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Summary Report of SEIA and HCV Assessments PT Musim Mas Pelalawan District, Riau Province

Executive Summary

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

PT Musim Mas is an oil palm plantation situated in Pangkalan Kuras (Betung Village, Talau Village, Tanjung Beringin, and Batang Kulim Village) and Pangkalan Lesung Sub District (Pangkalan Lesung Village), Pelalawan District, Riau Province. PT Musim Mas which has been registered as RSPO member, committed to develop a sustainable palm oil management system. The total area of 28,333.10 ha based on The Land Use Title - Hak Guna Usaha (No. 03 dated on 01 June 1994 size 3,383.2 Ha, No 04, dated on 01 June 1994 size 3,788.4673 Ha, No. 05 dated on 01 June 1994 size 1,956.4294 Ha, No. 01 dated on 02 April 1997 size 3,775 Ha, No. 02, dated on 02 April 1997 size 5,331 Ha, No 03 dated on 02 April 1997 size 399 Ha, No 01 dated on 21 November 1997 size 9,700 Ha). In addition to the nucleus (Estates), PT Musim Mas also has smallholder scheme in form of KKPA and Kas Desa. Total area of the KKPA is 1666 ha, consists of KKPA Merbau Sakti with the size of 864 ha and KKPA Rawa Tengkuluk with the size of 802 ha. Total area of Kas Desa (village oil palm development smallholding) is 17 ha consists of Kas Desa Betung with the size of 5 ha, Kas Desa Tanjung Beringin with the size of 5 ha, Kas Desa Talau with the size of 1 ha, Kas Desa Batang Kulim with the size of 1 ha, and Kas Desa Pangkalan Lesung with the size of 5 ha).

PT Musim Mas is committed to production of sustainable palm oil and was RSPO certified on 6th January 2009. As part of sustainable palm oil management, PT Musim Mas has conducted the Social Environment Impact Assessment (AMDAL), High Conservation Value (HCV) identification and Social Impact Assessment (SIA). HCV assessment in PT Musim Mas was conducted in September 2007 by Aksenta and in May 2015 re-assessment HCV on landscape level including land use change analysis (LUCA) was conducted by Aksenta, the team leader from Aksenta have been licensed by the HCV Assessor Licensing Scheme (Provisional ALS15025MM). The land use change and green house gases emission (GHG) analysis is updated using RSPO Carbon Assessment Tool for New Oil Palm Planting dated December 2014. This land use plan report will be submitted to the RSPO Emission Reduction Working Group separately as per RSPO requirements.

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Based on HCV and land use change analysis there was no primary forest in the HGU of PT Musim Mas and in the surrounding landscape outside the HGU. Almost the entire land is consisted of previously cultivated land, shrub land and open land areas. The summary of results from HCV assessments within the PT Musim Mas concession by HCV Assessor Licensing Scheme (Provisional ALS15025MM) showed four out of six high conservation values (or HCV) areas, namely HCV 1, HCV 3, HCV 4, HCV 6 are present in PT Musim Mas concession. The important element of HCV 1 is significant concentrations of species RTE (presence of *Manis javanicus*, *Batagu raffinis*, *Hylobates agilis*, *Scleropages formosus*) at regional level and corridor of Sun Bear (*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, HCV6 is screed graveyard (*Makam Puteri Bungsu Berdarah Putih*).

In general, the positive impacts of PT Musim Mas' development are financial contributions to the regency areas and national development generally through taxes and retributions instrument. Infrastructure improvement such as transportation access, health care service and education shall be positive contributions from this large scale investment. At the local level, the management provides opportunities to build partnership with local village community in the form system of smallholders' scheme (KKPA & Kas Desa oil palm) and many social support types to local village community. The potential negative social impact is related to the company's operations such as, the rivers which are used by the village communities may be polluted by the company's activities. Nevertheless, the outcomes of Social Impact Assessment are aimed at supporting the functions of production sustainability. The social circumstances in which the operations of company are related to stakeholders have been interpreted as part of integration and the success of company has contributed and there is mechanism of control over possible impacts.

