

Summary Report of Planning & Management of PT Agrolestari Sentosa
Rungan Sub-District, Gunung Mas District, Central Kalimantan Province

Executive Summary

PT Agrolestari Sentosa (PT ALS) is located in Rungan Sub-District, Gunung Mas District, Central Kalimantan Province. Its land permit was granted with the Decree of District Head of Gunung Mas No. 180 of the year 2005, dated 31 August 2005, covering a total of 20,000 ha. This was later extended by the Decree of District Head of Gunung Mas No. 113 of the year 2009, dated 15 June 2009, covering the same land area. On 2013, PT ALS received its land permit extension from the head of Gunung Mas District through the decree number 44/2013 with the total area of 19.752 ha.

A document of Environmental Impact Analysis (EIA) on the development of the plantation and its processing factory with capacity of 90 tons of FFB/hour was made available by the consultancy company CV Environment Technology. PT ALS is acknowledged as environmentally feasible with the issuance of the Decree of the Governor of Central Kalimantan No. 188.44/317/2008 on 8 October 2008.

The plantation also produced its Social Impact Assessment (SIA) report based on activities carried out by an internal team from PT SMART led by Yosaphat Ardhilla Renato, S.Ant., an RSPO-approved High Conservation Value (HCV) Assessor specialist in social impact management. The SIA was carried out through literature review, aiming at collecting basic information regarding the social and environmental impact in the concerned area of study; updating on issues relevant to the sustainable management of oil palm plantations as well as providing a proper understanding of the social and environmental contexts of the area.

The management unit of PT ALS has identified HCV in the concession area. The concession area covers 19,752 ha of land, based on the Decree of Head of Gunung Mas District No. 44 of the year 2013. The assessment was conducted by Forestry Faculty of Bogor Agriculture University (IPB), from 15 to 22 August 2010. The team members are RSPO-certified (*RSPO Approved HCV Assessor*). Eight HCV were identified: HCV 1 (HCV 1.1, HCV 1.2 and HCV 1.3), HCV 2.3, HCV 4 (HCV 4.1 and HCV 4.2), HCV 5 and HCV 6, covering a total of 521.87 ha.

PT ALS also has a document for the HCV Management and Monitoring Plan, as recommended following the results of HCV identification and analysis. The plan is devised to protect the HCV areas from damage arising from human activities. Also available is the SIA Management and Monitoring Plan, which follows up from the SIA carried out in February 2013. Finally, PT ALS has also made available its Environmental Management and Monitoring Plan. These three documents guide the management unit of PT ALS in managing the social and environmental aspects of the company's operations.

Reference Documents

Reference documents are as follows:

- a. Environmental Impact Analysis of the Development of 20,000-hectare Oil Palm Plantation of PT ALS and its Processing Factory by CV Environment Technology, October 2008
- b. Final Report Identification and Analysis of High Conservation Value Areas in the Concession Area of PT ALS, Gunung Mas district, Central Kalimantan province. Forestry Faculty, IPB, 2011.
- c. Social Impact Assessment, by Internal Team of PT SMART, March 2013
- d. Environmental Management and Monitoring Plan, 2008
- e. Social Impact Management and Monitoring, March 2013

- f. Management and Monitoring Plan for High Conservation Value Areas under Concession to PT ALS, Gunung Mas District, Central Kalimantan Province. Forestry Faculty, IPB, 2011.

Summary of Reference Documents

The presence of PT ALS has had a positive environmental and social impact on the surrounding community. The Environmental Management and Monitoring Plan has been disseminated to the Central Kalimantan provincial offices of Environmental Management (BPPLHD), Community Empowerment (BPM), Environmental Agency, City Planning, Estate Crops, and Health as well as the Gunung Mas district offices of City Planning, Land Authority, Estate Crops, Agriculture, Developmental Welfare and Public Protection, and Health. Regular monitoring is conducted.

