Summary Report of SEIA and HCV Assessments PT Maju Aneka Sawit Kotawaringin Timur District, Central Kalimantan Province

Executive Summary

This Executive Summary fulfills the RSPO New Planting Procedures Format "Summary Report of SEIA and HCV Assessment" (RSPO latest reversion of 5th May 2010).

PT Maju Aneka Sawit (PT MAS) is an oil palm plantation situated in Sebabi Village, Tanah Putih, Kenyala Village and Hajalipan Village, Subdistrict Besi Township and also Tangar Village & Baampah Village, Mentaya Hulu Sub District, Kotawaringin Timur District, Central Kalimantan Province. PT MAS which has been registered as RPSO member, committed to develop a sustainable palm oil management system. The total area of 19,551.559 ha is based on The Land Use Title (Hak Guna Usaha) Number 41 dated 03 October 2007 (11,887.77 ha) and Number 45 dated 03 January 2008 (7,663.789 ha). The Plantation Business Permit (IUP) was approved by the Regent of Kotawaringin Timur in the Decree of the Regent of Kotawaringin Timur (Surat Keputusan Bupati Kotawaringin Timur) No. 525.26/517/VIII/EKBANG/2005 dated 20 August 2005 (11,887.77 ha) and No.26/492/VI/EKBANG/2006 dated 10 June 2006 (8,017.806 ha).

PT MAS is committed to develop a sustainable palm oil management system and has obtained RSPO certificate on 17th June 2011. As part of a sustainable palm oil management, PT MAS has conducted the Social Environment Impact Assessment (AMDAL), High Conservation Value (HCV) identification and Social Impact Assessment (SIA). HCV assessment in PT MAS was conducted in June/July 2007 using HCV Toolkit 2003, and more detailed survey and comprehensive HCV Assessment was conducted by Aksenta in March 2009. In February 2015 the HCV re-assessment includes land use change analysis (LUCA) was conducted by aksenta, the team leader from Aksenta have been licensed by the HCV Assessor Licensing Scheme (Provisional ALS15026PN). In addition, land cover and planting assessment was conducted in June/July 2007 using satellite data, field assessment and verification with the FPIC document for land use right compensation. The land use change and Greenhouse Gas emission (GHG) analysis have been updated using RSPO Carbon Assessment Tool for New Oil Palm Planting dated December 2014. The latter report will be submitted to the RSPO Emission Reduction Working Group separately as per RSPO requirements.

Based on HCV and land cover assessments and land use change analysis there was no primary forest and peat swamp forest in the HGU of PT MAS. Almost the entire land consisted of previously cultivated land, shrub land and open land area. The summary of the results from HCV assessments within the PT MAS concession showed that four out of six high conservation values (or HCV) areas, namely HCV 1, HCV 3, HCV 4, HCV 6 are present in PT MAS concession. The important element of HCV 1 is significant concentrations of species RTE (*Orlitia borneensis, Amyda cartialginea* and *Cuora amboninensi*) at regional level and corridor of Sun Beer (*Helarctos malayanus*). The important element of HCV 3 is ecosystem of peat swap forest. The HCV 4 related with basic ecosystem for significant erosion control area. Lastly, HCV 6 is identified by places designated as sacred by the community which are found scattered within the concession.

In general, the potential social issues would involve land ownership between communities around the concession with the plantation management, issues concerning employees' right and relations with the company or employer, as well as environmental degradation that may disturbs important sources of livelihood for the communities. Several implications resulting from the establishment and operations of the oil palm plantation would involve altered livelihoods and living resources, land allocations, landscape (ecosystem, vegetation, and infrastructure), as well as displacement of communities and settlements.