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Scope of SEIA and HCV Assessment

General Data of the Company

Company Name	:	PT Musim Mas
Deed of Establishment	:	Notary M. Sutan Nasution No: 40 dated on 21 June 1972
Adjustment Article of Association	:	Notary Hustianti, SH, No: 105 dated on 19 May 2008
Capital Status	:	Foreign Investment (<i>Penanaman Modal Asing</i> , PMA)
Taxpayer Notification Number	:	01.100.016.3-092.000
Company Address	:	Jl. K. L. Yos Sudarso Km. 7.8 Tanjung Mulia – Medan 20241, Indonesia
Type of business	:	Oil Palm Plantation& Processing
Status of concession land	:	Land Use Title (HGU) No03/94 (3,383.2 Ha), No. 04/94 (3,788.4673 Ha), No. 05/94 (1,956.4294 Ha), No. 01/97 (9,700 Ha), No. 02/97 (5,331 Ha), No. 03/97 (399 Ha), No. 01/97 (3,775 Ha), KKPA Merbau Sakti, KKPA Rawa Tengkuluk and Kebun Kas Desa
Contact person	:	Supriadi Pardiman (Act. General Manager)
Geographical Location	:	See Picture 1, Picture2, Picture3 and Picture4
Surrounding Entities	:	PT Musim Mas plantation border with other entities: PT Serikat Putra, PT Surya Bratasena, PT Sari Lembah Subur, PT Indo Sawit, PT RAPP, PT Arara Abadi. The land use around PT Musim Mas is dominated by oil palm plantations and forest plantations (HTI).

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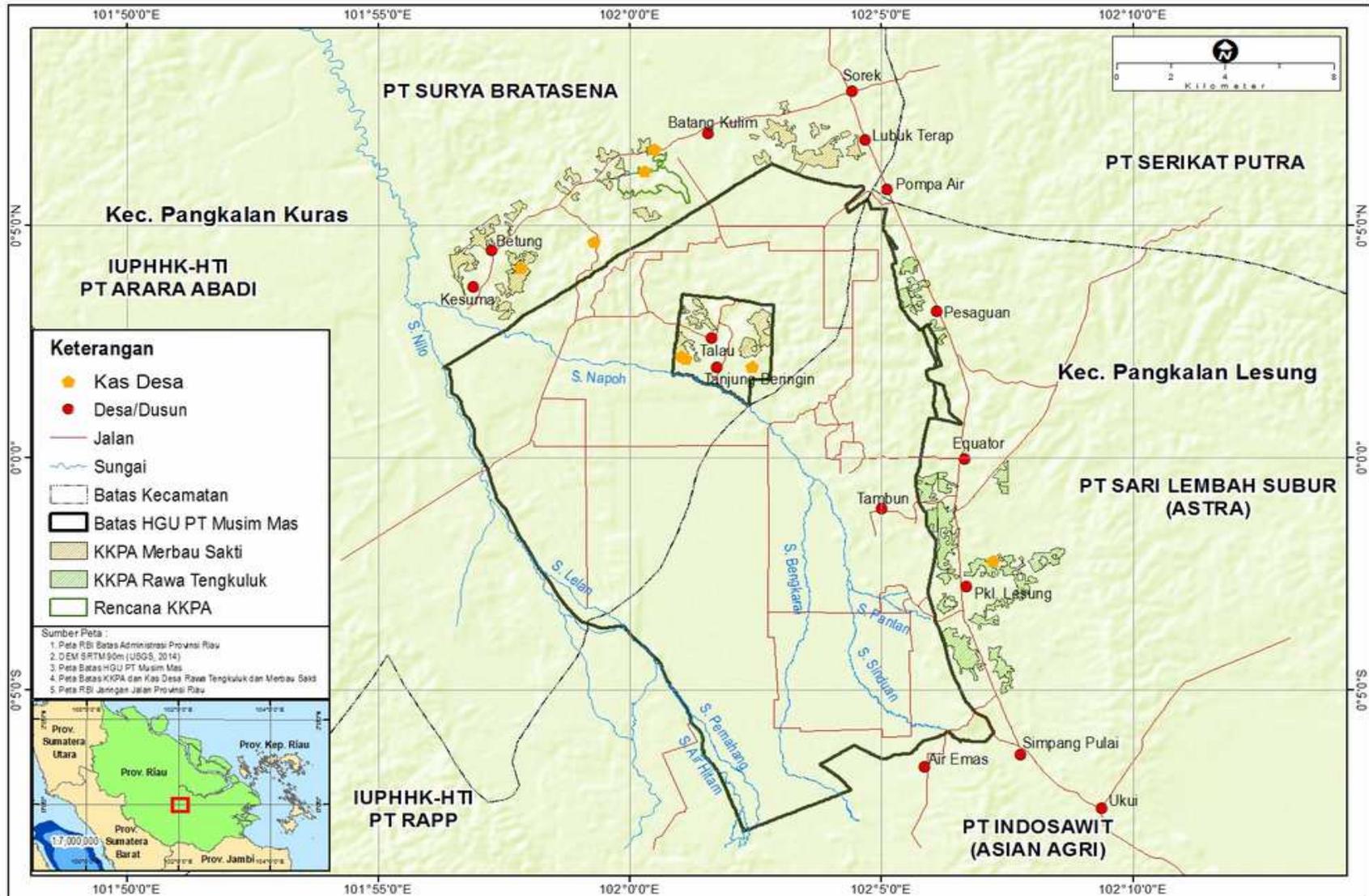
The scope of Social and Environment Impact Assessment of PT Musim Mas covers the local social entities within total area of 28,333.10 ha based on The Land Use Title (HGU) No 03/94 (3,383.2 Ha), No. 04/94 (3,788.4673 Ha), No. 05/94 (1,956.4294 Ha), No. 01/97 (9,700 Ha), No. 02/97 (5,331 Ha), No. 03/97 (399 Ha), No. 01/97 (3,775 Ha). Thus, the High Conservation Value assessment covers the total area 28,333.10 ha or formal area boundary into an area of corporate governance. The HCV assessment also covers landscape level including KKPA Merbau Sakti, KKPA Rawa Tengkuluk, Kas Desa Betung, Kas Desa Tanjung Beringin, Kas Desa Talau and Kas Desa Batang Kulim, areas outside the HGU expanded into villages and surrounding areas which is of considerable 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.

