

New Planting Procedure - Summary of Assessments

RSPO

Roundtable on Sustainable Palm Oil



Goodhope

SGS

NPP Reference Number: SGS-NPP22-0002

Country of the NPP submission: Indonesia

RSPO Membership Number: 1-0175-14-000-00

Section 1: General Information

Guidance Note: In this section, the growers need to provide all the necessary information in relation to the new development projects. This includes the type of assessment conducted, location of the project, the type of permit currently obtained, the rights to use the land information, and all relevant information. The land clearing plans will be included in this section as well.

PT Agro Wana Lestari intends to build oil palm plantations for plasma and has obtained a Location Permit based on the Decree of the Head of the Investment and One Stop Service Office of East Kotawaringin Regency, Number: 01/DPMPTSP/IL/I/2020 covering an area of ± 45,098,151.58 m² (4,509 Ha) in the villages of Tumbang Kaminting, Tanah Haluan, Tumbang Penyehuan, Tumbang Sapia, Tumbang Getas, Tumbang Batu, Tumbang Torung, and Lunuk Bauntung in Bukit Santuai District, East Kotawaringin Regency, Central Kalimantan Province.

Several stages of licensing issued by the East Kotawaringin Regency Government in the process of plasma development of PT AWL, namely:

- 1. Location Permit from the East Kotawaringin Regent, SK Number 923.A.4000.9.62.02/VI/2012 dated June 29, 2012 regarding the granting of a location permit for plasma development on behalf of PT Agro Wana Lestari covering an area of 658 Ha.*
- 2. Location Direction from the East Kotawaringin Regent, SK Number 525.26/099/EK.SDA/II/2014 dated 13 February 2014 concerning Location Direction for plasma on behalf of PT Agro Wana Lestari covering an area of 2,175.41 Ha.*
- 3. Principle Licensing issued by the East Kotawaringin Regent, SK Number 525.21/676/EK.SDA/IX/2014 September 2014 concerning Principle Licensing for PT Agro Wana Lestari plasma covering an area of 4,328 Ha.*
- 4. Location Permit based on the Decree of the Regent of East Kotawaringin Number 188.45/342/HUK-BPN/2015 dated September 14, 2015 concerning the Granting of Location Permits for the development of plasma plantations on behalf of PT AWL, Bukit Santuai District, East Kotawaringin Regency, covering an area of 2,156 Ha in Tumbang Torung Village, Tumbang Sapia, and Lunuk Bagantung Bukit Santuai District.*
- 5. Location Permit based on the Decree of the Head of the Office of Investment and One Stop Integrated Services of East Kotawaringin Regency, Number 01/DPMPTSP/IL/I/2020 dated January 7, 2020 concerning Location Permits for plasma on behalf of PT Agro Wana Lestari covering an area of 4,509 Ha.*

Plasma Plantation/Partnership development is one of the requirements for the issuance of Location Permits. PT AWL's obligation is to develop an oil palm plantation for the village community around the location as a community-owned plasma plantation covering 20% of the acquired land and 80% used as the company's nucleus plantation. In carrying out its obligations PT AWL has built community plasma plantations in each estate. However, the current area is around 481.7 Ha and does not meet the 20% requirement of PT AWL's nucleus estate HGU (11,803.95 Ha). The planting area of PT AWL's plasma plantations until August 2021 is 481.7 hectares located in four villages, namely Tumbang Penyehuan, Tumbang Kaminting, Tanah Haluan, and Tewaihora

villages. PT AWL has a plan to increase the area of plasma plantations according to the Location Permit for Plasma Plantation Development of 4,509 Ha which has been obtained by PT AWL.

Initially, the Plasma Plantation Location Permit of PT Agro Wana Lestari was an ex-HPH area of PT Kayu Emas and PT Sarpatim which operated from 1987 to 1995, and was continued by several contractors from PT Kayu Emas including Permata Indah, Rimba Buana, Bumi Persada Pertiwi, and BCT in 1996 to 2005.

In general, the dominant pattern of land ownership and control by the study village community from the Ngaju Dayak tribe, formerly was by clearing forests which were then turned into fields. The more fields that are opened for farming, the more land they have. The field is a marker of one's land ownership. Until 2006 the rice cultivation system in the fields was carried out by shifting cultivation and a few years later it would be carried out again when it was fertile. Over time, the shifting cultivation pattern was abandoned due to government regulations not to open fields by burning.

Community land ownership at this time is generally obtained from the results of inheritance from generation to generation from their parents or from their ancestors or buying from other people. Evidence of ownership of community garden lands is generally only based on planting and natural boundaries in the form of rivers and fruit trees (rubber, cempedak, rattan, etc.). On average, the existing land is cultivated for various types of agricultural and plantation commodities such as rubber, rattan, field rice, secondary crops, vegetables, palm oil, fruits, and others.

Based on the 2015-2035 Regional Spatial Plan Map for Kotawaringin Regency, Central Kalimantan Province, the oil palm plantation area of PT AWL is in the allotted plantation area. This shows that the plasma oil palm plantation area of PT AWL complies with the Central Kalimantan Provincial Spatial Plan regulations. For more details, a map of the oil palm plantation area of PT AWL which has been overlaid with the RTRW of East Kotawaringin Regency, Central Kalimantan Province 2015 – 2035.