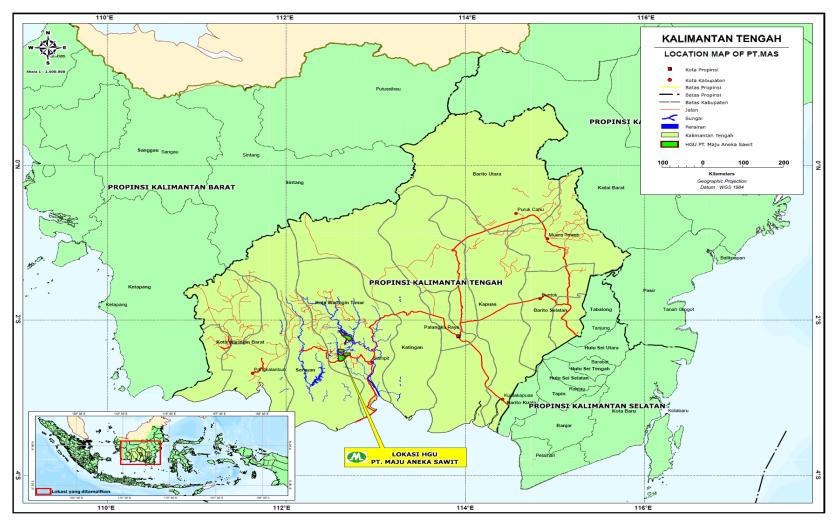
Scope of SEIA and HCV Assessment

General Data of the Company		
Company Name	:	PT Maju Aneka Sawit
Deed of Establishment	:	No. 13 dated 24 August 2000 (Sartono Simbolon, SH)
Deed of Minutes Meeting	:	No. 39 dated 10 March 2010 (Eddy Simin, SH)
Capital Status	:	Foreign Investment (Penanaman Modal Asing, PMA)
Taxpayer Notification Number	:	01.719.047.1-123.000
Company Address	:	Spring Tower 04-42, Jl. K. L. Yos Sudarso Km. 7.8
		Tanjung Mulia, Medan Deli Medan 20241 Sumatera
		Utara
Type of business	:	Oil Palm Plantation & Processing
Status of concession land	:	Land Use Title (HGU) No. 41 dated on 03 October
		2007 (size 11,887.77 ha) and HGU No 45. dated 03
		January 2008 (size 7,663.789 ha)
Contact person	:	Suwandi/Toris (Senior Estate Manager)
Geographical Location	:	See Picture 1, Picture 2, Picture 3 and Picture 4
Surrounding Entities	:	PT MAS plantation borders other entities, namely: PT.
		Sukajadi Sawit Mekar, PT. Katingan Indah Utama, PT.
		Mentaya Sawit Mas, PT. Karunia Kencana Permai
		Sejati, PT. Mulya Agro Permai, PT. Hamparan Mas
		Sawit Bangun Persada, PT. Sapta Karya Damai, and PT.
		Mustika Sembuluh.

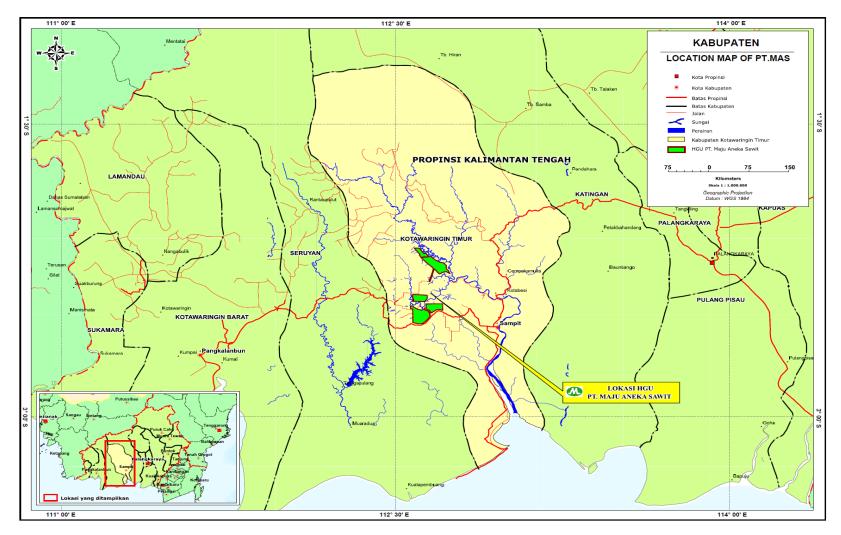
The scope of Social and Environment Impact Assessment of PT MAS covers the local social entities within total area of 19,551.559 ha based on The Land Use Title (Hak Guna Usaha) No 41 dated 03 October 2007 (11,887.77 ha) and No 45 dated 03 January 2008 (7,663.789 ha). Thus, the High Conservation Value assessment covers of the total area 19,551.559 ha or formal area boundary into an area of corporate governance. The HCV assessment also covers landscape level including areas outside the HGU expanded into villages and surrounding areas which have considerably importance for assessment of HCV values. Potential areas for oil palm plantings as corporate social responsibility (CSR) projects in villages in the vicinity outside of the HGU when opportunity arises are included.



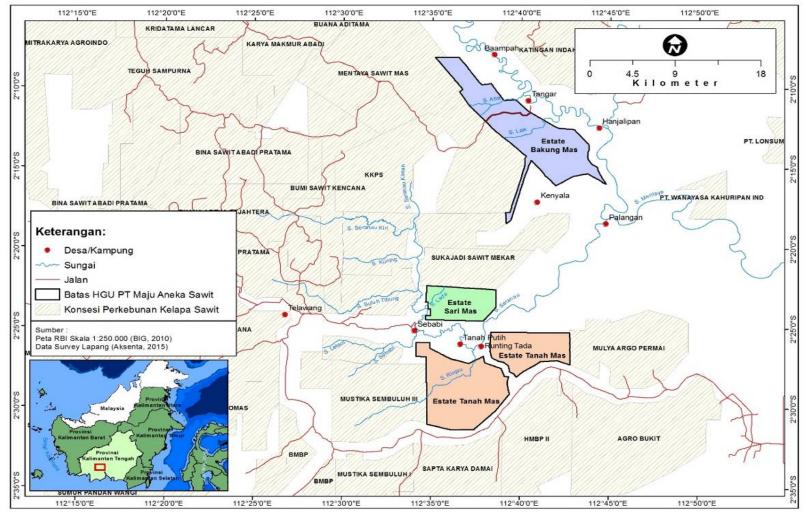
Picture 1 Location of PT MAS in Indonesia