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Picture 1 Location of PT Musim Mas in Indonesia

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Picture 4 Location of PT Musim Mas and its surrounding entities (include KKPA & Kas Desa)

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Permits

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

Table 1 Types of permits and recommendations PT Musim Mas

No	Licenses and recommendations	Issued by	Number and date	Note
1.	Deed of Establishment	Notary M. SutanNasution	No. 40 Date: 21 June 1972	
2.	Adjustment Article of Association	Notary Hustiati, SH	No. 105 Date: 19 May 2008	
3.	Taxpayer Notification Number	Tax Serve Office, Medan (Directorate General of Taxation, Medan Regional Office)	01.100.016.3-092.000	
4.	Location Permit (IzinLokasi)	Riau Governor	No. KPTS.52/I.L-VI/1991 dated on 29 June 1991	12,000 Ha
		Head of National Land Bureau (BPN) Kampar District	No.KPTS.29/KP/XI/1994 dated on 8 November 1994 with extension	9,000 Ha
			No.KPTS.67/KP/X/1996 dated on 07 October 1996	5,331 Ha
			No.KPTS.68/KP/X/1996 dated on 07 October 1996	3,775 Ha
		Head of National Land Bureau (BPN) Kampar District	No. KPTS.69/KP/X/1996 dated on 7 October 1996	399 Ha
		Head of National Land Bureau (BPN) Kampar District	No. KPTS.73/KP/XIV/1996 dated on 28 November 1996	9,500Ha
		Head of National Land Bureau (BPN) Kampar District	No. 15/460/60-62.ZN-ZP/03.97 dated on 20 March 1997	4,400 Ha.
5.	Forest Release	Ministry of Forestry	478/Kpts-II/1990 20 September 1990	30,560.25 Ha
6.	Social Environment Impact Assessment (AMDAL)	Environmental Impact Management Agency Pelalawan District	660/Bapedalda/2006 dated on July 2006	
		Environmental Impact Management Agency Pelalawan District	KPTS.660/BLH/2011/451 dated on 14 October 2011	
7.	Plantations Business Permit (IUP)	Chief Investment Coordination Agency	No.616/T/PERKEBUNAN INDUSTRI/1999/ dated on 23 November 1999	

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		Chief Investment Coordination Agency	No.30/1/IU/II/PMDN/INDUTRI/2010 dated on 01 July 2010	
		Pelalawan Regent Decree	IUP No. Kpts.525/Disbun/2009/238 Dated on 7 April 2009	
8.	Land Use Title (HGU)	Agrarian State Minister / Head of BPN	No 03 dated on 01 June 1994	3,383.2 Ha
		Agrarian State Minister / Head of BPN	No 04 dated on 01 June 1994	3,788.4673 Ha
		Agrarian State Minister / Head of BPN	No 05 dated on 01 June 1994	1,956.4294 Ha
		Agrarian State Minister / Head of BPN	No 01 dated on 02 April 1997	3,775 Ha
		Agrarian State Minister / Head of BPN	No 02 dated on 02 April 1997	5,331 Ha
		Agrarian State Minister / Head of BPN	No 03 dated on 02 April 1997	399 Ha
		Agrarian State Minister / Head of BPN	No 01 dated on 21 November 1997	9,700 Ha

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Area and time-plan for new plantings

The proposed new planting area by PT Musim Mas is from the balance of unplanted non-HCV areas and mineral soil area in the HGU which will seek agreement by the owners of the land through the FPIC (free, prior and informed consent) process. As a part of CSR project, the development of smallholder scheme (KKPA and Kas Desa) will also be carried out in the vicinity outside of the HGU. 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. Socialization and engagement with the communities on village oil palm development plan will also be undertaken. HCV management and monitoring activities that have been put in place will continue to be enforced.