Improvements in the income and welfare of the surrounding communities are evidence of the positive impact of PT ALS' presence. Negative impacts are social unrest/discontent and a decline in health. In the concession area of PT ALS, eight areas of HCV have been identified, namely: HCV 1 (HCV 1.1, HCV 1.2, and HCV 1.3), HCV 2 (HCV 2.3), HCV 4 (HCV 4.1 and HCV 4.2), HCV 5, and HCV 6. The total HCV area is 521.87 ha.

SEIA and HCV Management Planning Information

a. Company information and Contact person

- Company name : PT Agrolestari Sentosa
- location : Villages of Tangki Dahuyan, Tumbang Talaken, Tumbang Sepan and Bereng Belawan in Manuhing Sub-District, and villages of Rabambang, Jalemu Raya, Jalemu Masulan, Tajahan Antang, Hujung Pata, Tumbang Kajuei and Luwuk Langkuas in Rungan Sub-District, Gunung Mas District, Central Kalimantan Province
- Geographical location : 01 14'40,32" LS – 01 20'48,46" LS and 01 16'18,00" LS – 01 19'58,62" LS, 113 27' 20,51" BT – 113 32' 53,88" BT dan 113 24' 18,15" BT – 113 27' 34,13" BT
- Surrounding areas
 - a. North : Forest
 - b. East : Rungan river
 - c. West : PT Kalimantan Hamparan Sawit
 - d. South : Forest

- Permits
 1. Concession: Decree of District Head of Gunung Mas Number 180 Year 2005, dated 31 August 2005: total area of 20,000 ha.
 2. Concession extension: Decree of District Head of Gunung Number 113 Year 2009, dated 15 June 2009: total area of 20,000 ha
 3. Plantation permit : Decree of District Head of Gunung Number 112 Year 2010, dated 23 April 2010: total area of 20,000 ha
 4. Concession renewal: Decree of District Head of Gunung Number 44 Year 2013, dated 20 February 2013; total area of 19,752 ha.
 5. Land Use Title (HGU): In process

- Parties Involved:

Management of PT ALS prepared the HCV document as well as management and monitoring plan document with assistance from the Forestry Faculty of IPB, sub-district head and offices, district-level territorial command, Chief of District Police, community leaders, religious leaders, plantation management unit, university, local NGOs and other relevant stakeholders. The HCV Report was peer-reviewed by Dr. Kunkun Jaka Gurmaya Padjajaran University in November 2011. A public consultation was held at the Office of the Head of Manuhing Sub-District on 21 August 2010. Preparation of the SIA document and its ensuing management and monitoring document involved heads of villages, Chief of BPD, community representatives and the management of PT ALS.

Summary of SEIA Planning and Management

The EIA on the development of the plantation and its 90 tons FFB/hour processing plant was made available by the consultancy company CV Environment Technology. PT ALS was acknowledged as environmentally feasible with the issuance of Decree of the Governor of Central Kalimantan No. 188.44/317/2008 on 8 October 2008. The company also produced its SIA report through the internal team from PT SMART led by Yosaphat Ardhilla Renato, S.Ant. (an RSPO-approved HCV Assessor specialist in social impact management).