Picture 2 Location of PT MAS in Central Kalimantan



Picture 3 Location of PT MAS in Kotawaringin Timur District



Picture 4 Location of PT MAS and its surrounding entities



Permits

The permits that have been obtained by the company include Social Environment Impact Assessment (AMDAL), Location Permit, Plantation Business Permit (Izin Usaha Perkebunan), Land Title Permit (HGU). The list of the licenses and recommendations are tabulated below:

Table 1. Types of permits and recommendations of PT Maju Aneka Sawit

No	Licenses and recommendations	Issued by	Number and date	Note
1.	Deed of Establishment	Notary Eddy Simin, SH	Nomor: 13 Dated on 24 August 2000	
	Ratification Deed	Minister of Justice and Human Rights Republic Indonesia	No : C-1983 HT.01.01.TH.2001 Dated on 12 March 2001	
2	Deed of Minutes of Meeting	Notary Eddy Simin, SH	Nomor: 39 Dated on 10 March 2010	
	Acceptance of the Company's Notice of Change Data	Minister of Justice and Human Rights Republic Indonesia	No AHU-AH.01.10-10138 Dated on 27 April 2010	
3.	Taxpayer Notification Number	Ministry of Finance 01.719.047.1-123.000 Directorate General of Taxation		
4.	Permitted Area (Izin Lokasi)	Regent of Kotawaringin Timur (Bupati Kotawaringin Timur)	No: 433.460.42 Dated on 23 June 2004	9,250 Ha
		Regent of Kotawaringin Timur (Bupati Kotawaringin Timur)	No: 737.460.42 Dated on 03 November 2004	7,000 Ha
		Regent of Kotawaringin Timur (Bupati Kotawaringin Timur)	No: 113.460.42 Tanggal 3 February 2005	2.500 Ha
	Permitted Area - Change	Regent of Kotawaringin Timur (Bupati Kotawaringin Timur)	No: 598.460.42 Dated on 30 August 2004	11,750 Ha
		Regent of Kotawaringin Timur (Bupati Kotawaringin Timur)	No: 434.460.42 Dated on 29 December 2004	11,887.7 Ha
5.	Plantation Business Permit (IUP)	Regent of Kotawaringin Timur (Bupati Kotawaringin Timur)	No: 525.26/492/VI/EKBANG/2006 Dated on 10 June 2006	8,017.806 Ha
		Regent of Kotawaringin Timur (Bupati Kotawaringin Timur)	No: 525.26/517/VIII/EKBANG/2005 Dated on 20 August 2005	11,887.77 Ha
	Plantation Business Permit (IUP) - Change	Regent of Kotawaringin Timur (Bupati Kotawaringin Timur)	No: 188.45/295/HUK-EK.SDA/2014 Dated on 25 July 2014	11,887.77 Ha
6.	Social Environmental	Regent of Kotawaringin Timur (Bupati Kotawaringin Timur)	No. 127 year 2009 Dated on 02 February 2009	HGU No 41
Impcat Assessment (AMDAL)		Regent of Kotawaringin Timur (Bupati Kotawaringin Timur)	No. 115 Year 2009 Dated on 28 February 2009	HGU No 45
7	Land Use Title (Hak Guna Usaha-	National Land Officer Kotawaringin Timur District	Nomor: 41 Dated on 03 October 2007	11,887.77 ha
	HGU)		Nomor: 45 Dated on 03 January 2008	7,663.789 Ha



Area and time-plan for new plantings

The proposed new planting area by PT MAS is from the balance of unplanted non-HCV areas and mineral soil area in the HGU No 41 and HGU No 45. PT MAS will seek an agreement with the owners of the land through the FPIC (free, prior and informed consent) process. Development of oil palm plantings as CSR projects in the vicinity outside of the HGU, when opportunity arises, is included. Land development and planting of oil palm are following the procedures of RSPO New Planting Procedures. This is part of an ongoing planting and the NPP documents are meant for notification only. Activities that will be undertaken are land acquisition or compensation to the land owners through the Free Prior and Informed Consent (FPIC) process. Socialisation and engagement with the communities on village oil palm development plan will also be undertaken. HCV management and monitoring actitivities that have been put in place will continue to be enforced.



Assessment Process and Procedures

a. SEI Assessment

Assessors and their credentials:

The Social Impact Assessment of PT MAS was carried out by Aksenta which is located at Jl. Gandaria VIII/10, Kebayoran Baru, Jakarta 12130; Telephone/fax: +62 21 739-6518, E-mail: <u>aksenta@aksenta.com</u>. The Aksenta team for the Social Impact Assessment consists of members with multi-discipline in the social/economic aspects and professional in social assessment, resource economy and social relationships. The team members are:

Name	Expertise	Social Impact Assessment
Agus E. Munoraharjo	Cultural anthropology, community based information and communication facilitator, community development tourism, and peace studies.	Socio-cultural
Dwi R. Muhtaman	Forest and timber product certification, RSPO certification, coffee certification, social strategy.	Team leader, social auditor, certification
Wara Hapsari	Social relations, employment issues	Social

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

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

Data and information collection method

Methods used to collect data and information were:

- a. **Document review**. Conducted for documents available with the company and other documents obtained from other important stakeholders.
- b. **Observation**. Conducted for condition, utilization, and management of land and natural resources, and the community livelihoods.
- c. **Semi-structured interviews**. Conducted for plantation management, staffs, employees, formal and informal leaders, and members of the community.