Proposed expansion of oil palm area for nucleus (Estate)

Planted (Ha)	Building, roads, nursery, enclave, etc (Ha)	HCV & HCV MA	Proposed expansion of oil palm 2015 – 2020	Total HGU (Ha)
23,360.19	2,670.55	1,448.47	853.89	28,333.10

Proposed expansion of oil palm area for KKPA & Kas Desa

Location	Planted Area (Ha)	HCV	Proposed expansion of oil palm 2015 – 2016
KKPA Rawa Tengkuluk	802	0 ha	-
KKPA Merbau Sakti	864	0 ha	202.13
Kas Desa	17	0 ha	9

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Assessment Process and Procedures

a. SEI Assessment

Assessors and their credentials:

The Social Impact Assessment of PT Musim 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: aksenta@aksenta.com. 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
Dwi R. Muhtaman	Forest and timber product certification, RSPO certification, coffee certification, social strategy.	Team leader, social auditor, certification
Ganip Gunawan	Social relation, trainer, facilitator	Social
Bayu Shantiko	Natural resource economy and study on social development in rural areas.	Social/Economy

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

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

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 including the employee and staff representatives.

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- e. **Workshop.** Inter-village workshop.

Methods of Data and Information Analysis

The SIA for PT Musim Mas was conducted using two combined methodology namely; stakeholder analysis and social impact assessment employing sustainable livelihood framework. Data were compiled through literature study, observation, interview and focus group discussion, thus several important points were highlighted/ concluded in the latter part. In the focus group discussion, the respondents expressed their opinions of important issues which were compiled in the framework of sustainable livelihood with the form of asset which resulted in 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.

The steps in SIA implementation include the following, although there were several modifications in the assessment activity:

- Identifying and describe activities leading to scoping
- Predicting (or analyzing) impact trend and identifying how the parties make their responses
- Formulating recommendation and necessary action plan
- Assessing the process and preparing recommendations for compensation (financial or non financial)
- Describing potential for skill development and capacity building for communities
- Recommending institutions and coordination among parties
- Planning implementation and program monitoring.

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

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b. HCV Assessment

Assessors and their credentials

The HCV assessment in the Land Use Title (HGU), KKPA and its surrounding entities included KasDesa of PT Musim Mas by Aksenta located at Jl. Gandaria VIII/10, Kebayoran Baru, Jakarta 12130; Telephone/fax: +62 21 739-6518, E-mail: aksenta@aksenta.com. The team leader from Aksenta has been licensed by the HCV Assessor Licensing Scheme (Provisional ALS15025MM). The team members are:

Name	ALS License	Institution	Role	Expertise
Muayat Ali Mushi muayat@aksenta.com	Provisional (ALS15025MM)	Aksenta	Team Leader, Socio-cultural Assessment (HCV 5 HCV 6)	Social and culture, conduct HCV assessment since 2010
Yanto Ardiyanto yanto@aksenta.com	N/A	Aksenta	Team Member, Environmental Assessment	Hydrologist, soil conservation, spatial analysis and remote sensing, water management system, conduct HCV assessment since 2010
Wibowo A. Djatmiko bowie@aksenta.com	N/A	Aksenta	Team Coordinator, Biodiversity Assessment (HCV1-3)	Wildlife ecology, forest ecology, biodiversity conservation specialist; conduct HCV assessment since 2006
Reza Abdillah reza@aksenta.com	N/A	Aksenta	Team Member, GIS Specialist	Experience with GIS since 2013, remote sensing for biological conservation and land use issue

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

HCV Identifying Methods

The assessment covers of the total area 28,333.10 ha based on The Land Use Title (HGU). It also expands the coverage into, KKPA Merbau Sakti, KKPA Rawa Tengkuluk, villages – Kebun Kas Desa and other areas which are of considerable importance to the proposed surrounding plantation area. HCV reassessment was conducted in May 2015, the assessment consists of three main activities: desk-based study (conducted on 3-4 May 2015 in Jakarta), field work (conducted on 5-10 May 2015) and stakeholder consultation (conducted on 12 May 2015). Please refer to table 2.

