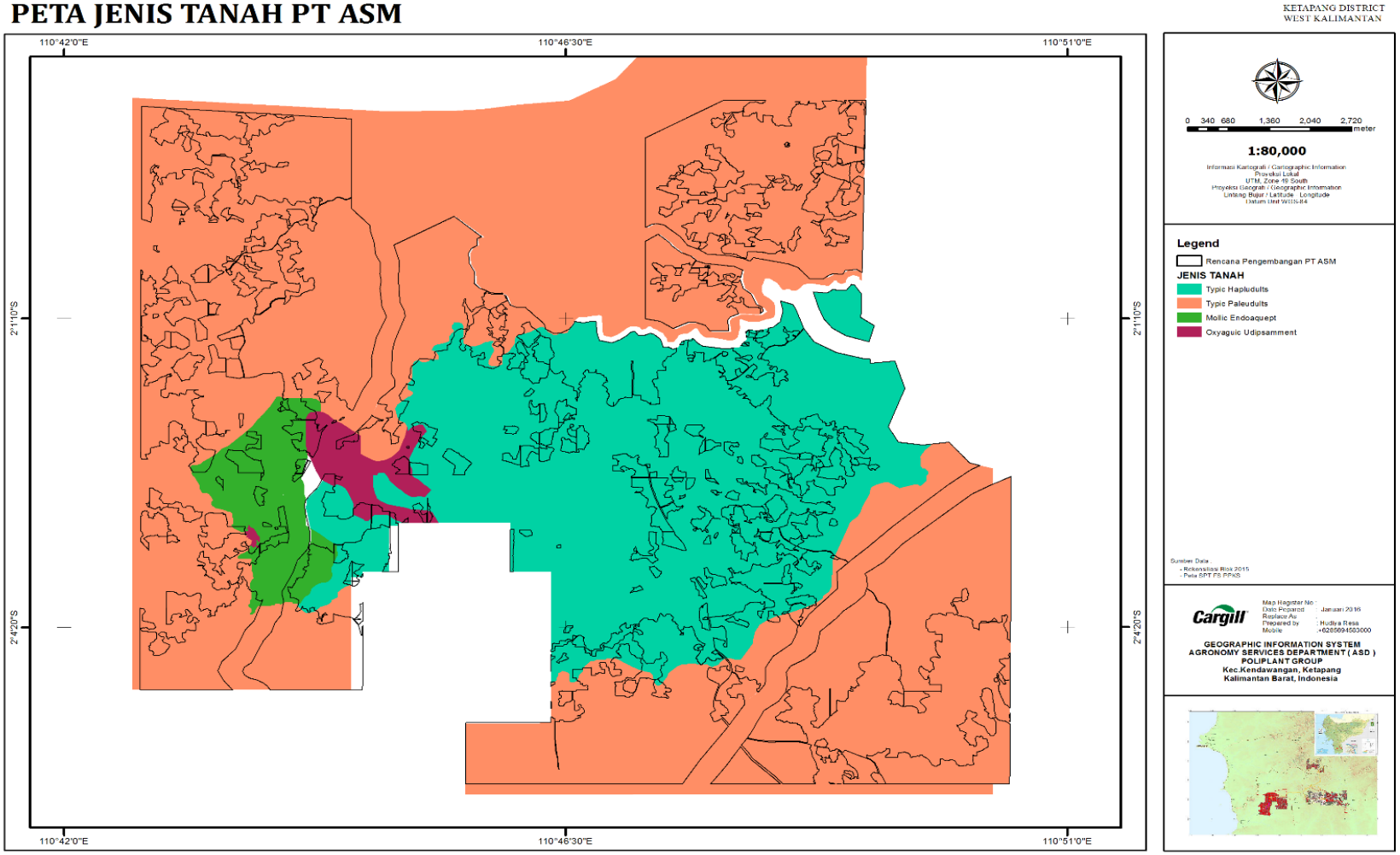

Figure 8. Map of soil type of new planting area

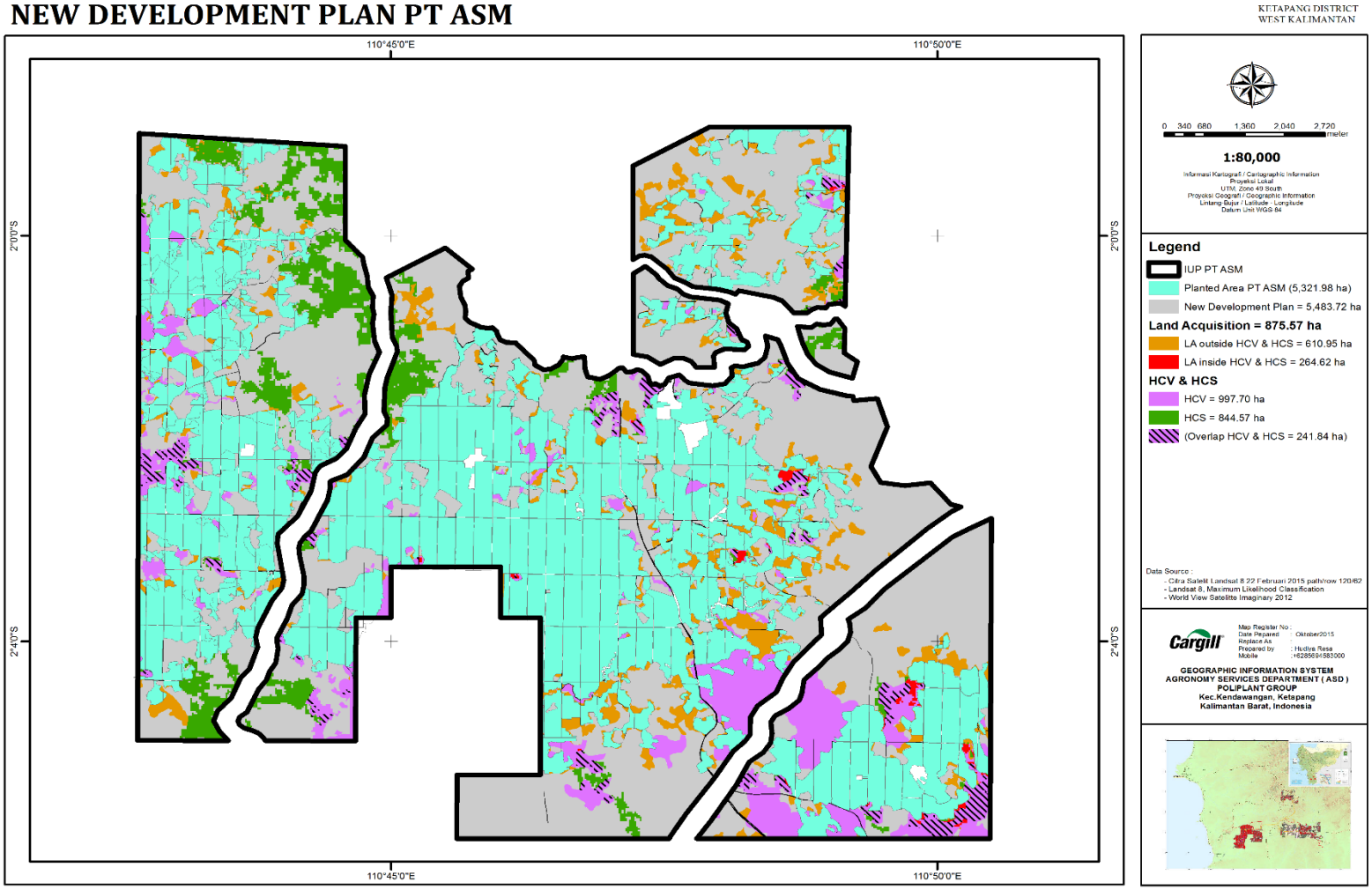

Figure 9. Map Showed the Planted Area, New Development Plan, HCV and HCS Area and Area Have been Compensated.

2.5. Area and time plan for new planting

New planting area of 5.483,72 Ha is expansion program for Sungai Tempayak Estate and Danau Ratu Estate of PT. ASM and is within permitted area for PT. ASM. Twenty percent (20%) of Plan Planted area in new Development will be allocated for smallholders. The Total HCV identified inside of IUP is 1246 Ha and from there 997,70 Ha is on new development area. Total HCS area identified is 844,57 Ha. The area area of new planting was excluded from HCV and HCS.

The detail area and time plan are summarized in table below.

Table 4. Area and time plan for proposed new planting

No.	Remarks	Amount (Ha)
A.	**IUP**	**12.515**
B.	**Planted Area**	5.321,98
	- Planting Year 2014	852,61
	- Planting Year 2013	531,37
	- Planting Year 2012	140,7
	- Planting Year 2011	669,53
	- Planting Year 2010	1791,29
	- Planting Year 2009	35,90
C.	**Company own (Inti)**	4021,4
	Smallholders (Kemitraan)	1300,58
D.	**Unplanted Area**	7084,15
E.	**Potential Development area**	**5.483,72**
	- 2016/2017	1500
	- 2017/2018	1500
	- 2018/2019	1500
	- 2019/2020	983,72
F.	**HCV (Total Without Overlap)**	1246
	HCV area inside of Unplanted area	997,70
	HCS	844,57
	Overlap HCS & HCV	241,84

3. Assessment Process and Procedures

3.1. Assessors and their credentials

3.1.1. Environmental Impact Assessment (EIA)

The EIA document of PT. ASM was prepared by Centre of the Environmental Research (PPLH) Tanjungpura University (PPLH-UNTAN). The document had undergone examination and assessment process by EIA Commission of West Kalimantan Province. The AMDAL approval was issued by West Kalimantan Governor's Decree No. 547 of year 2009, dated on 17 September 2009 about the approval of Environmental Feasibility Study of 16.100 Ha's Plantation and 60 MT/H Mill Capacity of PT. Andes Sawit Mas at Marau and Jelai Hulu Sub-District in Ketapang District , West Kalimantan Province.

The EIA team was led by Mr. Ir. Asrifin Aspan, MS who has a certification as EIA-A and EIA

– B with various working experiences as follows:

- The EIA Preparation of Plantation and Palm Oil Processing Plant, PT. Harapan Sawit Lestari , District of Ketapang , West Kalimantan.
- The EIA Preparation of Plantation and Palm Oil Processing Plant, PT.Budidaya Agro Lestari , District of Ketapang , West Kalimantan.
- The EIA Preparation of Plantation and Palm Oil Processing Plant, PT. Sandika Nata Palma , District of Ketapang , West Kalimantan.