Summary of Environmental Management and Monitoring Plan of PT ALS

No.	Component of Env. Parameter (operational phase)	Source of impact	Environmental Parameter	Method of Data Collection and Analysis	Location	Duration and Frequency of Monitoring	Environmental Management Plan (RKL)
a	Temperature and humidity	Land clearing and planting of seedlings	Temperature and humidity in plantation area	Measuring of temperature and relative humidity with thermometer and hygrometer at 06:00-08:00, 12:00-14:00 and 21:00-00:00 hours.	Plantation blocks in operation.	Twice a year	<ol style="list-style-type: none"> 1. Opening of conservation area 2. Planting of soil covering plants. Planting of cereals immediately after land clearing to avoid excessive period of open soil
b.	Gas and dirt	Land clearing, construction of supporting facilities, factory construction, FFB processing, crude palm oil (CPO) transport, factory waste management	Dirt (PM10), and gas (SO ₂), CO, O ₃ and NO ₂ .	Regarding dirt parameter/ PM10 gravimetry is employed with continuous beta-ray radiometric measurement, SO ₂ with parosaniilin method, NO ₂ with Saltzman method	Plantation area, oil palm factory, road for CPO transport, location of factory waste management	Twice a year	<ol style="list-style-type: none"> 1. Regular maintenance of tools and equipment 2. Speed control of vehicles when transporting CPO 3. Noise reduction device on exhaust pipes of heavy equipment 4. Prevent felling of trees along riparian areas and conservation areas 5. Use of ear plugs for workers
c.	Noise	Land clearing activities, construction of supporting facilities, construction of factory, FFB processing, CPO transport, and factory waste management	Noise level	Use of Integrated Sound Level Meter with 7 times measurement, 4 times during daylight and 3 times at night, 10 minutes period of measuring.	Plantation area, oil palm factory, road to transport CPO	Twice a year	<ol style="list-style-type: none"> 3. Noise reduction device on exhaust pipes of heavy equipment 4. Prevent felling of trees along riparian areas and conservation areas 5. Use of ear plugs for workers
d.	Physiological	Land clearing	Texture, structure,	Topsoil composite sampling at the	Oil palm plantation	Twice a year	<ol style="list-style-type: none"> 1. Land clearing takes into account

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No.	Component of Env. Parameter (operational phase)	Source of impact	Environmental Parameter	Method of Data Collection and Analysis	Location	Duration and Frequency of Monitoring	Environmental Management Plan (RKL)
	and chemical characteristics of soil	activities, nursery, soil and water conservation, and plant maintenance.	permeability, drainage, effective soil depth, parameter of chemical characteristics of soil: pH in water, C-organic, Total of N, available P, exchangeable Cation (K, Na, Ca, Mg), Cation exchangeable capacity (KTK), base saturation.	depth of 0-30 and 30-60 ±1 kg for observation on soil physics	blocks and nursery.		seasonal changes 2. Developing conservation areas 3. Developing early warning system on erosion and sedimentation 4. Planting of soil-covering plants 5. Use of empty fruit bunches as mulch 6. Develop and implement SOP for environmentally friendly plantation development and plant maintenance 7. Proper fertilising (with regard to timing/frequency, choice, dosage, method)
e.	Erosion	Land clearing activities, soil and water conservation.	5-year record of rainfall, slope stability (Ls), organic nutrient of soil, structure and permeability.	5-year record of rainfall obtained from meteorological station, data on slope stability resulting from interpretation of steepness map data.	Plantation blocks with slope of 16-25%	Twice a year.	1. Planting of soil cover plants 2. Terrace 3. Erosion and sedimentation observation plots.

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No.	Component of Env. Parameter (operational phase)	Source of impact	Environmental Parameter	Method of Data Collection and Analysis	Location	Duration and Frequency of Monitoring	Environmental Management Plan (RKL)
f.	Water quality of river	Plantation maintenance activities, processing of FFB and management of factory waste.	pH, total suspended solid (TSS), BOD, COD, Total Nitrogen (N-Total), Grease and fat.	Water sampling and laboratory analysis.	Kajue and Manuhing rivers	Three times a year.	<ol style="list-style-type: none"> 1. Improve efficiency of fertiliser and pesticide application 2. Develop and implement environmentally friendly SOP for plant maintenance 3. Proper fertilising (with regard to timing/frequency, choice, dosage, method) 4. Construction of water and wastewater treatment plant
g.	Ground water quality	LA use activities.	pH, total suspended solid (TSS), BOD, COD, Total Nitrogen (N-Total), grease and fat, and heavy metals.	Water sampling and laboratory analysis.	Groundwater within plantation area	Twice a year, during LA activities.	<ol style="list-style-type: none"> 1. Construction of water and wastewater treatment plant 2. Selection of LA sites in accordance with requirements 3. Wastewater run-off on impermeable soil 4. Rotation following soil impermeability and dosage of reused waste water
h.	Wate volume in rivers	FFB processing activities.	Water table and volume fluctuation.	Observation of water table and measuring of water volume of rivers	Kajuer river	Three times a year	<ol style="list-style-type: none"> 1. Construction of water reservoir 2. Maintaining riparian areas 3. Efficient use of river water 4. Groundwater as substitute only when necessary
i.	Water biota	FFB processing activities	Biodiversity and population of water organisms	Water sampling and laboratory analysis	Kajue and Manuhing rivers	Three times a year.	<ol style="list-style-type: none"> 1. Managing abundant water organisms in adjacent areas 2. Developing monitoring and early warning systems of water organisms