Table 2 Schedule of HCV Assessment in PT Musim Mas & its surrounding plantation area

Activities	Time	Location
Pre-assessment & Preparation	3-4 May 2015	Aksenta Office, Jakarta
Opening meeting	5 May 2015	PT Musim Mas
Participatory mapping	5 May 2015	PT Musim Mas
Field survey	6-10 Mei 2015	Land Use Title Area of PT Musim Mas and its surrounding landscape, includes 6, 2 KKPA and the surrounding villages included Kebun Kas Desa
Closing meeting	11 May 2015	PT Musim Mas
Public consultation	12 May 2015	Training Centre PT Musim Mas
Interim report	12 May 2015	PT Musim 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.

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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), including 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.

- 4) Interview with the community in the assessment area

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

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Public Consultation

Public consultation is a face-to-face meeting with key stakeholders in the assessment area, such as local community, village government, regency government, relevant institutions in the regency and companies operating around the assessment 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 analyzed during pre-assessment (Table 3) and being used for HCV assessment in PT Musim Mas are tabulated below:

Table 3 Data and Information collected and analyzed during HCV pre-assessment

Category	Main Sources
General	<ul style="list-style-type: none">• Concession Map of PT Musim Mas (source: PT Musim Mas)• Forest Area Designation Map and Marine Ecosystem of Riau Province (Director General of Forestry Planology, Forestry Department, 2001)• Spatial plan (RTRW) (2012)• Indicative Map of New Permit Suspension (PPIB) Forest Utilization, Forest Areas Utilization and Forest Areas Zoning Changes and Forest for Other Land Use version 6 (2013)• Distribution Map of Peatland, Size and Carbon Content (Wetland International-Indonesia Program. 2004)• Land Cover from Landsat Imagery 8 (USGS, March 2015)• HCV Identification Report PT Musim Mas 2007 (Aksenta, 2007)• Internal HCV Identification Report for KKPA RawaTengkuluk and KKPA Merbau Sakti PT Musim Mas (MM Group, 2010)• HCV Management and Monitoring Plan PT MM (PT MM)• HCV Management and Monitoring Report PTMM (PT MM)
HCV 1, 2,	<ul style="list-style-type: none">• Sumatran Ecosystem Ecology (Whitten <i>et al.</i> 1987; Published UGM)

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Category	Main Sources
3	<ul style="list-style-type: none"> • Birds in Sumatra, Java, Bali and Borneo (MacKinnon <i>et al.</i> 2000) • Fresh Water Fish of West Indonesia and Celebes (Kottelat <i>et al.</i> 1993) • Tortoise and Crocodile of Indonesia & Papua New Guinea (Iskandar 2000) • Borneo Mammals, Sabah, Sarawak and Brunei Darussalam (With Note for Sumatran and Java Mammals) (Payne <i>et al.</i> 2000) • Snakes of Sumatra (David & Vogel 1997) • Ramsar Area in Indonesia, source: http://www.ramsar.org • CITES Appendices I, II and III, valid from 05February 2015 (CITES 2015) • Endemic Bird Area Factsheet: Sumatra and Peninsular Malaysia (BirdLife International 2015) • Important Bird Areas in Asia: Key Sites for Conservation (Birdlife International 2004) • IUCN Red List of Threatened Species, ver. 2015.1. http://www.iucnredlist.org
HCV 4	<ul style="list-style-type: none"> • Data digital Shuttle Radar Topography Mission Elevation Data (USGS, 2004) • Land System Map (RePPPProt, 1991) • Elevation Map (based on the results of SRTM data processing) • Slope Map (based on the results of DEM SRTM data processing) • Land Cover Map (based on the results of Landsat Imagery 8, 2014)
HCV 5, 6	<ul style="list-style-type: none"> • Pelalawan District in Numbers 2013 • Village Distribution Map of Pelalawan District (Source: RBI)

Beside the HCV Assessment, PT Musim Mas also conducted landuse change analysis (LUC) to determine changes to vegetation since 2005. Land use change analysis is done using satellite imagery from 2005, 2007, 2009 and 2015. In addition to the spatial data in the form of satellite imagery, Land use change analysis have also used some of the data supporting, that is, (i) land clearing data of PT MM, and (ii) legality data of operating areas. Stages and processes land use change analysis-LUCA are as follows:

1. Pre-processing Image
2. Image Classification: Supervised Classification / Visual Interpretation
3. Field Verification
4. Contingency and Accuracy Test matrix with Kappa Index

Summary of Assessment Findings

a. SEI Assessment

The SIA for PT Musim Mas was conducted using two combined methodology namely; stakeholders analysis and social impact assessment employing sustainable livelihood framework. Data were compiled through literature study, observation, interview and focus group discussion, thus several important points were highlighted/ concluded in the latter part. In the focus group discussion, the respondents expressed their opinions of important issues which were compiled in the framework of sustainable livelihood with the form of asset which resulted in specific impact assessment in the social aspect of communities.