3.1.2. HCV & Social Impact Assessment Assesor

The HCV and SIA Assessment of PT. ASM was prepared by assessor from Daemeter Consulting. The HCV and SIA Assesstment team consisted of 17 people consists on field team (12 persons) and additional support and senior advisor team (5 persons) for reporting oversight. A short CV or biography for each person is provided on below table. The Daemeter Consulting addressed at Jl. Tangkuban Perahu 1, Bogor, and West Java Province Indonesia 16128 (Phone: 62-251-8315625).

Table 5. HCV & SIA assessor credentials

Team Composition		
Name	**Role**	**Expertise**
Felicia Lasmana	Lead Assessor ALS License: Provisional (ALS14007FL) Biodiversity Team Leader	Biodiversity (Mammals), Landscape Ecology, Conservation.
Robert Zuehlke	Daemeter Consulting	Lead Reporter, Biodiversity
Muhammad Iqbal	Bird Expert	Avifauna
Hanjoyo	Vegetation Expert	Botany, Landscape Ecology, Environmental services
Syapuri	Botanist Assistant	Botany
Iwan Rosyid	HCV 5 & 6 (Social & Culture) Team Leader	Community Engagement, Socio-economic and cultural
Daryatun Ridwan	Community Engagement Expert	Community Engagement Socio-economic and cultural, Participatory mapping
Sahat Aritonang	Socio-economic and cultural survey team member	Socio-economic & cultural, Forestry
Naka Yuliansyah	Socio-economic and cultural survey team member (Junior)	Socio-economic and cultural

Andre Febriant	Socio-economic and cultural survey team member (Junior)	Socio-economic and Cultural
Indrawan Suryadi	GIS Landscape Ecology Expert	GIS & Remote Sensing; Landscape Ecology
Aji Sartono	GIS & Remote Sensing Specialist	GIS & Remote Sensing
ADDITIONAL SUPPORT AND SENIOR ADVISOR TEAM		
Name	**Role**	**Expertise**
Gary Paoli	Project Manager, Coordinator of Biodiversity Team & Reporting Oversight	Project Management, Landscape Ecology, Biodiversity (Botany)
Aisyah Sileuw	Coordinator of Socio-cultural Team & Reporting Oversight	Project Management, Socio-economic and cultural, Participatory mapping
Godwin Limberg	Field Coordinator of Socio-cultural Assessment Team & Reporting Oversight	Project Management, Socio-economic and cultural, Participatory mapping
Kimberly Carlson	Remote sensing expert	GIS & Remote Sensing
Elizabeth Yaap	Reporting Oversight	Biodiversity (Mammals), Landscape Ecology, Conservation

3.2. Assessment Method

3.2.1. HCV Assessment Method

The periode of HCV assessment has taken time for 11 months, starting on January until November 2015. The HCV assessment was conducted by Daemeter Consulting using HCV Toolkit year 2008, HCVRN 2013, Common Guidance for the identification of High Conservation Values and HCVRN 2014, Common Guidance for the management and monitoring of High Conservation Values. Data sources used in the identification and analysis HCV process including :

Table 6. Type and Source of Secondary Data Collection

Data Type	Data Source	Year
Land Cover	Landsat 2015 ETM Satelite images (1 : 50.000)	2015
Topography	DEM-SRTM 30 m USGS NASA	2014
Ecosystem Mapping	RePPProT	1989
Species	Vegetation – Kessler and Sidiyasa 1994 Mammals – IUCN Red List Birds – Mackinnon *et al.*	1994 2015 1998
Social Cultural	AMDAL PT. ASM & Social Impact Assessment PT. ASM	2009 & 2015

Identification of HCVs was conducted based on the analysis and mapping of the area, with the following process:

a. Secondary Data Collection

Secondary data was collected and analyzed during the planning phase of the assessment and included the following :

Table 7. Secondary Data Collection

Land Cover	For the assessment of HCVs 1-4, historical and present forest cover was assessed from satellite imagery. Landsat 2015 ETM satellite images were analysed and confirmed using images from previous years. The latest available satellite image was classified into land cover types through on-screen digitization (the definition of land cover types is provided in Table 6. This land cover mapping gave clear indications of the areas that needed to be surveyed during full assessment. Digitization was carried out at a scale of 1:50,000 or better.
Topographical data	The Digital Elevation Model (DEM) produced by the Shuttle Radar Topography Mission (SRTM) was used for defining general topography and slopes throughout the estate. HCV 4.2 utilizes this secondary data set to define major components or erosion potential. This data has been gap-filled by USGS - NASA and has a horizontal resolution of 30m/1 arc-seconds.
Ecosystem Mapping	For the identification of HCV 3 (Rare or Endangered Ecosystems), we use the revised, geo-corrected version of the RePPProT (details shown on the previous Landscape & Regional Context section Chapter 2.2). Ecosystem mapping uses proxies for RePPProT classification in West Kalimantan and their status under HCV 3 through precautionary approach. The data used for this assessment were made available as a Digital Appendix in the revised HCV Toolkit for Indonesia (The Consortium for Revision of the HCV Toolkit Indonesia, 2009).
Species Data	For assessment of HCVs 1 and 2, secondary data on species potentially present in the assessment area were extracted from field guides (e.g. Kessler & Sidiyasa, 1994, IUCN, 2015, Mackinnon, et. al., 1998) with full list in REFERENCES). These tables were cross-referenced and augmented by experts that joined the field survey and by consulting community groups with knowledge of the area and species likely present.
Social Cultural Data	Secondary data for assessment of HCV 5 and 6 were available from the AMDAL and SIA (Social Impact Assessment), which were produced by Daemeter in parallel with HCV assessment.

b. Primary Data Collection

Table 8. Primary Data Collection

Field verification of topographical conditions and land cover maps	To assess the accuracy of topographical conditions described in secondary DEM data, land cover and ecosystem mapping, field observations were made throughout the Company's plantations. Both the DEM and land cover reflected conditions in the field very well as shown in the working area map
Plant surveys	There was very limited remaining intact natural forest (as defined by satellite imagery and land cover analysis). Semi - structured plant observations were made of trees, secondary regrowth and remnant forest identified from desktop study of satellite images. Species identification for selected taxa were made in the field and supplemented with digital photographic documentation. Higher priority was given to survey for species of concern under HCV 1.2 and HCV 1.3. Identification of species required field team experience, consultation with experts and reference to Daemeter's in house herbarium. A full explanation of methods, areas surveyed and results is given in Annex 3.
Birds	Bird surveys aimed to identify features of the bird community relevant to HCVs 1.3 and 2.3 (HCV 1.2 was deemed very unlikely present for birds given geographic location and land cover). Survey methods included line transects, opportunistic observations during the survey, and interviews with local hunters. The combination of these methods ensured a holistic bird inventory and increased the likelihood of detecting key species that deserve conservation interventions. Because logistics and transportation limitation, survey collect data cannot be conducted in very early morning. Moreover, it is time consuming to reach whole area which mostly un-accessible and rainy weather. A full explanation of methods, areas surveyed and results is given in Annex 4.
Mammals	The survey of mammals and other vertebrates of concern under HCV 1 was conducted using rapid assessment techniques, combining (i) un/structured interviews with hunters, (ii) assessment of habitat quality (in combination with the botany team), and (iii) direct (visual) and indirect (prints, calls, scat) sightings whilst undertaking habitat assessments. Community interviews and habitat assessments were conducted at the village level (4 villages and 3 sub- villages). Field data collection and interview were conducted in the same time. Most of the targeted dusun and desa for interview only available in the late afternoon or evening, making interview process has time limitation. A full explanation of methods, areas surveyed and results is given in Annex 5.
Social and Cultural Surveys to Assess HCV 5 and 6.	Using the HCV Toolkit as a reference, questions were prepared for meetings at the village level to evaluate the dependency of community members on natural ecosystems to fulfill basic needs (HCV 5) and identify presence of any important cultural sites (HCV 6). A combination of Focus Group Discussions (FGD) and individual-based interviews was used to collect data on social and cultural aspects.

PT. ASM also conducted Land Use Change Analysis (LUCA) to ensure that there is no deforestation due to land development. PT. ASM conducted assessment in September 2015 through combination of analysis of satellite imagery from Landsat and carried out field sampling check. Stages and process LUCA are as follows :

- Maps and satellite imagery
- Analysis of vegetation stratification using ArcGIS
- NDVI (Normalized Difference Vegetation Index)
- Field verification

3.2.2. SIA Assessment Method

Social impact assessment activities was carried out by applying several methods that combine primary data and secondary information, direct observation, analysis and expert consultation maps, both qualitative and quantitative information. Identification of potential impacts is done in the early to determine the possible impact and be a reference in determining the methods of data collection and compiling key questions to guide the discussion.

a. Desktop Study (Secondary data Analysis)

Desktop studies carried out by analyzing the available secondary information, such as activity reports, research reports, operational maps, AMDAL document and other documents. Desktop activity studies are useful for determining the coverage area of assessment that is based on administrative boundaries, the location permit and ecological limits. In addition the analysis of the desktop study can assist in the identification of the affected parties, the number of villages and settlements, the identification of activities that have an impact, impact predictions and determination of subsequent assessment methods. Desktop study was also conducted to find the parameters and indicators of the impact, the choices of action, as well as comparative data in enriching study of similar cases.

b. Focus Group Discussion

Focused discussion method is a method of collecting data / information / perception is based on the principle of participation, where participants selected at random or semi-free but with criteria that guarantee the representation of elements or groups in society. This method was chosen because of the information submitted can be cross-checked with other sources, so there is a fact that is closest to the truth.