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No.	Component of Env. Parameter (operational phase)	Source of impact	Environmental Parameter	Method of Data Collection and Analysis	Location	Duration and Frequency of Monitoring	Environmental Management Plan (RKL)
j	Potential of forest fire	Land clearing activities	Level of harms from fire resulting from biomass	Secondary data on forest fire index from nearest meteorological station and recorded frequency of forest fire occurrence.	Plantation area.	Twice a year.	<ol style="list-style-type: none"> 1. Zero burning land clearance 2. Development of SOP on non-burning land clearance. 3. Protect, conserve and make use of water ponds 4. Implementation of fire buffer zones around plantation area 5. Written banners/notice boards with prohibitions, warnings and appeals for caution 7. Development of early warning system 8. Availability of water transport vehicles 9. Availability of heavy equipment and radio communications 10. Construction of watchtowers
k	Flora and Fauna	Land clearing activities	Biodiversity and population of flora and fauna	Data collection by line plot sampling	Plantation area and processing site.	Twice a year during land clearing	<ol style="list-style-type: none"> 1. Creating conservation sites in designated areas 2. Planting of native plants in plantation area
l	Community attitude and perception	Factory waste management activities	Number of community members in agreement and preserving perception and attitude, both positive and	Direct observation and interview	Subdistrict. Manuhing: Balawan Mulya, Bereng Belawan, Tb. Sepan, Tb. Talaken, Tangki Dahuyan, Tb. Jalemu, Tb. Samui, Tb. Oroi	Twice a year during factory waste management activities	Dissemination dialogues and proper approaches

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No.	Component of Env. Parameter (operational phase)	Source of impact	Environmental Parameter	Method of Data Collection and Analysis	Location	Duration and Frequency of Monitoring	Environmental Management Plan (RKL)
			negative, regarding existence of the project.		Rungan Sub-District: Luwuk Lengkuas, Tb. Kajuei, Hujung Pata, Tb. Malahoi, Jalemu Masulan, Rabambang, Tb. Kuayan.		
m	Social discontent	Factory waste management activities	Number of community members discontented with existence of the project	Direct observation and interviews		Twice a year.	Dissemination dialogues and proper approaches
n	Disease prevalence and incidence	Land clearing activities and FFB processing	Level of prevalence and frequency of incidence	Direct observation and interviews with random sampling, distribution of questionnaires and in-depth interviews. Both quantitative and qualitative data analysis.		Twice a year	<ol style="list-style-type: none"> 1. Prevent environmental pollution during land clearing and FFB processing 2. Distribute masks during fires, provide medical services and health check-ups 3. Provide transportation to community members in need

General Recommendations based on SIA

1. Improved Income

Economic improvement in the community is made possible by providing the local government with detailed information on the company's labour requirements; paying salaries that meet or exceed the standard minimum wage; empowering the community and encouraging the growth of local businesses through local partnerships and local sourcing; implementing worker health and safety policies; and providing training in entrepreneurship for local residents. PT ALS also conducts plasma development activities, which have the potential to improve the local economy in general and the income of participating farmers in particular.

2. Social Anxiety

Based on records of consultation and socialisation prior to the development of PT ALS in the study area as mentioned in the EIA, the process of land acquisition and compensation were conducted in line with free, informed, prior consent (FPIC) method. Land acquisition was obstructed by disagreement on the company's investment and operational management. Further dialogue with the local communities resulted in agreement on the concession area being the basis for compensation, which was later carried out in accordance with procedures established within PT ALS.