Plantation area of PT Musim Mas is immediately adjacent to the community settlement. Village directly interacted with the plantation include Tanjung Beringin Village, Talau Village, Betung Village, Desa Batang Kulim, Kesuma Village, Pangkalan Lesung Village, and Air Hitam Village. The first two villages are located in the plantation surrounded by HGU area, both villages are considered as “major enclave” in the plantation area. The existence of PT Musim Mas has accumulatively changed of community's livelihood. The change of land use management in this area bears major impact on the economic and culture of the communities. Fact on the field shows the handover of land property through purchase and sell transaction in area near PT Musim Mas is become more intensive since the operation of oil palm in large scale.

The positive impacts of PT Musim Mas' development are financial contributions to the regency area and national development generally through taxes and retributions instrument. Infrastructure improvement such as transportation access, health care service and education are positive contributions of large scale investment. At the local level, the management provides opportunities to build partnership with local village community in the form system of plasma-core oil palm and many social support types to local village community.

The presence of PT Musim Mas becomes motivator of development in local plantation community. The Positive change is the economic development which has improved in aggregate better than before.

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On the other hand, there are potential negative impacts on the local community. For instance this relates to the limitation of work and business opportunity. Low adaptation ability of the community may be the hindrance for the community to reap the potential benefits. Explicitly there is no social fluctuation uncovered to the surface. However, potential negative tendencies of social risk will occur if there is no accurate social strategy to transform social risk into social potential for improvement. Based on identification of social impact assessment, it is presented the guideline of social policy and social impact management as follows:

- **Guideline of Social Policy:**

Management unit PT Musim Mas makes clear and measured vision, mission and in social management aspect. This vision, mission and strategy constitute main base to arrange social management programs. The initiation related to community interest shall involve the community, started from planning, performance, monitoring/evaluation. This community involving also includes social vision, mission and strategy arrangement of the company.

- **Social impact management:**

1. Economic development of surrounding communities aspect
2. Change of culture and lifestyle aspect
3. Social relation aspect
4. Public Services

PT Musim Mas has developed scheme smallholder in form of KKPA with surrounding villagers, with total area of 2 ha for each family. The development was carried out in stages starting from 2001. The company has collaborated with two cooperation namely Rawa Tengkuluk Cooperation in Pangkalan Lesung Sub -district and Merbau Sakti Cooperation in Pangkalan Kuras Sub - district to develop KKPA.

Rawa Tengkuluk Cooperation consists of four farmer groups with members of 401 families from Pangkalan Lesung Village and Pesaguan Village with a total area of 802 ha. Merbau Sakti Cooperation consists of nine farmer groups with members of 432 families from Sorek Satu Village, Batang Kulim Village, Betung Village and Tanjung Beringin Village with a total area of 864 ha.

The company has also developed Kas Desa with a total area of 17 ha, which consist of 5 ha for Pangkalan Lesung, Betung and Tanjung Beringin villages respectively and 1 ha

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for Talau and Batang Kulim villages respectively. These Kas Desa are for village development.

Merbau Sakti Cooperation plans to develop new oil palm holdings with a total of 202 ha, while Batang Kulim village has proposed to develop 5 ha and Talau village has proposed to develop 4 ha of new plantation (Kebun Kas Desa).

KKPA and Kas Desa program conducted by PT Musim Mas is seen as successful by the local communities. They have requested PT Musim Mas to expand the KKPA scheme and Kas Desa. The village communities believe that the support of the company under KKPA scheme will significantly increase the income of the KKPA farmers and village.

b. HCV assessments

Based on the Land Use Change Analysis in PT Musim Mas area (Aksenta, 2015), since November 2005 there is no primary forest in assessment area. The landsat satellite imagery of 2005 showed that oil palm is the dominant land cover in the concession. Current condition based on satellite imagery of Landsat 8, March 2015 also showed that most of the land in assessment area has been planted with oil palm. The remaining land covers are degraded secondary forest, shrub and open land. The condition of natural peat swamp vegetation around Napoh and Bengkarai rivers is still good as conservation area.

The assessment area is located outside the Important Bird Area (IBA) territory. The nearest IBA territory is Siak-Kampar Peat swamp Forest, which located approximately 30 km to the east. The assessment area is not a Ramsar area. The nearest conservation area is Tesso Nilo National Park, which located approximately 20 km to the southwest and Kerumutan wildlife reserve, which located 25 km to the east. Between the plantation and Tesso Nilo National Park there are Nilo River and PT Arara Abadi concession.