This method also makes it possible to obtain a more complete chronological information, diversity of local knowledge, and build mutual understanding. Discussions carried out independently with a guide key questions that had been prepared, so discussions focused and not out of context to be achieved. Discussion with community representatives conducted in all villages affected by the construction of the Plantation. The discussion was hosted by members of the assessment team, in this case the participants act as a resource.

c. Depth Interviews

Depth interviews were conducted in person or characters who have a thorough knowledge of the desired topic. Depth interviews were conducted to obtain more detailed information about a problem includes policies, decisions, programs, historical / chronological events, claims, aspirations and also the solutions to be considered in solving a problem. This method opens a greater insight about the desired topic. In-depth interviews conducted on company management, workers, community leaders, government officials and local cooperatives are concerned.

d. Observation

Method of observation is very important, because it can provide a clearer picture of a condition or state. In the assessment, observations carried out to obtain Real and authentic evidence to a problem. Observations made for example to see and obtain annotations directly on the handling of waste in the production process, see the direct impact of plantation land clearing and the process of execution of work by the workers in the company, the use of Personal Protective Equipment (PPE), the road conditions of production, the condition of water resources and handling of the environment.

e. Map Analysis

Analysis of the map is done at an early stage and also in the final analysis. At the start of activities, the map is very useful to provide an overview of the company's position, condition of the land, village and settlement distribution, ecological boundaries, administrative and permit limits locations. Besides the map could help planning in terms of access to transport (land and river) and mileage. In the next activity, the map will show patterns of movement and mobility of people, water drainage pattern against waste and pollution, the movement of the local economy, community and corporate interaction patterns, constraints of nature, as well as the best solutions to reduce the impact.

f. Expert Consultation

Social problems are often very diverse and complex, so it may be necessary consultations with experts who master the problems found. Consulting experts will help provide an explanation based on the theory and experience in analyzing the problem and determine the best options to be selected in the resolution of a problem.

3.3. Stakeholders Consultations

Stakeholder consultation is fundamental to the HCV process. A range of stakeholders was consulted during the full assessment stage. Stakeholder input focused on opinions and concerns about operational activities in the AOI and specific input on biodiversity issues, environmental services, local livelihoods and other issues of concern to local communities and broader stakeholder groups. Stakeholders that were consulted for this assessment include:

- Dinas Kehutanan & Perkebunan / Forestry and Plantation Office
- Badan Pusat Statistik (BPS) / Central Bureau of Statistics
- Fauna and Flora International (FFI) - Ketapang
- Local community member : Village elders (tokoh masyarakat), Community organisation (Dewan Adat Dayak)
- Government officials in district level (Kecamatan Marau and Jelai Hulu) – Kepolisian (The Indonesian Police) Marau Sector, Koramil Marau (The Indonesian Army), Kepala Camat (Head of District Jelai Hulu),
- Government officials in village level (desa and dusun),
- Bagan Lempahun Credit unions (KUD / Koperasi Unit Desa)
- Village Consultative Body (BPD / Badan Permusyawaratan Desa)
- Headquarters Office (HQ) Cargill Poliplant staffs: Sustainability Manager, GIS Coordinator, CEM (Chief Estate Manager) of Cargill East Region.
- ASM Company staffs (Danau Ratu Estate and Sei Tempayak Estate): Estate Managers, Senior Estate Manager (SEM), Public Relation Officer.

Public Consultation

As part of HCV assessment, a public consultation was conducted at Jelai Hulu District Office on 16 June 2015 with 30 participants from 7 village and 15 sub district. Public consultation meeting with result presentation approach has been conducted in district level with attendants from government officials in district level (Administration and representatives of the local communities).

Summary Minutes of Public Consultation

A main concern raised by villagers during the discussion portion of the public consultation was how to improve the condition of the river buffers, including how to preserve and rehabilitate riparian areas. They also corrected the names of jumpung, rivers, sacred place and rituals for some villages. Environmental issues around Kendawangan would be related with mining and palm oil plantation practices (e.g. reducing chemical subtances, wildlife protection etc). The company should show more commitment for sustainable palm oil and BMP, both in environment and social sector. The Company presence raises peoples' economic level and local employment, but the negative impact is declining quantity and quality of river water. CSR programs of the Company should be more adequate for society.

Peer Review

In the HCV context, peer review is the process whereby an HCV assessment is evaluated by HCV expert(s) to identify any shortcomings of the assessment process and output. The reviewer checks that :

- The HCV toolkit is used appropriately
- HCV identification has been carefully evaluated by experts in the appropriate field and the logic explained
- Management and monitoring recommendations follow current best practices and are fitting for the landscape and social context
- Appropriate stakeholder consultation has taken place
- All of these are reflected in the HCV Assessment Report, and
- Upon receipt of the peer review, edits are made to address comments by the reviewer and a final draft is produced.

Daemeter use the ALS peer reviewer pool to assess this report.

3.4. List of legal, regulatory and other guidance referenced

Table 9. List of legal, regulatory and other guidance referenced

Reference	Details
Status of vulnerability according to the world Conservation Union (IUCN) Red List	Vulnerability of plants and wildlife
Status in terms of trade of world's wild fauna and flora (CITES)	Rule on trade (usage) of plants and wildlife
HCV Toolkit	Guidance on High Conservation Value Area Indentification in Indonesia Version 2 (2008)
UU No. 32 year 2009	Protection and Management of the Enviroment
UU No. 41 year 1999	Forestry

UU No. 5 year 1990	Nature Resource and Their Ecosystem Conservation
PP No. 7 year 1999	Protected of plants and wildlife list
PP No. 38 year 2011	River
PP No. 68 year 1998	Nature reserve management
Presidential Decree No. 32 year 1990	Management of Protected Area
https://www.hcvnetwork.org/resources/cg-identification-sep-2014-english	HCVRN.2013. Common Guidance for the identification of High Conservation Value
https://www.hcvnetwork.org/resources/cg-management-and-monitoring-2014-english	HCVRN.2014. Common Guidance for the management and monitoring of High Conservation Values

4. Summary of Assessment

4.1. Summary of SEI Assessment

The SEIA development and preparation of management and monitoring Plan for PT. ASM is prepared under cooperation agreement between PT. ASM and AMDAL consultant and Daemeter Consulting. The preparation of such report refers to the result of identification and analysis of Social Impact Assessment conducted in April – December 2015 in the area of PT. ASM, Ketapang Regency, West Kalimantan Province and the frame of reference of the agreed work.

Results from identification and categorization based on findings and fieldwork in ASM's area are presented in table below.

Table 10. Result from identification SEI Assessment

Activity	Positive Issue raised by Stakeholder	Negative Issue raised by Stakeholder	Assessor Recomendations
Socialization of Plantation Development	Expectations for the welfare of society	Differences in society perception on the delivery of dissemination content	Differences in perception of society on the delivery of socialization content. Improve the way the company communication and relates to community
The process of compensation and land acquisition	• Have land managed by the company (land partnership) • Increased welfare of members of the partnership (Kemitraan)	• land conflicts • Social jealousy	a. The company always coordinating with Culture leaders, village officials, community leaders and other interested parties when there are activities related to land measuring or boundaries marking, considering the people in the area surrounding a location permit. b. To avoid conflicts of land ownership in the future, it should be the company's land

			acquisition involving land owners, the witness left and right boundaries of land and village officials in the land acquisition.
Plantation management (land clearing, nursery and seeding, planting, maintenance, harvesting, FFB transport)	• Absorption of labor • Business opportunities for local partners • Positive lifestyle changes	• Declining water quality due to erosion, sedimentation and water pollution by chemicals • Work related accident • Negative Lifestyle changes	a. Conduct laboratory tests and publish the results of testing to the public b. To identify accidents and diseases caused by the activities of plantation and mill management, regarding the type and frequency of occurrence, discuss with officials / rural people about the solution to be implemented.
Development of infrastructure (roads, bridges, housing, public facilities, etc.)	• Open access to transport, communication and information • Business opportunities for local partners	• Work related accident • Negative Lifestyle changes	a. Identify the damaged roads and road infrastructure that need to be improved b. Visit to the school, to the market and to the village to see the physical changes
Corporate Social Responsibility	• There is assistance to villages / communities	• Public disappointment if it does not match with expectations • Social jealousy	a. The company should continue to deal with all community groups that particularly affected, to get information about the interests and wishes them and discuss it with them. b. Communication and this relationship should not be limited to the elite village or cooperative, but all the components of society, including those who are regarded as a disadvantaged group. c. Employment for local employment and job vacancies openly expressed either through village officials / district as well as through announcements / media to reach the

			remote villages
Partnership	• Revenue for the community • Institutional capacity building	• Grievance and disbelief • Management is not credible and transparent • Social jealousy	a. The Company immediately disseminate details the positive and negative impacts of oil palm plantation management, a partnership and cooperation rule that will be done with the community. b. Establish intensive communication with the authorities and the public to discuss ways to improve the quality of the village, growing aspirations in the community and the welfare of society as well as the harmony between the company and the community

The following management and mitigation measures are recommended for adoption and implementation, in order to address the significant potential social and environmental impacts and make the project socially acceptable and beneficial.

Based on the results of the study of Social Impact Assessment in PT. ASM, the following is a step that is recommended to reduce the negative social impact in the PT ASM :

1. The company improve the ways to communicate and connect with the community.
2. The company immediately to socialize in detail about the positive impact and negative of the management of palm oil plantations, a partnership and a set of rules cooperation will be carried out with the community.
3. The company has always coordinate with indigenous leaders, village officials, leaders community and other interested parties, if there are activities related to measurement land or marking boundaries, considering the people in the area around the location permit was uphold customary law.
4. To avoid conflicts of land ownership in the future should be in corporate land acquisition involves land owners, the witness left and right boundaries of land and village officials in land acquisition.
5. The company can use existing institutional development, such as cooperatives at the village level to discuss the potential impact of this and cooperate with the local government to formulate options for the settlement of this problem.
6. The company should continue to deal with all groups of society, especially affected, to get information about the interests and wishes them and discuss it with them. Communication and this relationship should not limited to the elite village or cooperative, but all the components of society including those considered as disadvantaged groups

To ensure that the activities to increase the positive impact and reduce the negative impact goes as planned the need for monitoring activities as follows :