- d. **FGD** (**Focus Group Discussion**). Community FGD was conducted included with employee and staff representatives.
- e. Workshop. Inter-village workshop.
- f. **Public Consultation.** Public consultation was conducted by inviting main stakeholders.

Methods of Data and Information Analysis

Identify key stakeholders, each stakeholder's interest and vulnerability, and relations within stakeholders. In addition to this analysis, data and information collected are "placed" (or mapped) in a four-box matrix that transparently relates one with the other. Vertically it is assumed that there is two ways good internal and external stakeholder relationship. The internal box contains two sub-groups of management and employees, while the external box contains sub-groups of community elites and commoners; there are two horizontal sub-groups as well consisting of management versus community themselves. *Emic* and *etic* approaches, or analyze these data and information. The greatest objectivity possible is expected through using this method.

The SIA for PT MAS is conducted using two combined methodology namely; stakeholders analysis and social impact assessment employing sustainable livelihood framework. Data are complied through literature study, observation, interview and focus group discussion, thus several important points may be conclude in the letter part. In the focus group discussion, the respondents participative expressed their opinions of important issues are compiled in the framework of sustainable livelihood with the form of asset thus it produces specific impact assessment in the social aspect of communities. Five aspects related to sustainable livelihood, namely human, physical, social, financial and natural assets using the identified components and displayed in matrix table, analyzed and scored qualitatively and quantitatively.

Activities in this assessment step consisted of the following:

- 1. Collect preliminary information: this includes data information collection before the team conducted visit.
- 2. Assessment design,
- 3. Field assessment
- 4. Analysis: all data information collected from document review, interview, observation, FGD, mini workshop and public consultations were collected and analyzed to assess the social impact and estimate impact consequences/multiplications if these impacts were not adequately managed.
- 5. Reporting.



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

b. HCV Assessment

Assessors and their credentials

The HCV assessment in the Land Use Title (HGU) of PT MAS by Aksenta located at Jl. Gandaria VIII/10, Kebayoran Baru, Jakarta 12130; Telephone/fax: +62 21 739-6518, E-mail: <u>aksenta@aksenta.com</u>. The team leader from Aksenta has been licensed by the HCV Assessor Licensing Scheme (Provisional ALS15026PN). The team members are:

Name	ALS License	Institution	Role	Expertise
Pupung F Nurwatha pupung@aksenta.com	Provisional (ALS15026PN)	Aksenta	Team Leader, Biodiversity Assessment (HCV 1, HCV 2 and HCV 3)	Research and wild animal survey, ornithologist, facilitator of community biodiversity assessment, participative mapping, conduct HCV assessment since 2007
Yanto Ardiyanto <u>yanto@aksenta.com</u>	N/A	Aksenta	Team Member, Environmental Assessment	Hydrologist, soil conservation, spatial analysis and remote sensing, water management system, conduct HCV assessment since 2010
Nandang Mulyana nandang@aksenta.com	N/A	Aksenta	Team Member, socio-cultural Assessment (HCV 5 HCV 6)	Regional Planning and Village Development, Community empowerment, Management of Conflict, Participative Mapping, conduct HCV assessment since 2009
Reza Abdillah <u>reza@aksenta.com</u>	N/A	Aksenta	Team Member, GIS Specialist	Experience with GIS since 2013, remote sensing for biological conservation and land use issue

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

HCV Identifying Methods

The assessment covers of the total area 19,551.559 ha based on The Land Use Title (Hak Guna Usaha) No 41 and HGU No 45. It is also expanded into villages and other areas which considerably important to the proposed surrounding plantation area. HCV reassessment was

conducted in February 2015, the assessment consists of three main activities: desk-based study (conducted on 2 - 4 February 2015 in Jakarta), field work (conducted on 6 - 13 February 2015) and stakeholder consultation (conducted on 13 February 2015). Please refer to table 2.

Activities	Time	Location
Pre-assessment & Preparation	2-4 Feb2015	Aksenta Office, Jakarta
Opening meeting	6 Feb 2015	PT MAS
Participatory mapping	6 Feb 2015	PT MAS
Field Survey	6-12 Feb2015	Land Use Title Area of PT MAS and its surrounding landscape, includes 3 estates as follow : Sari Mas, Bakung Mas, Tanah Mas and the surrounding villages
Public Consultation	13 Feb 2015	Training Centre
Closing meeting & interim report	13 Feb 2015	PT MAS

Table 2 Schedule of HCV Assessment in PT MAS

The HCV assessment was conducted based on step-wise screening that harmonizes the required information to the scale reference (see guidance on HCVRN, 2013). The scale reference used for the assessment of HCV 1-3 covers the global, regional and national levels, before ground truthing is conducted. Whilst, the assessment of HCV 4-6 focuses on landscape assessment or local level before ground truthing is conducted. The process of HCV assessment begins with pre-assessment, data collection from the site and public consultation. The collected data and information will be analyzed further and the discovered HCV will be mapped out.