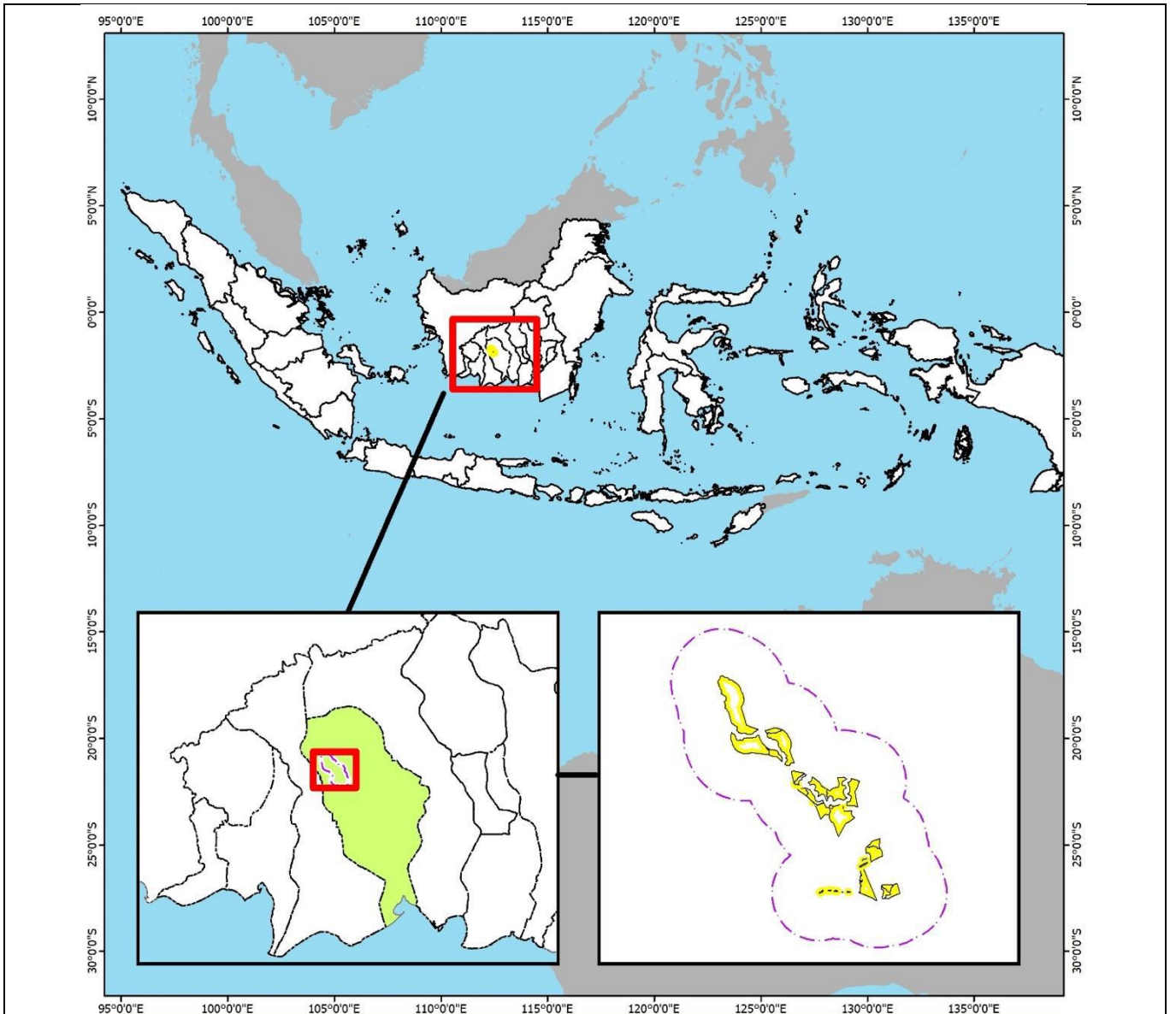
An integrated High Conservation Value (HCV) and High Carbon Stock (HCS) assessment or study (hereinafter referred to as an integrated HCV-HCSA study), conducted in the PT Agro Wana Lestari plantation area (PT AWL) which is located in Bukit Santuai District, East Kotawaringin Regency, Central Kalimantan Province. The coverage area of the integrated HCV-HCSA study consists of an area that is included in the location permit for a prospective plasma plantation, covering an area of 4,509.82 hectares located in the Area of Other Use Areas (APL).