Table 11. Mitigation Measures for Social Impact Assesment

No	Impact Monitored	Indicator	Monitoring Methods	Monitoring Frequency
1	The opening of access of transportation, communication and information	• Long road in plantation area • Quality of roads and means of transport and telecommunications	Identifying the road damaged and infrastructure of the need of road repair	Once a month and enhancement of frequency on rainy season
2	Local Manpower Absorption	• The number of job vacancies • The number of local labor that can be absorbed in the company's activities	Provision of jobs, especially for local employment and job vacancies openly expressed either through village officials / district as well as through announcements / media	Any time , When Company have Vacancy
3	The increase in income of the people, especially members of the partnership	• The number of children who enroll in higher education • Housing conditions are getting better and permanent • Others	A visit to the school, to the market and to the village to see the physical changes	Every three months
4	Institutional capacity building	• The number of institutions in the village and its position against the outsiders • The number of members in these institutions	Identifying new organization that might be developed by the community with respect to certain issues, such as gatherers TBS cooperatives, etc.	Every three months
5	Increasing the capacity of human resources	• The number of skilled workers • The number of high school or University graduates • The existence of a new initiative being developed in the village	Do counseling and guidance on the Oil Palm management, the development and improvement of skills and entrepreneurship to society and youth, providing	Once every six months

			assistance for entrepreneurship	
6	Changes in habits and environment	• The new choice in agriculture • Total number of criminals who handled by the authorities • The existence of a joint initiative between the company and the community in order to secure the Plantation and surrounding	A visit to the department of agriculture or plantation services for which they will develop programs and cooperate with the authorities in providing security to citizens	Every three months
7	The decline in water quality	• Clarity, hazardous chemical elements	Conduct laboratory testing and publish the results of testing to the public	Once every six months
8	Social conflict	• Data from the company's land acquisition • The number of letters of protest sent by the citizens to the company • Demonstration by residents	• Identify and respond to issues that developed in the community to communicate directly to the community / village officials • Respond, receive complaints and desires of the community • Doing good and intensive communication with the authorities and villagers to involve the local community in the activities of the company resulting in a harmonious relationship with the community • Identify land has been, is and will be	Every six months

			released by the owners, size and location of the village / hamlet	
9	The decline in public confidence, especially members of the partnership	• The existence of joint activities between the community and company • The presence of anti oil and anti companies	Establish intensive communication with the authorities and the public to discuss ways to improve the quality of the village, growing aspirations in the community and the welfare of society as well as the harmony between the company and the community	Every six months
10	Social jealousy	• Origin workers absorbed within the company • The presence of new economic activities involving all citizens • Potential social impact arisen from social jealousy of community that does not own “kebun kemitraan”	Employment for local employment and job vacancies openly expressed either through village officials / district as well as through announcements / media in order to get to a remote village, Communicate with other surrounding entities about kemitraan program for Community. Define possible CSR Program for Alternative Economic Empowerment for community that does not own kebun kemitraan.	Once every six months
11	Accident and health	• The use of tools and safety and health at work	To identify accidents and diseases caused	Every six months

		• The number of patients at the clinic as a result of occupational accidents and diseases caused by the activities of the management of oil palm plantations	by the activities of plantation and mill management, regarding the type and frequency of discussion with authorities / villagers about the solution that will be applied	

Table 12. Management and mitigation measures for Environmental Impact Assessment of the Pre-Construction Phase

No	Impact	Source of Impact	Location	Mitigation	Time Frame
1	Social Unrest	Their land acquisition associated with the land owned by indigenous communities	Communities around the estate	a. Technology approach - Make a definitive boundary and inventory of public lands that are included in the Plantation as well as gardens and paddy fields of enclave community - Convention on community land and grow crops - Inventory tenure of affected communities and implement the compensation agreed to by both parties - Do not disturb the land that became the main source of people's livelihood such as rubber plantations and rice fields b. Socio-Economic Approach - Perform proactive approach and intensive socialization to the community leaders and citizens - To disseminate sustainability and	During construction

				implement programs for continuous CD - Allocate funding for the dissemination of plantation activity plan to be implemented - Implement community development (CD) in order to increase the capacity of the community, among others implement: training and skills in both the agriculture and non-agriculture, facilitate the establishment / strengthening of credit institutions in order to improve people's access to capital, and develop the potential of other communities in accordance with the potential local natural resources or by growing aspirations of the local community and others c. Institutional approach - Participate in forming village institutions responsible for the distribution of the impact of social unrest related to the existing activities currently being undertaken in the future - Establish a community development organization in the organizational structure of PT. Andes Sawit Mas - Establish a village institutions and community development agencies	

				- CD program involving village officials and community leaders	

Table 13. Management and mitigation measures for Environmental Impact Assessment of the Construction Phase

No	Impact	Source of Impact	Location	Mitigation	Time Frame
1	Potential Fire on Land	Land Clearing	Plantation area	a. Technology approach - Forming Fire Fighting teams (task force) to suppress fires - Creating a water reservoir and the fire control tower to tackle forest fires - Providing facilities and infrastructure for firefighters - Zero Burning during land clearing b. Socio-Economic Approach - Extension to the public about the dangers of fire - Build partnerships in the community post - Consult the relevant agencies - Involving the community in order to prevent fires c. Institutional approaches (institutional) - In cooperation with the Department of Forestry and Plantation Ketapang in managing fire in the plantation - Establish a task force of firefighting unit and complete with the facilities and infrastructure	During the activity, and continuously (during the construction period and production)

2	Increased Rate of Soil Erosion	Land clearing and road construction	Areal sloped 15-25% and the road network	a. Technology approach to Making Roads - The road is made slightly convex and on the right side of the road made a trench (drainage) - Plant a cover crop (Land Cover) along the roadside to reduce the rate of soil erosion surface Land-Clearing - Plant a cover crop (Land Cover) to reduce the rate of soil erosion surface - Establish individual terraces and silt pit to reduce the speed of surface runoff and erosion - Making the drainage channel (primary, secondary and tertiary) - Land clearing activities are not carried out during the rainy season and done gradually b. Socio-Economic Approach Making Roads - Inventory road, the road has slopes above 8% - Testing the erosion rate - Conducting outreach to the community around the plantation on the importance of soil and water conservation - Provide access to use the road so that the road becomes congested (small erosion)	During the construction and operation phases

				- Installing nets sedimentation on the sloping road Land-Clearing - Inventory the land that has a slope above 8% - Continuous Extension to the public about the dangers of erosion on soil fertility and erosion prevention methods - Conducting ongoing outreach to the community in and around the gardens of the importance of soil and water conservation c. Approach institutions (Institutional) - Establish a unit of the division of environmental and community development. Working closely with the relevant agencies to cooperate to implement the environmental management - Ask for help related agencies in minimizing the rate of soil erosion	
3	Decrease River Water Quality	The opening of roads and land clearing, and nurseries and plant maintenance immature	Street gardens, nurseries and maintenance immature (TBM)	a. Technology approach Making Roads - Maintaining riparian conservation area and planted with a cover crop - Maintaining waterways / drainage - Ban on tree cutting on conservation area Land clearings - Conducting clearance not in the rainy season	

				- Maintaining riparian conservation area and planting cover crop - Ban on the felling of trees in conservation areas close to river border. Nurseries and maintenance of Generating Plant (TM) - Conducting spraying pests and diseases in the dry season - Wear a mask when spraying according to SOP - Use of fertilizers Soil Sub Application method b. Socio-Economic Approach - Provide training to the community - Together contribute to maintain the conservation area - To assist in the provision of clean water (wells) - Companies approached the CD programme - Provide periodic health checks for employees at the plant maintenance c. Institutions (Institutional) Approach - To coordinate with agencies - Briefing to employees on competence and conservation of the environment - In cooperation with relevant agencies to implement	

				environmental management - Establish a unit of the division of environmental and community development in the organization plantations and palm oil mills of PT. Andes Sawit Mas - Working with Agusjam Hospital at Ketapang for blood sampling part of plant maintenance	
4	Decrease in Population Species Diversity and Flora and Fauna Protected Land	Land clearing	Entire forests, conservation areas, including forest riparian corridor	a. Technology approach - Relocate the flora and fauna are protected in the safer habitat - Making the announcement boards and extension of ban on employees and the local community to not cut or hunting of protected flora and fauna - To protect flora that have economically and ecology value - Re-planting and maintaining the type of vegetation / flora that have ecology function - Perform LCC planting on oil palm plantations, with woody plants Leguminoceae - Provides conservation areas for protected flora and fauna - Not disturb the Protected fauna - Not cut down protected flora b. Socio-Economic Approach	

				- Facilitating citizens for flora planting - Conducting a persuasive approach to the society that activity caused the loss of protected species and ecology is prohibited - Involving the public and companies collaborate with Conservation of Natural Resources institution (BKSDA) to alleviate the impact - Requests assistance to the government for tackling an important environmental impacts due companies limitation. - Prohibit employees to hunt and maintain protected fauna - Encourage people to plant Gamal, sengan, Angkaras, Jati and cepu in the community garden and an enclave area by providing seed and planting guidance c. Institutions Approach (Institutional) - Participate in forming village organizations or environmental management division - Coordination with the various relevant technical agencies - Working with Government Agencies and Universities for implementation of environmental management	

				- Establish an organizational unit for environmental management and monitoring in the organization of plantations and palm oil mills and Community development of PT. Andes Sawit Mas	
5	Social unrest	Recruitment	Villages in and around the plantation area	a. Technology approach - Conducting open Selection for employee recruitment - Provide masks for employees on duty at the time of Nursery - Conducting training for new employees to improve their skills, capabilities and professionalism b. Socio-Economic Approach - Dissemination in continuously basis to employees about work discipline, and health safety and security - Provide incentive for employees excellence c. Institutional approach - Participate in the forming of village institutions that responsible to the impact spreading and social problem in related to the current activities undertaken and future activities - Implementation of the CD program involving the relevant agencies, district, village	During construction

				administration, the village council, cooperatives and local community leaders	
6	Employment opportunities and incomes	All the activities of the plantation project at the stage of construction	Villages that have been in the scope of the study area boundary	a. Technology approach - Provide an opportunity for people who are directly affected from plantation activities in accordance with prescribed qualifications - Provide training, guidance, effort and capital on affected communities, the new business opportunities, outside the agricultural sector - Participate in providing and completing facilities and economic infrastructure b. Socio-Economic Approach - Prioritizing to the citizens affected - Provide training to improve the skills of the workforce and entrepreneurship - Provide socialization of salaries of employees for the positive use - Provide information on job opportunities in a transparent manner c. Institutions Approach (Institutional) - Participate in forming village organizations or environmental management division and Community	Do once on the construction phase