Pre-assessment

Pre-assessment is the initial process of HCV identification. Pre-assessment covers activities as follow: (i) collect the data and information on the development and the management of the existing estate and management planning, (ii) collect the secondary data and information from various sources (report, journal, book, statistic data, basic map), include information on biodiversity aspect and issue (global, regional, national, even local level), environment (especially on soil and water conservation) and socio-cultural, and (iii) analyze and validate the collected data and information and spatial analysis of basic map.

Data collection

Data collection in the field focuses on the area potentially classified as HCV area based on pre-assessment result. The collection of data and information is focused on the HCV element and attribute by using the methods as follow:



- 1) Participatory mapping
- 2) Ground truthing

Ground truthing is the field verification of the land cover from the interpretation of landsat satellite that is conducted during pre-assessment. At the same time when ground truthing is conducted, the collection of data and information also being conducted on site. The activity is being done by HCV assessor, either being done as a group per location or parallel for each section of assessment. This depends on the area potentially classified as HCV area.

3) Data collection on site

The collection of data on site is being done simultaneously with ground truthing. The purpose of this activity is to verify the existence of HCV element and attribute, in which it will be the basic to determine whether there is HCV in that particular area.

 Interview with the community in the assessed area Interview with the community or the company worker is being conducted to gain information about the existence of HCV element and attribute.

Public Consultation

Public consultation is a face-to-face meeting with key stakeholders in the assessed area, such as local community, village government, regency government, relevant institutions in the regency and companies operating around the assessed area.

Data analysis and HCV mapping

The data collected on site will be compiled and tabulated based on the area of assessment. Initially, the data collected on site will be compiled and tabulated separately in accordance with each section assessed (biodiversity, environmental service, and socio-cultural). For each section, the HCV element and attribute found on site is listed. Furthermore, analysis will be conducted to justify the existence or non-existence of HCV elements and to determine the boundary of HCV area.

References

The sources of information collected and analysed during pre-assessment (Table 3) and being used for HCV assessment in PT MAS are tabulated below:

HCV	Main Sources
1, 2, 3	 Land title map of PT MAS in Kotawaringin Timur District, Central Kalimantan (source : PT MAS) Pata Panunjukan Kausaan butan dan Parajran Provinci Kalimantan Tangah (Dirjan)
	• Peta Penunjukan Kawasan hutan dan Perairan Provinsi Kalimantan Tengah (Dirjen

 Table 3 Data and Information collected and analyzed

HCV	Main Sources						
	Planologi Kehutanan, Departemen Kehutanan, Tahun 2001)						
	• Conservation map of Central Kalimantan Province (BKSDA Kaleng, 2009).						
	• Rencana Tata Ruang Wilayah (RTRW) Kabupaten Kotawaringin Timur (2012)						
	• Peta Indikatif Penundaan Pemberian Izin Baru (PPIB) Pemanfaatan Hutan, Penggunaan Kawasan hutan dan Perubahan Peruntukan Kawasan Hutan dan Areal Penggunaan Lair versi 6 (2013)						
	• Peatland map, the area and the carbon content in Kalimantan. (Wetland International- Indonesia Program. 2004)						
	• Land covers from landsat satellite imagery 8 (USGS, September 2014).						
	• The Ecology of Kalimantan. Periplus Edition, HK. (MacKinnon, et al., 2006).						
	• Field Guide to The Mammals of Borneo (Payne dkk. 2000)						
	• Birds in Sumatera, Jawa, Bali and Kalimantan (MacKinnon, et al. 2000)						
	• Indonesian and Papua New Guinea Turtoise and Crocodile (Iskandar, 2000)						
	• IUCN Red List of Threatened Species. www.iucnredlist.org						
	• Endemic Bird Area Factsheet: Borneo (BirdLife International, 2012).						
	• Appendices I, II and III, valid from 14 April 2014 (CITES, 2014).						
	• Important Bird Areas in Asia: Key Sites for Conservation (Birdlife International, 2004)						
	• Ramsar area in Indonesia, source: http://www.ramsar.org						
	• Kajian Ekosistem Pulau Kalimantan(Prihatna/WWF Indonesia, 2009)						
	• Rapid Assessment of HCV PT MAS, June/July 2007						
	• HCV Identification Report of PT MAS 2009 (Aksenta, 2009)						
	 Management & Monitoring Plan of HCV PT MAS 						
	Report of Implementation Management & Monitoring Plan HCV PT MAS						
	• Land title map of PT MAS in Kotawaringin Timur District, Central Kalimantan (source : PT MAS)						
	• Landsat satellite imagery 8 (USGS, 2014)						
	• Data digital Shuttle Radar Topography Mission Elevation Data (USGS, 2004)						
	• Land System Map (RePPProt, 1991).						
4	• Peta Ketinggian Tempat (hasil pengolahan berdasarkan data SRTM).						
-	• Elevation map (hasil pengolahan berdasarkan data DEM SRTM).						
	• Land cover map (hasil pengolahan berdasarkan citra Landsat 8, 2014).						
	• Rapid Assessment of HCV PT MAS, June/July 2007						
	• HCV Identification Report of PT MAS 2009 (Aksenta, 2009)						
	Management & Monitoring Plan of HCV PT MAS						
	Report of Implementation Management & Monitoring Plan HCV PT MAS						
	• Land title map of PT MAS in Kotawaringin Timur District, Central Kalimantan (source : PT MAS)						
	• Kotawaringin Timur District in 2013 (BPS Kabupaten Kotawaringin Timur, 2014)						
	• Telawang sub-district in 2013 (BPS Kabupaten Kotawaringin Timur, 2014)						
5, 6	• Village map in sub-district, regent of Kotawaringin Timur. (Sumber: RBI)						
5,0	• Landsat satellite imagery 8 (Landsat 8, September 2014)						
	• Rapid Assessment of HCV PT MAS, June/July 2007						
	• HCV Identification Report of PT MAS 2009 (Aksenta, 2009)						
	Management & Monitoring Plan of HCV PT MAS						
	Report of Implementation Management & Monitoring Plan HCV PT MAS						