PT ALS considers it necessary to provide local governments and village authorities with information on its demand for workers, specifically the number of vacant positions. The company also considers it necessary to manage, monitor and closely inspect source of environmental pollution, especially water pollution. Mismanagement could result in a decline in water quality, which is a major issue, as water is a key resource for communities in the area.

3. Decline in Community Health

Intensive communication with stakeholders in the study area needs to be carried out proactively to ensure that negative social impact would not increase. This includes:

- Communication with local contractors as a way of closely supervising them to ensure that they establish environmental control with regard to operational activities, both in transport and in waste management.
- Communication with internal management, the regional environmental authorities and local communities to ensure optimum efforts in managing by-products of oil palm processing, harmful/hazardous substances and reporting on environmental and social impact monitoring.
- Communication with local communities to provide them with information on proper sanitation and environmental management practices.

A public consultation on the SIA Management Plan was held on 19 April 2013 at the main office of Manuhing plantation (MNHE) PT ALS. Among participants were Village Heads, Village Secretaries, Chief of BPD, Sub-District Heads, Heads of General Affairs of Sub-Districts and the management of PT ALS.

Summary of HCV Planning and Management

Recommendations on Management

HCV areas in the PT ALS concession area in Central Kalimantan consist of riparian areas, areas with springs, hills and sacred places. Activities to preserve and enhance these HCV areas include:

- Designation of borders of HCV areas
- Maintenance of border signs of HCV areas
- Protection of HCV areas, flora and wildlife
- Rehabilitation and enrichment of HCV areas
- Community outreach
- Training of employees
- Formulation/improvement of SOP for HCV management
- Organisation Empowerment
- Coordination with relevant authorities.

Recommendation on Monitoring

Indicators are based on the categories of HCV in the relevant locations. HCV found in plantation area of PT ALS in Central Kalimantan are HCV1 (HCV1.1, HCV1.2, and HCV1.3), HCV2 (HCV2.3), HCV4 (HCV4.1 and HCV4.2), HCV5 and HCV6.

Monitoring is conducted according to the HCV management plan. Monitoring activities include:

- Intensity of interference with HCV areas, including forest fire
- Condition of diversity and density of fauna (including protected and rare, threatened, endangered (RTE)) species in HCV areas
- Condition of diversity and population of wildlife (including protected and RTE) species at HCV areas
- Implementation of activities and survival rate of plants planted during rehabilitation activities at HCV areas
- Changes in river width
- Water quality in rivers and springs
- River biota

Plan for HCV Monitoring and Regular Data Review

A peer review of the HCV assessment report and the HCV Management and Monitoring Plan was conducted by Dr. Kunkun Jaka Gurmaya in 2010. The results of the review provide the basis for improvement of the HCV assessment report and HCV Management and Monitoring Plan.

Management and planning for Interference to HCV areas

1. Listing and identification of soil cover conditions in HCV areas follows the existing soil covering. It is conducted in riparian areas, lake areas and areas with springs.
2. Boundary signs

Management plan to enhance or maintain conservation values of identified HCV areas

1. Maintenance of boundary signs
2. Protection of HCV areas, flora and wildlife
3. Patrol to protect HCV areas, flora and wildlife, especially in areas susceptible to interference.
4. Management of riparian areas, lake areas and areas with springs already planted with oil palm, by implementing environmentally friendly management practices.
5. Rehabilitation and enrichment of riparian areas, lake areas and areas with springs are to be conducted in damaged HCV areas.
6. Enrichment of vegetation which is a food source for wildlife, especially species identified as RTE.

Internal Responsibility

We hereby sign off on the above Summary Report of Planning and Management. The above may be amended and clarified for improvement during the development of the plantation but it will remain in accordance with RSPO Standards and Principles.

On behalf of the Management of **PT Agrolestari Sentosa**,



Dr. Haskarlianus Pasang

Head of Sustainability Division

Date: May 10th, 2013