				Development by the company - To coordinate with the local villagers to the partnership program and Community Development	
7	Public health	Their Mobilization of heavy equipment and clearing and maintenance of nurseries and immature (TBM)	Oil palm plantation and watersheds	a. Technology approach for Mobilization of heavy equipment - Maintenance of heavy equipment and periodic examination - Using technology reduces sound / noise - Wastewater from workshops vehicle in the form of used oil is collected in drums and taken up by the licensed oil collector - Mobilization of the devices are set at regular intervals - Watering of the dusty road at the time of mobilization Land-Clearing - Checking the health of employees regularly to health centers or clinics owned by the company - Reduce the place, and breeding of mosquitoes - Making the public toilets that could be a Sanitary toilet or pit by adapted Cover following to people's choice (To Change habits get toilet in the river or the gardens into the appointed place)	Every day and reported every 3 months during the construction period

				- Conduct periodic spraying to eradicate mosquitoes and larvae - The provision of clean water in tune with the existing ground water level - Increase the frequency of regular health services to rural communities that potentially affected - Strictly supervise the disposal of wastewater that has undergone first processing - Supervise the quality of air and river water quality b. Socio-Economic Approach - Facilitating citizens who wish to complement the health infrastructure and environmental sanitation - Routine Socialization of health and safety in plantations - The application of sanctions for violations of occupational health and safety regulations Nursery Maintenance and immature area (TBM) - Use of recommended pesticides - Spraying is not carried out in the rainy season - Spraying according to SOP - Make the channel that will accommodate the fertilizer residue of nursery and reusable	

				c. Institutions Approach (Institutional) - Company clinic also available for community for treatment, in collaboration with the Agusjam hospital for blood sampling of employees who in plant maintenance - To coordinate with clinic / health center in an effort to cope with all the local disease that often appears in public - Establish an organizational unit management and environmental monitoring in the organization plantations and palm oil mills of PT. Andes Sawit Mas - In cooperation with relevant agencies to work together to implement environmental management	

Table 14. Management and mitigation measures for Environmental Impact Assessment of the Production Phase

No	Impact	Source of Impact	Location	Mitigation	Time Frame
1	Decrease in Water Quality	- Production & Processing Activities - Oil Palm Upkeep	- Tempayak River - Kendawangan River Perigi River/ Kiri River - Selemba River	a. Technology approach - In house keeping - Wastewater Treatment Plant (WWTP) - Tackling the incidence of pests (flies) b. Socio-Economic Approach	During Palm Oil Processing Plant PT. Andes Sawit Mas Operate

			- Menjahawan River	- Assisting community health services - Procurement of water sources (wells) for public water c. Institutional approach - Working with government agencies (local government Ketapang and local government in West Kalimantan) and University to implement environmental management. Plantations and palm oil processing factory PT. Andes Sawit Mas act as executor and authorized agencies act as a Supervisory functions. - Establish organizational unit Management and environmental monitoring in the organization of plantations and palm oil mills of PT. Andes Sawit Mas - Monitoring of the implementation of water quality management by the relevant authorities - Reporting on the results periodically to related institutions	
2	Social unrest	Oil Palm Upkeep and Mill Operational	People in the surrounding gardens	a. Technology approach - Provide a mask for upkeep employees - Spraying herbicides in dry season and not use herbicides on the	During mill operation and oil palm plantion operation

				outskirts of the drainage - Fertilizing with sub soil application b. Socio-Economic Approach - To disseminate continuous Socialization c. Institutional approach - Establish an institution that would accommodate the village/channel public complaints which cooperated with relevant agencies	
3	Employment opportunities and incomes	Labor resources absorbed from the production stage	Villages that have been in the scope of the study area boundary	a. Technology approach - Provide opportunities for people directly affected by the activities in accordance with prescribed qualifications - Provide training, guidance and capitalization efforts for affected communities, regarding new business opportunities, outside the agricultural sector - Participate in providing and completing the facilities and economic infrastructure b. Socio-Economic Approach - Prioritizing to affected comunity	Done once at the construction phase

				- Provide training to improve the skills of the workforce and entrepreneurship - Provide socialization of salaries to employees for the positive and constructive use - Provide information on job opportunities in a transparent manner c. Institutional approach - Participate in forming village organizations or environmental management division and Community Development by the company - Coordination with the local village for the partnership programme and Community Development	
4	Decrease of Public Health	Their plant operations, fertilizer and pesticides and transport of production	- Plantation area - Watershed	a. Technology approach - Providing health services to people who are associated with disease vectors - Improving health services to rural communities affected - Managing the polluted source - Provide counseling to workers about the importance of EHS - The use of herbicides and fertilizers according to SOP b. Socio-Economic Approach - Encouraging and providing incentives to the community to	Every day and every 3 months are reported in the period of production

				complement the means to support the improvement of health and environmental sanitation c. Institutional approach - Dissemination to the public to maintain cleanliness and environmental sanitation - To coordinate with local health clinic	

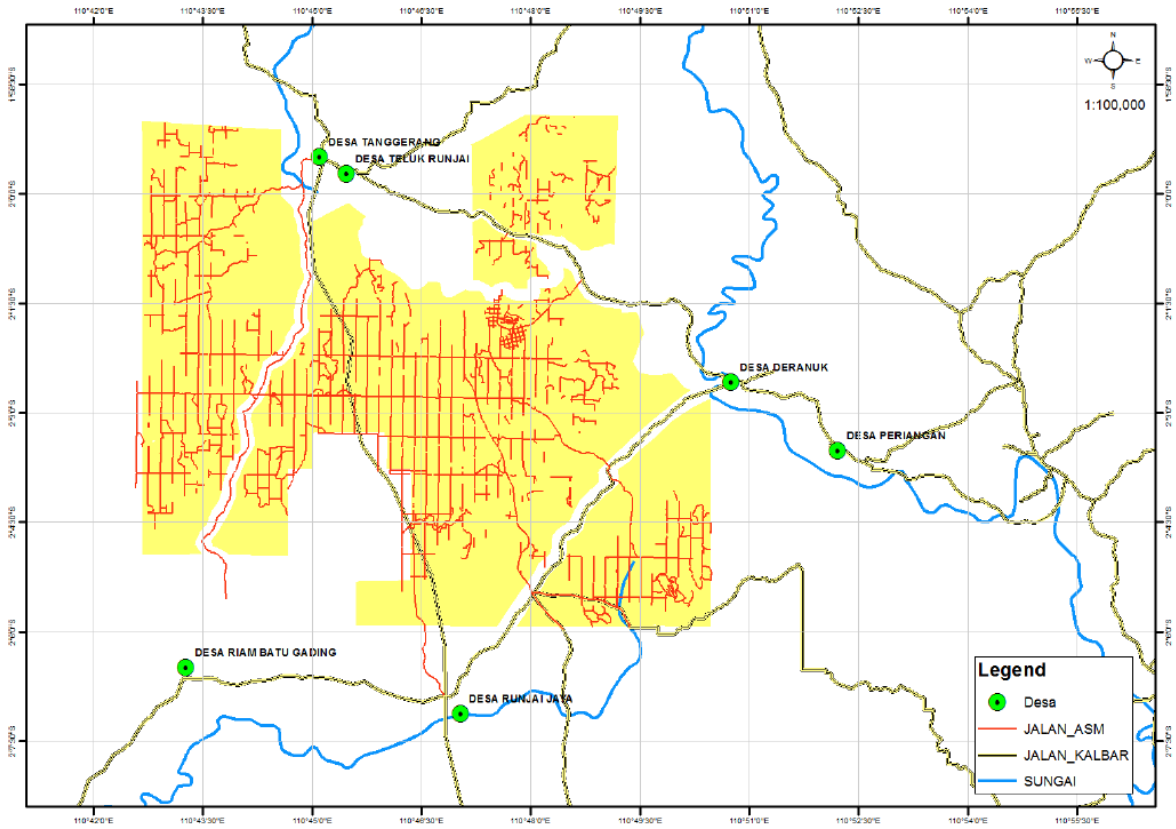

Figure 10. Location map of visited village during social impact assessment

4.2. Summary of HCV Assessment

The result of HCV assessment that carried out by Daemeter Consulting in 2015 shows that there is no primary forest in new planting areas of inti. Total HCV identified is 1.246 Ha without overlap and 3.201 Ha with overlap and from analysis of HCV map there is 997,70 Ha from HCV area identified was on new development area planned for new planting. New planting areas are within classification of other land-use (APL). Based on LUCA in PT. ASM, result also shows that there is no primary forest in the new planting areas. The satellite imagery showed that scrub, bare soil, secondary regrowth and mixed agriculture are the dominant land cover.

The HCV assessment was conducted by Daemeter Consulting on January – November 2015 using HCV Toolkit year 2008, published by The Consortium Revised HCV Toolkit Indonesia, HCVRN, 2013, Common Guidance for the identification of High Conservation Values and HCVRN, 2014, Common Guidance for the management and monitoring of High Conservation Values as guidance to assess the presence of HCV area in concession of PT. ASM.

Table 15. Total Area of HCV

HCVMA		Total Area (Ha)
HCV 1	HCV 1.1	640
	HCV 1.2	
	HCV 1.3	
	HCV 1.4	
HCV 3		640
HCV 4	HCV 4.1	551
	HCV 4.2	90
HCV 5		551
HCV 6		Required participatory mapping with community
Total HCVMA with overlap		**3.201**
Total HCVMA without overlap		**1.246**

The purpose of management and monitoring plan of HCV are :

- To ensure all the identified HCV and all area that assigned as HCV are protected and managed well, so that the HCV functions are well preserved.
- To enhance the administration and documentation of the management and monitoring in the sense that the process carried out is more systematically according to the legal aspects.