Summary of Assessment Findings

a. SEI Assessment

This social impact assessment for PT MAS aimed at: 1) Collect baseline information on socio-economic and cultural issues of communities in and around the PT MAS concession; 2) Gather information on company employees; 3) Estimate the social impact produced by the establishment and operations of PT MAS; 4) Develop recommendations to manage social impact that have occurred and anticipate potential future social impact.

Based on stakeholders profiling and confirmed from information collected through interviews with village officials and community and focus group discussion, the communities are from seven villages around the concession of PT MAS and those operating in the concession as enclaves with mixed rubber and agriculture crops. The seven villages distributed throughout the PT MAS estate are not entirely inter-connected through the roads. Tangar Village and Baampah Village in Kuwayan District, Penyang Village, Sebabi Village and Tanah Putih Village in Telawang District are all accessible through the land roads. On the other hand, Kenyala Village and Hanjalipan Village – although accessible by land – is easier to access by river.

Generally, the villages in the three districts around PT MAS plantation area are of the same village typology as indigenous villages. Characteristics of indigenous villages are, first, the villages originated from the Dayak tribes' settlements rising from shifting cultivation settling along rivers. Most of these villagers are Dayaks of the Dayak Temuan sub-tribe. Hindu Kaharingan is the oldest religion in the Dayak community, the Kaharingan tradition is still practiced in various rituals, such as the life and death cycle, culminating with the *tiwah* ritual, a ritual to take the spirit of the dead to the eternal world. For the local Dayak tribes, the land (forest) is a source of livelihood, place for shifting cultivation, hunting, and harvesting non-timber forest product, which are then planted with rubber, rattan, and other hardwoods, allowed to grow for years, then utilized for farmlands. This shifting cultivations and farming tradition have created a social and cultural system, such as *handep* or form of mutual cooperation to clear farmlands, and *gawe* or a harvest celebration.

In general, potential social issues will involve land ownership between communities around the concession with the plantation management, issues concerning employees' right and relations with the company or employer, as well as environmental degradation that may disturbs important sources of livelihood for the communities. Several implications resulting from the establishment and operations of the oil palm plantation would involve altered livelihoods and living resources, land allocations, landscape (ecosystem, vegetation, and infrastructure), as well as displacement of communities and settlements.

This SIA for PT MAS were conducted so that the result could be used by the company in its operational social impact planning and management to ensure future sustainability of the company's operations. Result of this SIA can also used as reference for company planning to achieve oil palm company certification standards.

General Recommendations of social impact management:

Based on the discussion and conclusion, in general the recommended actions are divided into two; namely for the company, and for the surrounding communities. It is expected that the implementation of recommended actions will improve the sustainable livelihood and quality of standard living of the communities around the company at the location. The general recommendations for company are:

- 1. Develop participatory approaches for socially relevant activities: from planning implementing, and monitoring/evaluation. Community participation must be included in planning company vision, mission and social strategy.
- 2. Develop strategy to improve education for community to prepare for the work force.
- 3. Develop productive businesses or work in accordance to the community's potential and aspirations (Commonity Development or CSR Program)
- 4. Improve relations between the company with enclave villagers and surronnding land owners.

b. HCV assessments

Based on landsat satellite imagery in September 2014, the assessed area does not have natural forest. Land Use Change Analysis report shows that since November 2005 the assessed area does not contain primary forest. The current land cover in the assessed area is dominated by oil palm. Whilst, according to Peta Indikatif Penundaan Izin Lokasi Baru (PIPIB) revision VI/2014 by the Ministry of Forestry, there is no area occupied by primary forest within and around the assessed area. The area outside the assessed area is indicated as peatland area. The peatland area is situated in the south-east of Sarimas Estate and South-east Bakung Mas Estate.