There are four HCV categories present in assessment area, which are HCV 1, HCV 3, HCV 4 and HCV 6. There are two types of HCV in assessment area; first, a suitable area to maintain the continuity of HCV elements so it is feasible as a HCV area; second, an area which not HCV, but their presence can support the HCV areas. The second type is categorized as HCV Management Area (HCV-MA). The assessment area consists of Estates Plantations, KKPA and Kas Desa. The result of HCV assessment shows that there are no HCV areas present in KKPA Rawa Tengkuluk and KKPA Merbau Sakti.

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HCV areas are also not present in Kas Desa Pangkalan Lesung, Kas Desa Betung, Kas Desa Tanjung Beringin, Kas Desa Talau and Kas Desa Batang Kulim. HCV areas are not found in the areas that will be developed into new oil palm holdings/plantation (new development plan in KKPA Merbau Sakti, Kas Desa Batang Kulim and Kas Desa Talau). HCV areas are only sighted within the HGU PT Musim Mas (see Picture 5).

Table 4 shows that there are 13 locations of HCV areas in nucleus, that is one HCV 6 in Estate 1 (Tambun Village). Five single HCV 4, five single HCV 1 and two compounds HCV (HCV 1, 3 and 4). HCVMA are located in four locations (Table 4). The total area of HCV & HCV-MA is about 1,448.47 ha (HCV area about 1,325.76 ha and HCV-MA about 122.71 ha). The distribution of HCV and HCV-MA areas are presented in figure 5.

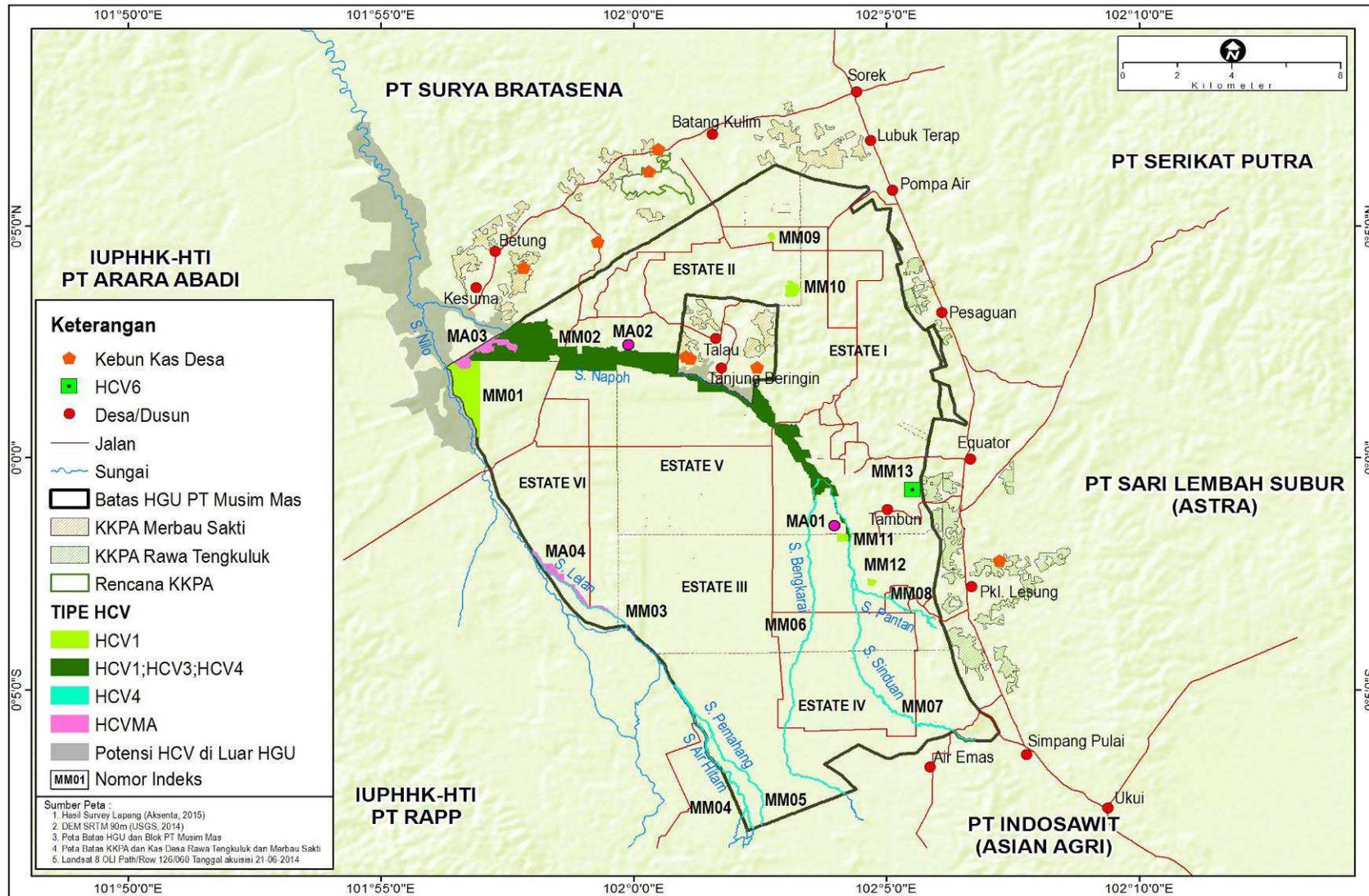
Table 4 Location and area of HCV & HCV-MA in the assessment area