The basic programs and activities that fulfill the HCV management are summarized as table below :

Table 16. Identification of HCV areas and proposed measure

HCV	Finding	Threat		Management Recommendation	Monitoring Recommendation
		Source	Type		
HCV 1 – Globally, regionally, or Nationally Significant concentrations of biodiversity Values	Present	• The Company • Neighbouring companies • Local community	*Current* • Conversion of forest and swamp area to small scale agriculture (*ladang*) and palm oil (VERY HIGH) • Community wildlife exploitation (HIGH) • Timber extraction (HIGH) • Loss of water quality in rivers due to nutrient leaching / fertiliser & pesticide runoff to the river (VERY HIGH) *Potential* • Increased hunting pressure in HL and forest remnants in the AOI (HIGH) • Pollution by domestic or household waste (e.g., plastic) (HIGH)	• Designate the non – rubber dominated agroforestry system as "low development" area • Maintaining connectivity and buffer of natural areas in the plantation with the Hutan Lindung (HL) to avoid land encroachment. Riparian buffers also need to be maintained for its quality preservation. • Clear company policy on HCV and HCVMA • HCV Socialization and delineation of HCVA and HCVMA to local community and internal ASM • Develop internal policy /SOP to protect RTE (rare ,treathened, and Endangered) species. Policy/SOP will be socialized to	• Monitor HCV 1 species population in HCVMA • Monitor forest corridor adjacent to HL to protect wildlife habitat, along with riparian forest and swamp area • Community surveys to monitor trend in hunting effort and success • Mapping of any further clearing and applicable restoration / rehabilitation activities within HCVMA • Monitor river preservation effort and patrol effectiveness • Measurement of canopy closure and tree growth within HCVMA • Use of monitoring results to adapt management

				internal workers and local people. • Law enforcement and biodiversity protection from hunting / wildlife trade. Targeted socialization needs to be performed to local hunters and ASM workers. Although hunting is sporadic, on going socialization is necessary to gradually reduce hunting and alter hunting practices. • Prevention of illegal logging or unsustainable community logging • Periodic patrols along river banks to preserve river areas • Restoration and rehabilitation of degraded local protected areas (e.g., riparian zones) • Further identification of threatened species. For example herpethofauna, eventually, precautionary management by including the species in the education material and good water	recommendations in the future

				management (riparian buffers, maintain water quality, reduce hunting) should be included in the management and monitoring plan. • Observation on migratory birds in the riparian zones and swamp area during migration seasons. Follow-up management plan to prevent hunting and wetland damage if migratory birds observed in significant quantities (as identified by an ornithologist that has specialized knowledge in migratory birds).	
HCV 2 – Important Natural Landscapes & Processes	Absent	No Required	No Required	No Required	No Required
HCV 3 – Rare Or Endangered Ecosystems	Present	Threats, management and monitoring follow HCV 1, as HCV 3 areas, which all remain natural habitats in the AOI, are habitat for HCV 1 species.			
HCV 4 – Areas providing basic services of nature	Present	• Local communities • The Company	Current • Loss of remaining riparian buffers (VERY HIGH) • Water pollution due to agrochemical application (VERY HIGH)	• Areas important for regulation of hydrological processes are managed to maintain normal hydrological functions, and where feasible to restore them where they have been degraded or eliminated.	• Measurement of land use change in riparian areas especially regarding river straightening. • Measurement of forest re-growth in riparian areas, especially where

			• Loss of drinkable water supply downstream (VERY HIGH) • Poor construction of roads, bridges and drains (HIGH) • Deterioration of hydrological function, specifically river straightening, re-engineering of conversion to oil palm (VERY HIGH) • Operational company activities, leading to silting of rivers, reduction of surface water discharge, increased erosion rates, damage to infrastructure (roads) due to use of equipment and heavy vehicles (VERY HIGH) *Potential* • Lack of understanding of erosion potential by The Company's staff and steps	• Riparian buffer restoration based on recommended widths listed in under HCV 4.1 • Ensure all roads, drains, bridges and other earthworks are properly constructed and maintained. • Conduct a consultation b a third party regarding river straightening with impacted local community. A scheme to compensate this issue might need to be discussed through FPIC process (participatory mapping). • Develop SOPs based on best management practices in oil palm plantations, such as land clearing management with ground cover establishment and road development to prevent erosion. • Implementation of SOPs relating to road building and maintenance and water quality.	restoration activities are undertaken • River and stream water quality and quantity monitoring (before-after, control-Impact method should be used and results made readily available to communities, or monitoring done in conjunction with). • Reporting of damage and subsequent repair of earthworks. • Monitor the success of community engagement initiatives to reduce environmental impacts (e.g., encroachment into riparian areas) • Establish structured, recurring surveys of community perceptions of water quantity and quality • Monitor the success of community engagement initiatives to offset

			to be taken to mitigate erosion (LOW) • Lack of water quality and quantity as forest degraded and ecosystem service provision decreased (erosion and flood control) (LOW) • Soil Erosion through land clearing and roads on steep slopes (LOW)	• Measurement of land use change in riparian areas. • Reporting of damage and subsequent repair of earthworks	environmental impacts (e.g., encroachment into riparian areas) • Use of adaptive management to evaluate and adjust management and monitoring activities as necessary
HCV 5 - Natural Resources Critical for Meeting Basic Needs of Local People	Present	• The Company • Local Community	*Current* • Company operations (e.g., land clearing, and clearance of riparian strips and riverbank) within concession affecting rivers as the source of fish and water (VERY HIGH) • Conversion of forest and swamp area to small scale agriculture (*ladang*) and palm oil by community (VERY HIGH) • Hunting carried out by community and ASM	Management and monitoring follow HCV 1 and HCV 4	

			staffs (VERY HIGH) **Potential** • Over harvesting on *Schima wallichii/P*ena ga Keruing, which is used for construction materials, (LOW)		
HCV 6 - Areas and Species critical to local communities' Traditional Cultural Identity	**Present**	• The Company • Local Community	*Current* • Disturbance of / damage to sacred sites (jumpung), cultural sites or cemeteries by company operational activities (MEDIUM) • *Potential* • Disturbance of cultural or burial sites, sacred sites (*jumpung*), cultural sites or cemeteries through future conversion or existing plantation operations (HIGH) • Disturbance of / damage to sacred sites (jumpung), sacred sites, cultural sites or cemeteries by community clearing	• Where allowable by the community, demarcate HCV 6 areas in the field, important cultural site areas must be clearly marked on the ground to ensure that disruption to the site does not occur • SOPs need to be made for activities related to protecting HCV 6 areas. Field staff awareness on HCV 6 should be performed as well as other communities, which potentially unaware of their presence. SOP should include community member oversight during any land clearing activities • The Company needs to	• Have a regular programme, at least twice a year, of inspection and reporting to ensure these sites are not disturbed and as evidence that the company is protecting these sites • Identify impact of the company's operations in identified areas

			activities for fields (*ladang*) (MEDIUM)	document and set buffer zones surround cultural sites. This could be done by marking HCVA 6 on all operational maps and stored in Company GIS • The company must get written consent and ratification by the community involved if operational activities have potential effects on HCV 6 areas	

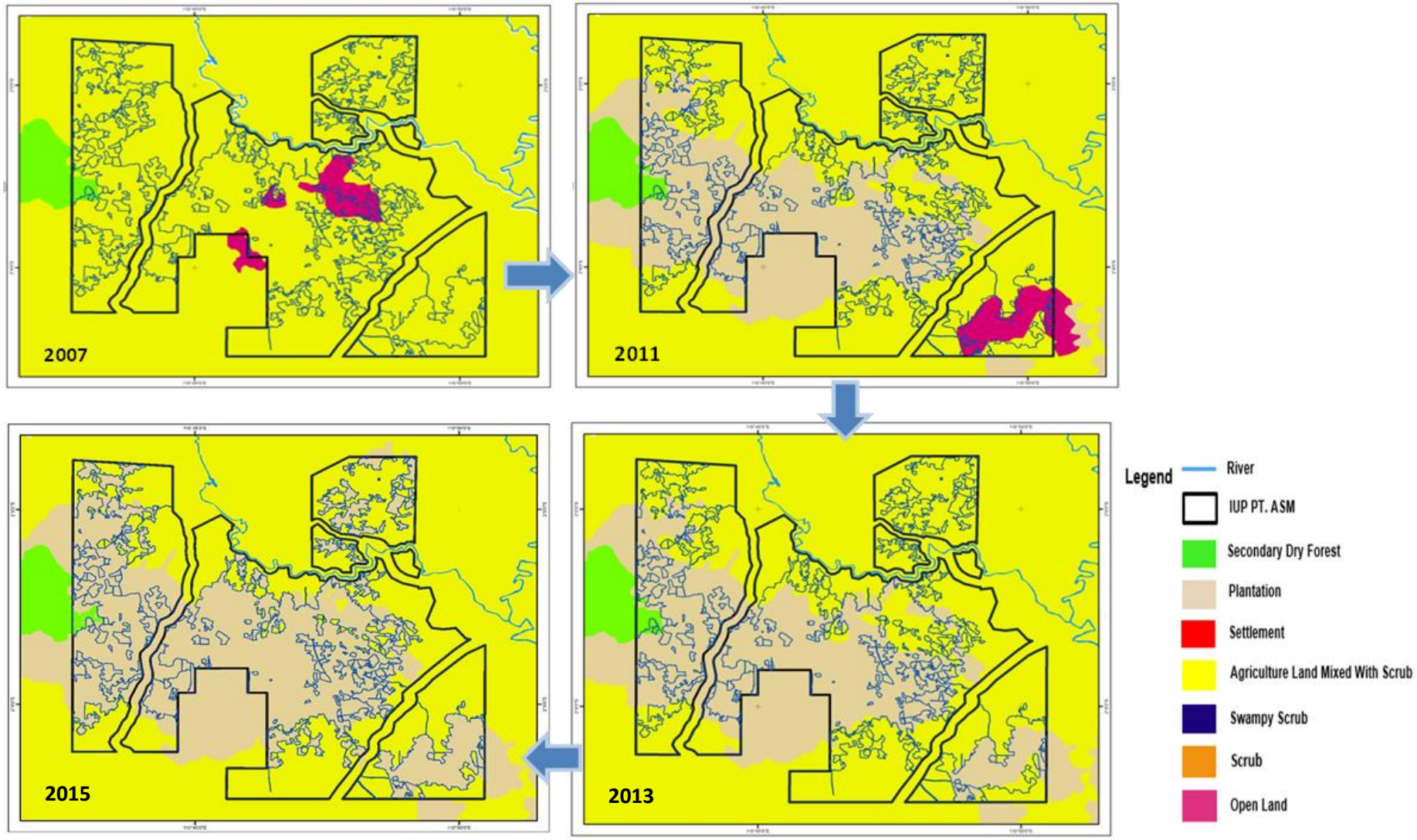

Figure 11. Land cover change in New Planting Area (*Source: www://webgis.dephut.go.id*)