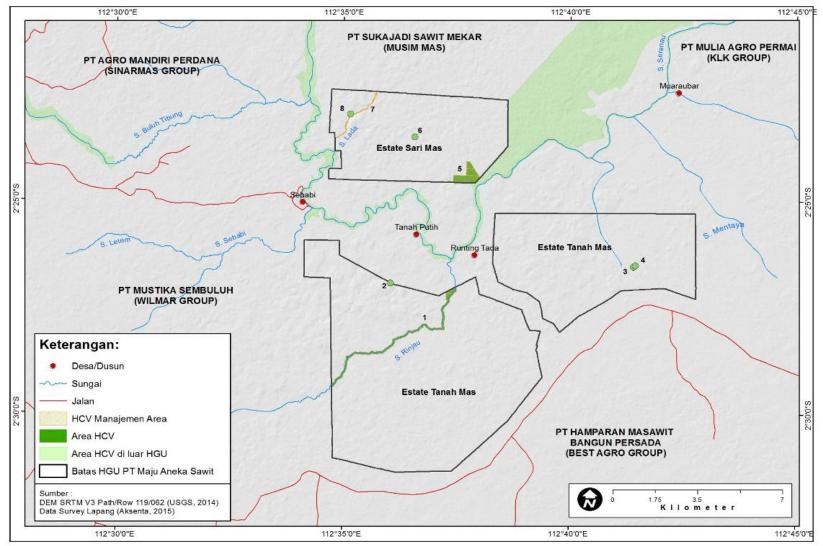
The assessed area is situated in the area with low biodiversity, outside the Important Bird Area, Heart of Borneo, and Ramsar area. There is no area determined or recommended as conservation area within the landscape of the assessed area. The closest conservation areas are TN Tanjung Puting, located approximately 50 km in the Southwest and TN Sebangau, located approximately 70 km in the Southeast. Between the concession and the conservation

area lies oil palm plantation and agriculture land and there is no corridor connecting the concession to the conservation area.

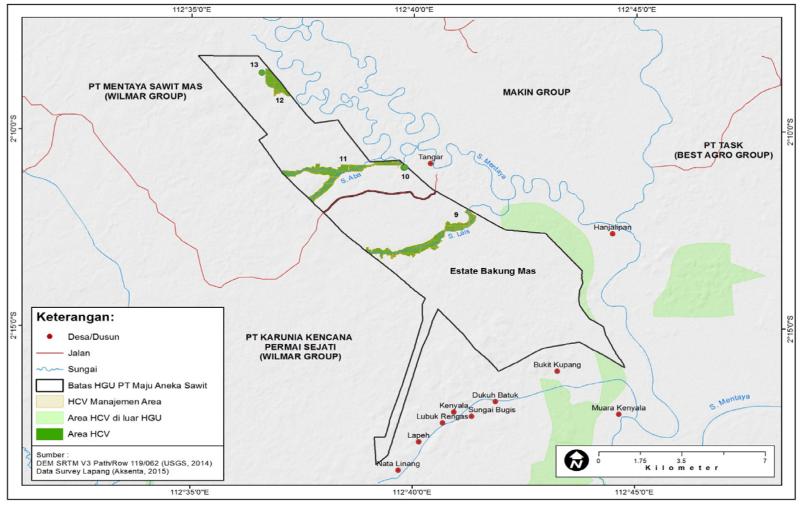
The summary of results from HCV assessments within the PT MAS concession showed four out of six high conservation values (or HCV) areas, namely HCV 1, HCV 3, HCV 4, HCV 6 are present in PT MAS concession. The important element of HCV 1 is significant concentrations of species RTE (*Orlitia borneensis, Amyda cartialginea* and *Cuora amboninensi*) at regional level and corridor of Sun Beer (*Helarctos malayanus*). The important element of HCV 3 is ecosystem of peat swap forest. The HCV 4 related with basic ecosystem for significant erosion control area. Lastly, HCV 6 is identified by places designated as sacred by the community which are found scattered within the concession. The total areas identified as HCV and Management Area (HCV-MA) is 551.72 ha. The summary of HCV area in HGU PT MAS is in Table 4 and Picture 5 & 6. The HCV area and proposed expansion of oil palm area in PT MAS shown in Picture 7 & 8.

Estate	ID	HCV	Description	Location	Size (Ha)
Tanah mas A	1	1; 4	Rinjau River and the riparianBlok P56-62, O61-62, N63-65,zoneM65, L65-70		90.45
Tanah mas A	2	6	Sandung (Grave)	Divisi A Blok N55-56	0.01
Tanah mas B	3	6	2 Old Grave (Penyang people)	Divisi K Blok X50	0.01
Tanah mas B	4	6	4 old grave sacred	Divisi K Blok X49	0.02
Sari Mas	5	3; 4	Secondary Forest in peat area	Blok P39, Q37-39, R38-39	52.46
Sari Mas	6	6	Old grave	Divisi B Blok O33	0.02
Sari Mas	7	4	Lada river	Blok M27-30, L30-34	9.59
Sari Mas	8	6	Sandung of Hapnani family	Divisi A Blok L30	0,01
Bakung Mas	9	1; 4	Lais River and the riparian	Blok X106-107, W107-108, V109-111, U110-112, T111- 112, S111, W105	166.68
Bakung Mas	10	6	Sandung of Sakadua village	Divisi G Blok U98-99	1.00
Bakung Mas			Blok U98, T98, S99, R99-102, Q99-100, Q103-104, P100	173.24	
Bakung Mas	12	1; 4	Aur Like dan Water catcment Blok O85-87, 089-90, P86-88, area N90-91		58.22
Bakung Mas	13	6	Grave of Tua from Baampah Village	Blok 86-87	0.01
				Total HCV Area	551.72