No. Index	Sub-Index	HCV	HCV Elements	Indicative Threshold	Size (ha)
MM01		1	Young Secondary Forest S. Nilo	Unplanted area at west of plantation boundary along the Nilo River riparian zone which still in good condition	182.82
MM02	A	1, 3, 4	Napoh River riparian zone as a flood plain and place for endangered species	Buffer 15m from river side	41.80
	B	1, 3, 4	Peat area around Napoh River riparian zone as a floodplain and place for endangered species	Peat Swamp beside Napoh River	878.80
MM03		4	Lelan River riparian zone	Buffer 15m from river side	7.83
MM04	A	4	Air Hitam River riparian zone	Buffer 15m from river side	9.57
	B	4	Air Hitam River floodplain around plantation boundary Estate IV	Area around Air Hitam River riparian zone which still in good condition	12.26
MM05		4	Pemahang River riparian zone	Buffer 15m from river side	20.81
MM06		4	Bengkarai River riparian zone	Buffer 15m from river side	45.87
MM07	A	4	Sinduan River riparian zone	Buffer 15m from river side	45.42

RSPO

No. Index	Sub-Index	HCV	HCV Elements	Indicative Threshold	Size (ha)
	B	1, 3, 4	Peat area around Sinduan River riparian zone	Peat Swamp around Sinduan River	15.18
MM08	A	4	Pantan River riparian zone	Buffer 15m from river side	14.23
	B	4	Pelintai River riparian zone	Buffer 15m from river side	3.10
MM09		1	Kepung Sialang for wildlife refuge	Block M9/10	5.75
MM10		1	Mix rubber plantation for wildlife refuge	Block N16/17	25.19
MM11		1	Hot springs; forest for refuge	Block R50	10.36
MM12		1	Kepung Sialang for wildlife refuge	S55/56	6.77
MM13		6	Tomb of "Puteri Bungsu Berdarah Putih"	Tambun Village	-
MA01		HCVMA	graveyard	Block G24	-
MA02		HCVMA	Hot spring	Block R 48	-
MA03		HCVMA	Burned area around Napoh River		74.24
MA04		HCVMA	Vegetated area around Lelan River riparian zone		48.47
Total HCV & HCV MA area					1,448.47

RSPO



Picture 5 HCV & HCV-MA Area in PT Musim Mas

RSPO

Several issues which might threaten the HCV areas were identified:

Potential threat analysis on the existences of HCV in PT Musim Mas is conducted. 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. The main cause or sources of the threats are comes from external parties. This happens because the concession is a land that originally owned by the communities. The activities done by communities such as timber logging and farming still can be found in the assessment area.

General Recommendations for HCV Management

Several general recommendation are made, which can be immediately followed up to protect and manage the HCV areas: Delineation HCV area, verify the extent of indicative HCV area, and to determine the end result as definitive HCV Area Map PT Musim Mas, socialize the presence of HCV area in PT Musim 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 Musim Mas by Aksenta and has been approved by the Management of PT Musim Mas.

Aksenta,



Muayat Ali Mushi

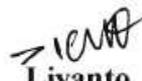
Team Leader

Date: 10 June 2015

Management PT Musim Mas



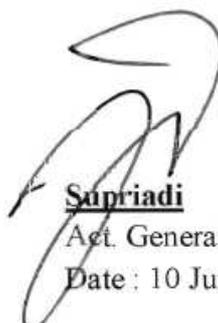
Supriadi
Act. General Manager PT Musim Mas
Date : 10 June 2015



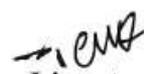
Liyanto
Senior Manager PT Musim Mas
Date: 10 June 2015

Statement of acceptance of responsibility for assessment

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



Supriadi
Act. General Manager PT Musim Mas
Date : 10 June 2015



Liyanto
Senior Manager PT Musim Mas
Date: 10 June 2015