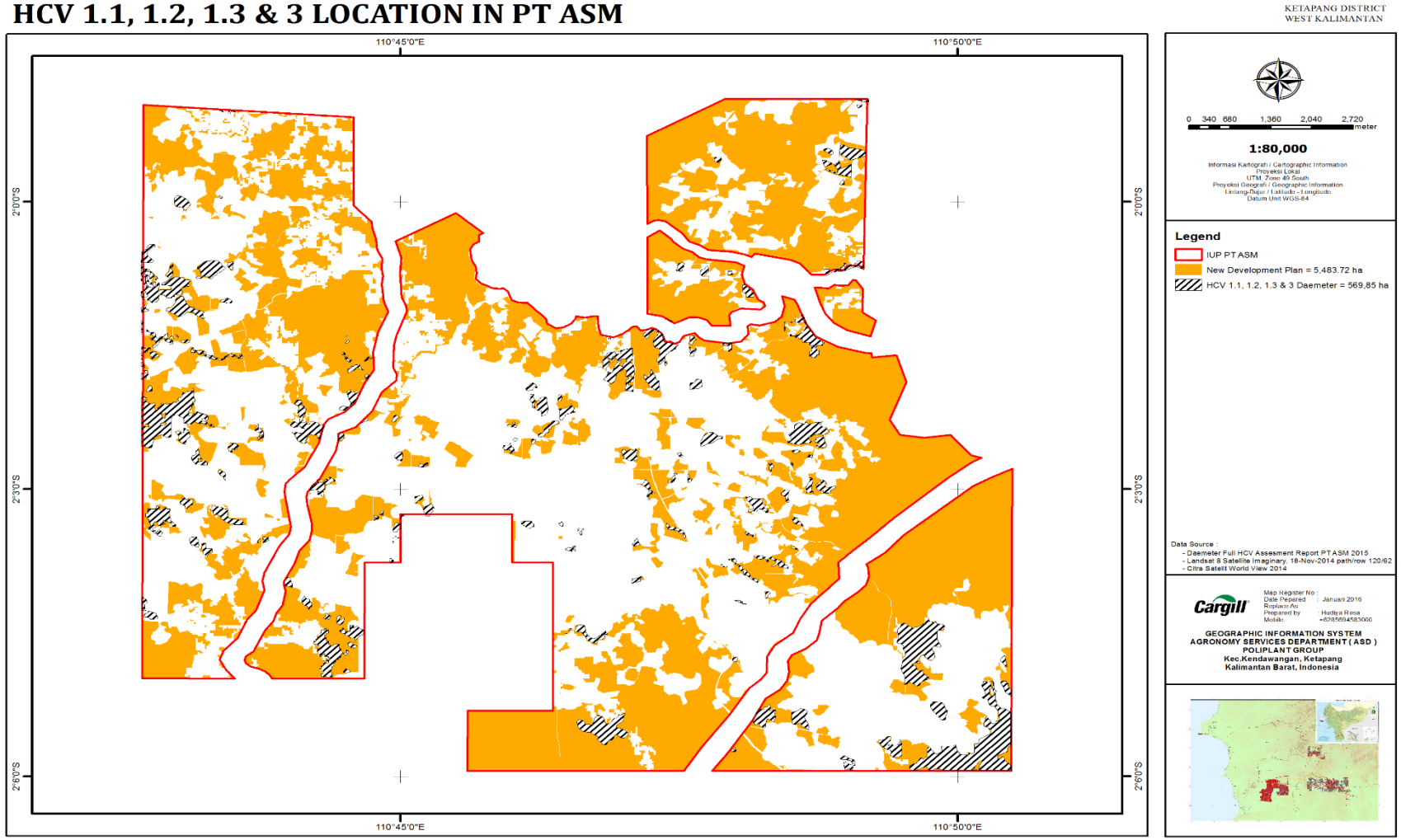

Figure 12. Location map of HCV 1.1, 1.2, 1.3, 3 area and New Development Area

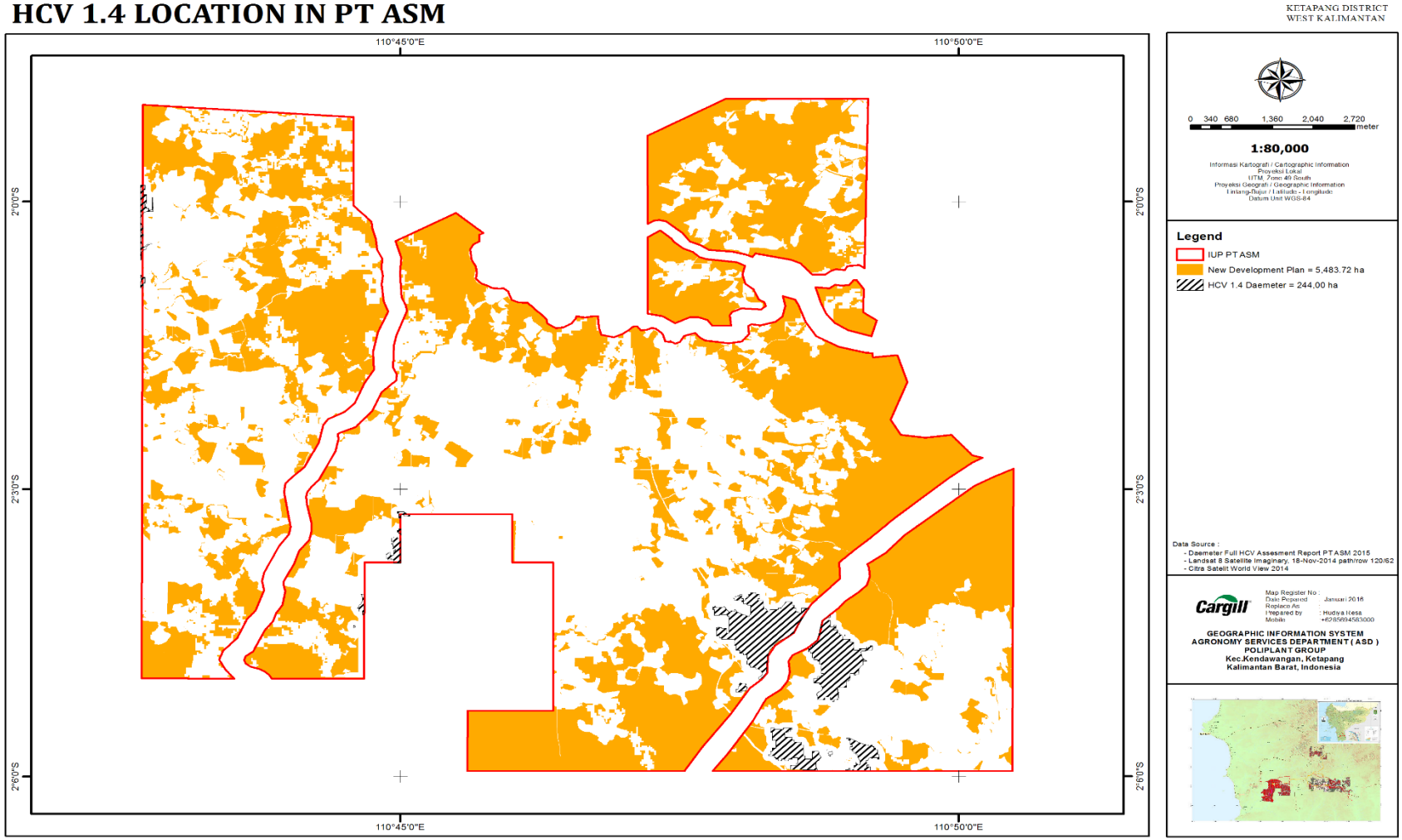

Figure 13. Location map of HCV 1.4 area and New Development Area

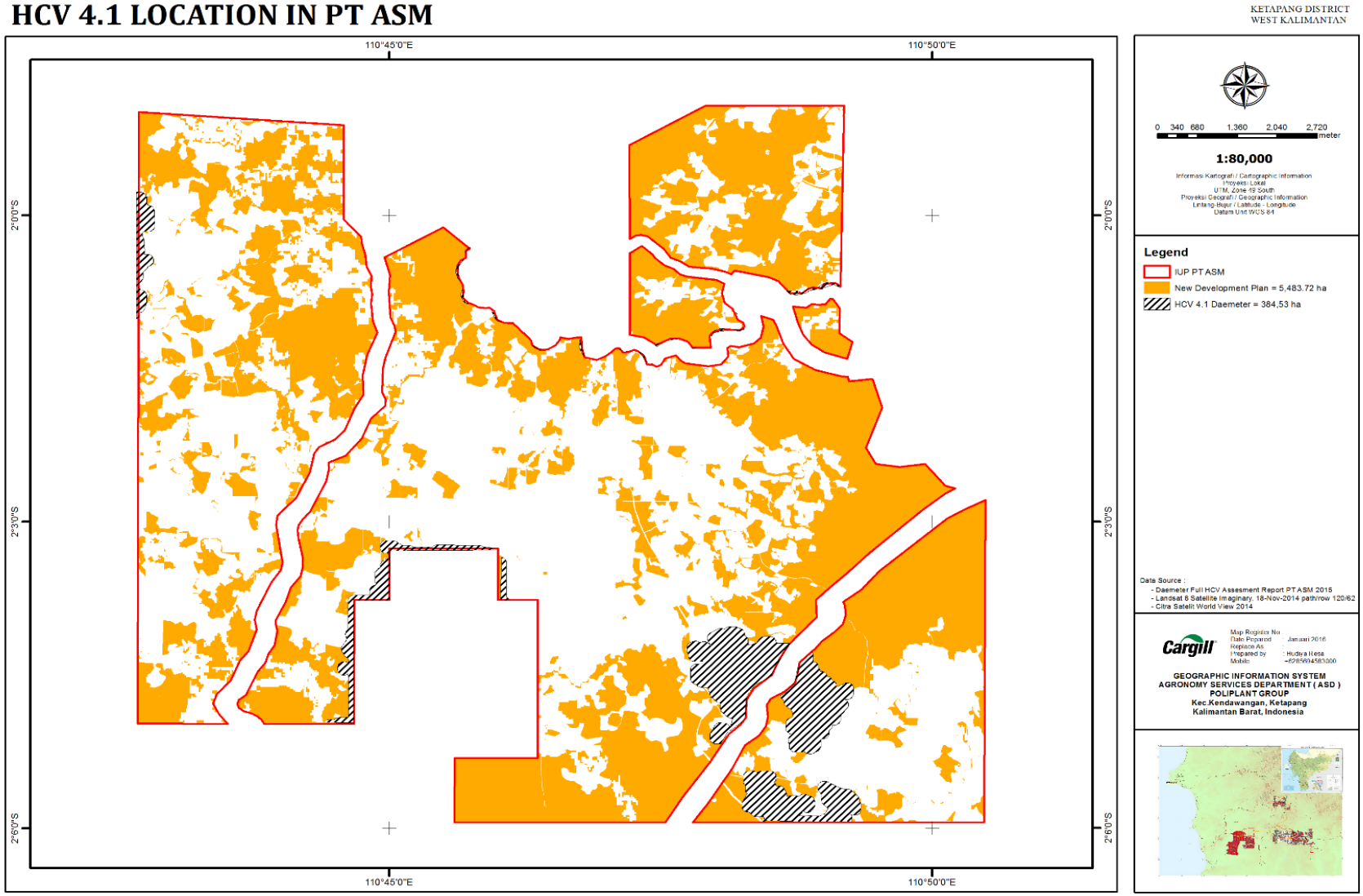

Figure 14. Location map of HCV 4.1 area and New Development Area

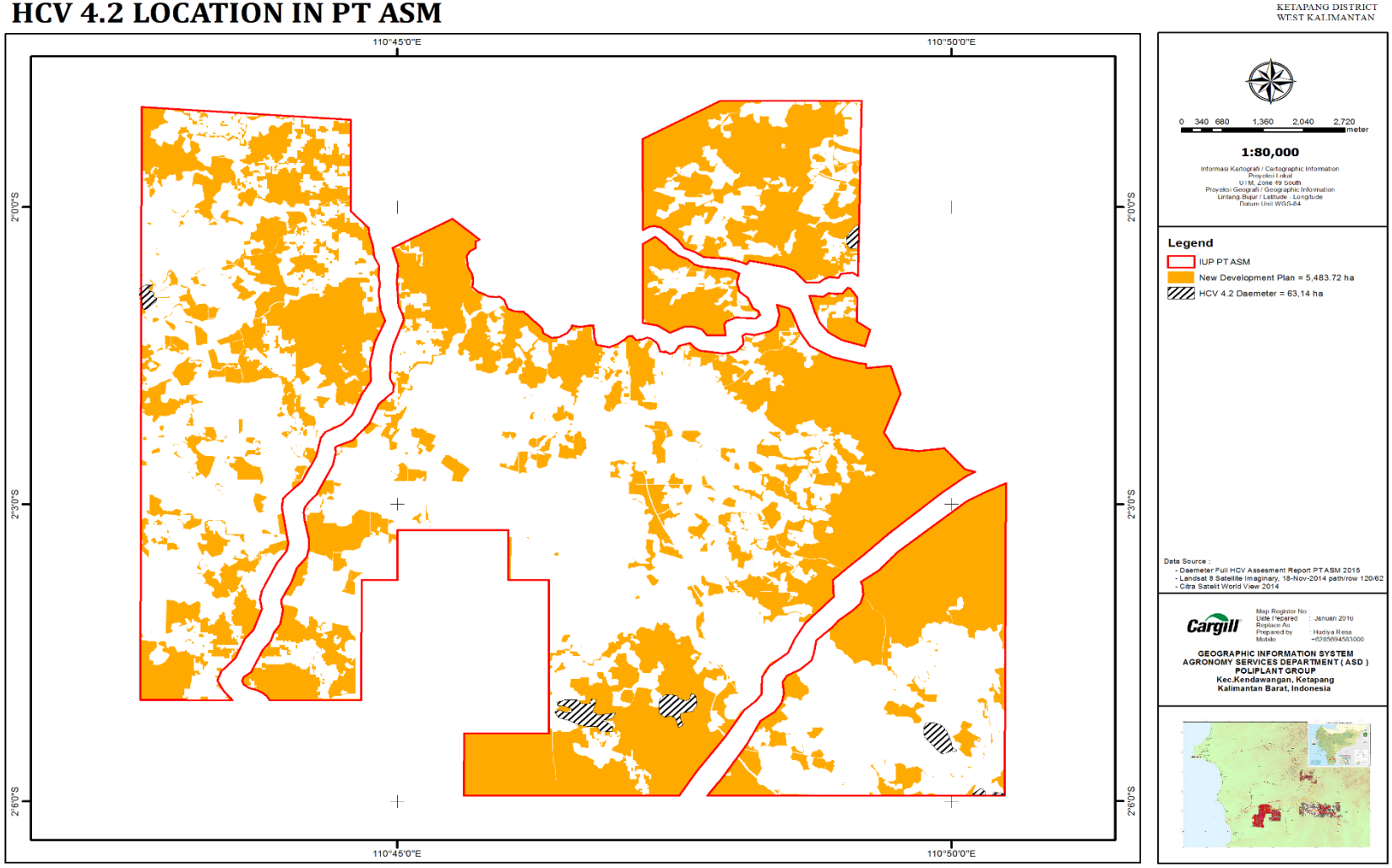

Figure 15. Location map of HCV 4.2 area and New Development Area

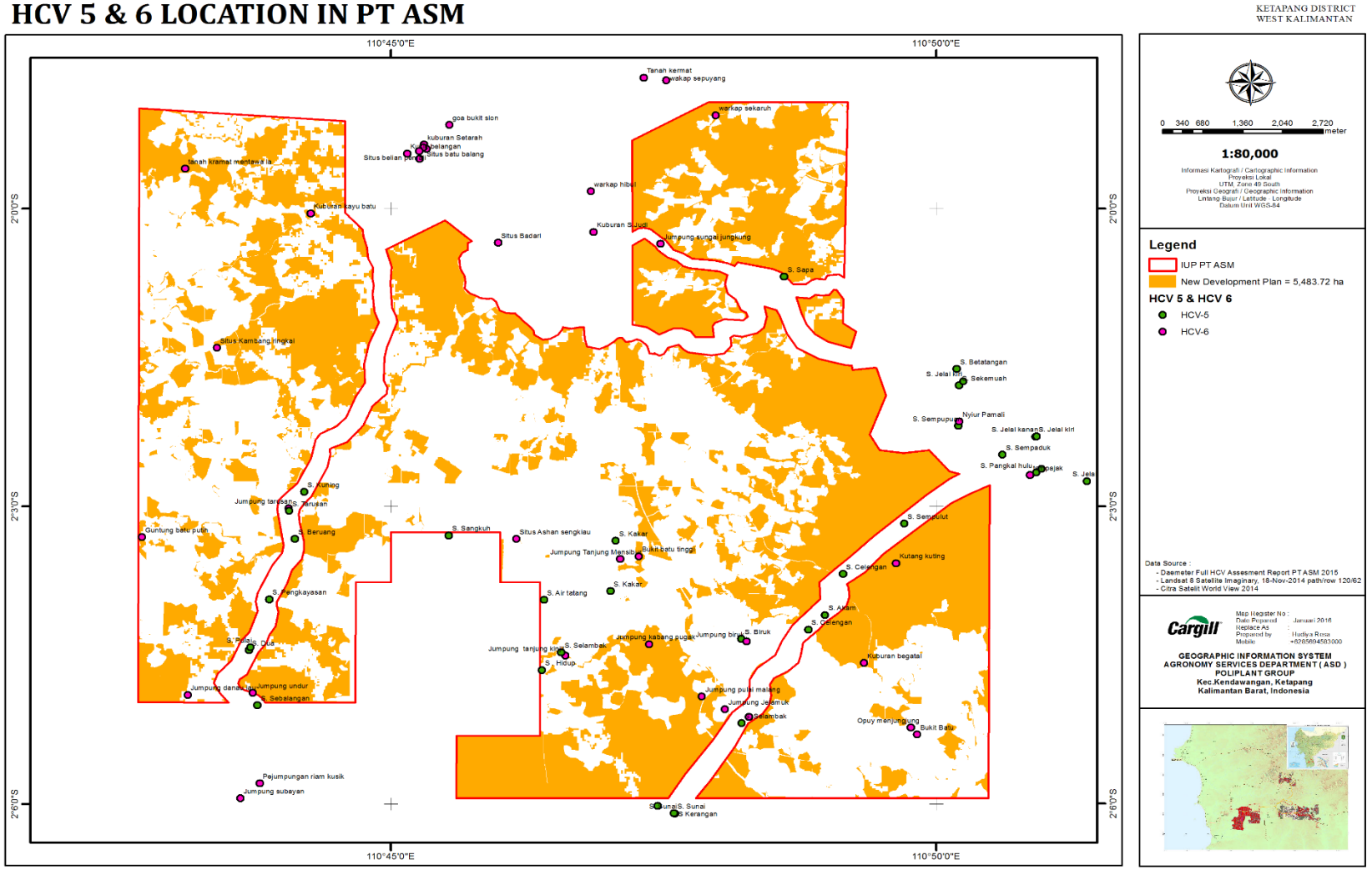

Figure 16. Location map of HCV 5 & 6 area and New Development Area

5. Internal Responsibility

This document is summary report of SEIA and HCV assessment of PT. Andes Sawit Mas and has been approved by the management of PT. Andes Sawit Mas.

Daemeter Consulting,

Social Assessor

Aisyah Sileuw
President Director
Daemeter Consulting

04 November 2015

Felicia Lasmana
Biodiversity specialist
(ALS14007FL)

Approved by,

Anthony Yeow
President Director
Cargill Poliplant Group

The statement of acceptance of responsibility for assessments

Assessment result document on High Conservation Value (HCV) and Social Impact Assessment (SIA) by Daemeter Consulting of PT. Andes Sawit Mas will be applied as one of the guidelines in managing palm oil plantation in PT. Andes Sawit Mas (ASM).

Date : 25 May 2016

Management of PT. Andes Sawit Mas