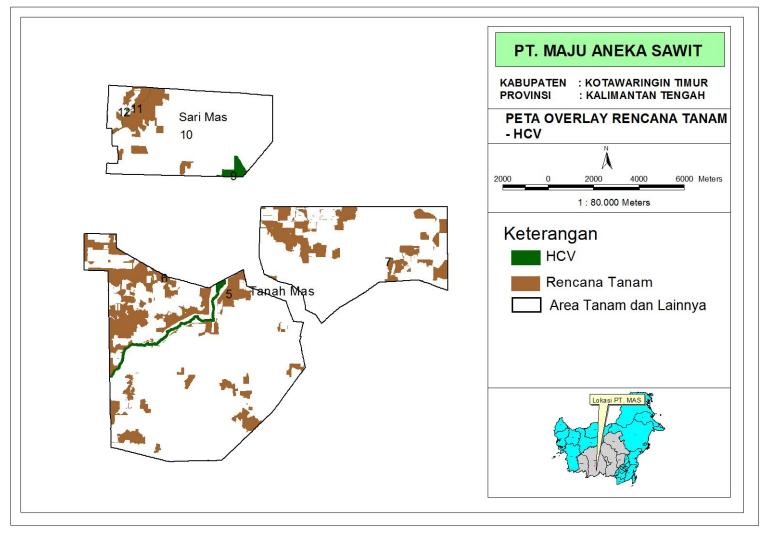
Table 4 the summary of HCV area in the concession



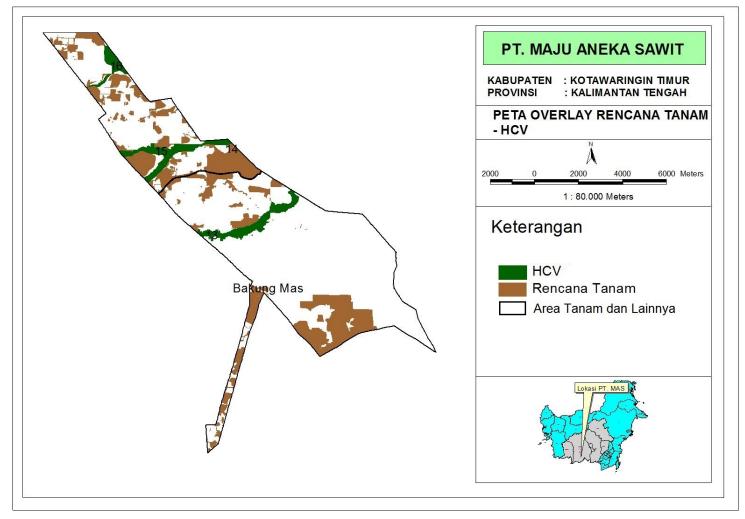
Picture 5 HCV Area in Tanah Mas & Sarimas Estate, PT MAS



Picture 6 HCV Area in Bakung Mas Estate, PT MAS



Picture 7: HCV Area and planned planting area within Tanah Mas & Sarimas Estate - PT MAS



Picture 8: HCV Area and planned planting area within Bakung Mas Estate - PT MAS



Several issues which might threaten the HCV areas were identified:

Based on the assessment conducted to identify the threat to the presence of HCV in the concession, HCV 1 and HCV 4 are seriously threatened. This is mainly due to the rivers in the concession that has not been protected from the mining activity, especially in Estate Bakung Mas and rivers that course along the plantation without proper riparian buffer zone protecting the river.

General Recommendations for HCV Management

Several general recommendation are made, which can immediately followed up to protect and manage the HCV areas: Delineation of HCV area, verify the extent of indicative HCV area, and to determine the end result as definitive HCV Area Map PT MAS, Socialize the presence of HCV area in PT MAS, Develop management & Monitoring plan, capacity building of HCV management & monitoring.



Internal responsibility

Formal signing off by assessors and company

This document is the summary of assessment result on High Conservation Value (HCV) and Social Impact Assessment (SIA) in PT Maju Aneka Sawit (PT MAS) by Aksenta and has been approved by the Management of PT MAS.

Aksenta,

Pupung Firman Nurwatha Team Leader Date: 31 March 2015 Management PT MAS,

<u>Suwandi/Toris</u> Senior Manager PT MAS Date: 31 March 2015

Statement of acceptance of responsibility for assessment

Assessment result document on High Conservation Value (HCV) and Social Impact Assessment (SIA) of PT MAS by Aksenta, will be applied as one of the guidelines in managing palm oil plantation in PT MAS

<u>Suwandi/Toris</u> Senior Manager PT MAS Date: 31 March 2015