In order to comply with the government regulation that nucleus estates must build plasma plantations with an area of 20% of the managed plantation area, PT AWL plans to build plasma plantations which currently have been given a location permit for plasma plantations based on the Decree of the Head of the Investment Agency and One Stop Integrated Services. East Kotawaringin Regency No. 01/DPMPTSP/IL/I/2020 dated January 7th, 2020, covering an area of ± 4,509 ha (± 45,098,151.58 m²) in Tanah Haluan Village, Tumbang Kaminting, Tumbang Panyahuan, Tumbang Getas, Tumbang Sapia, Tumbang Batu, Tumbang Turung and Lunuk Bauntung, Bukit Santuai District, East Kotawaringin Regency, Central Kalimantan Province. Furthermore, before land clearing and planting is carried out, in order to meet the requirements of the New Planting Procedure (NPP) or the RSPO New Planting Plan (NPP) Procedure, an integrated HCV and HCS study or assessment must first be carried out along with Social Impact Assessment (SIA), Soil and topographic studies, Land-Use Change Analysis (LUCA) and Green House Gas (GHG) Assessment and FPIC (FPIC).

The Company made a commitment that it will only develop plantations only for areas that are within the the Plantation Business Permit (IUP). Based on Maps of New Planting Plan, the company will be developed plantations as follow:

Years Plan	Hectare development area
2022	1,124.85 ha
2023	413.74 ha
2024	688.38 ha

Total	1,984.27 ha
Section 2: Maps	
<i>Guidance Note: Please include the following maps here with minimum 300 dpi resolution</i>	

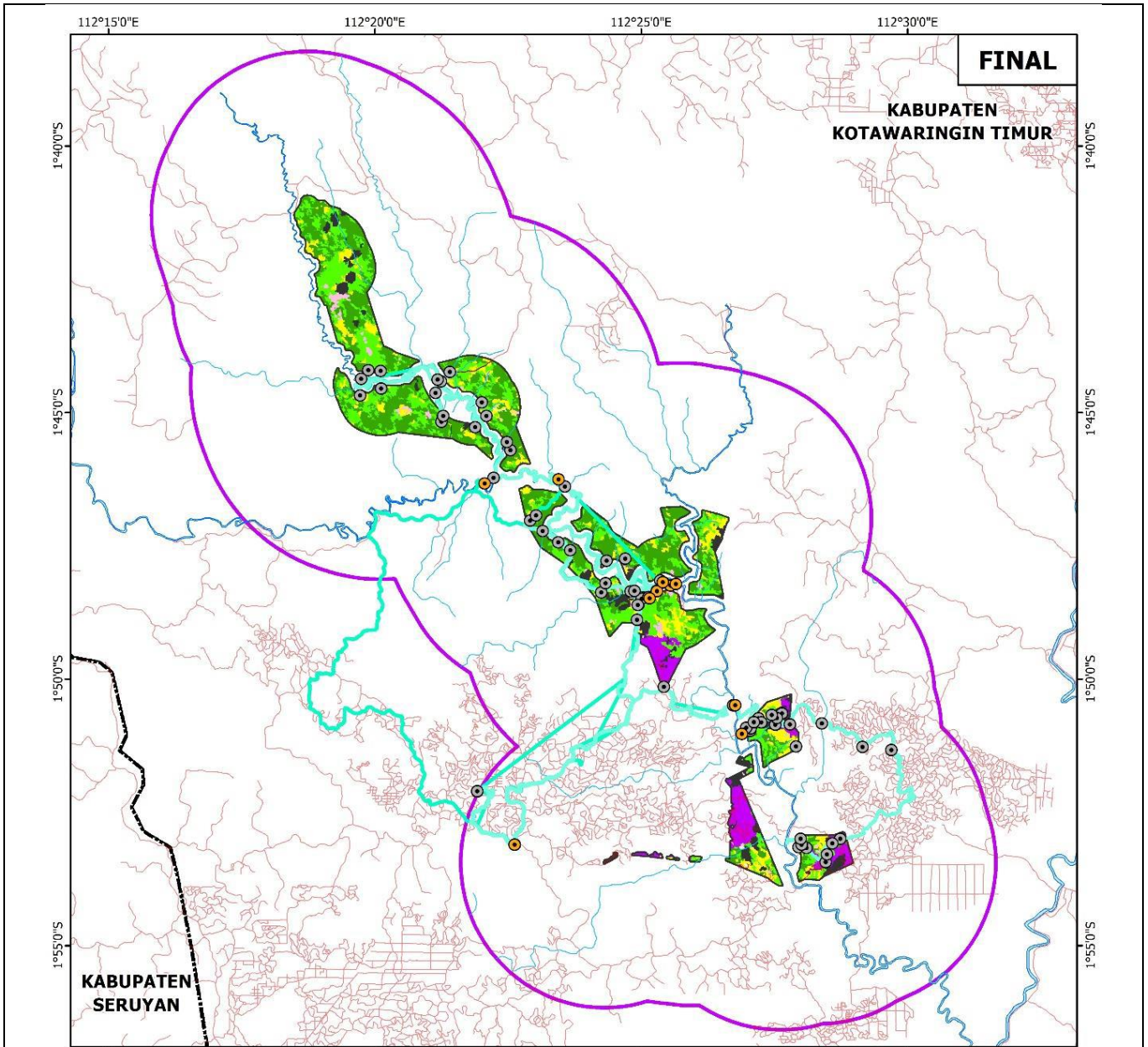


HCV-HCS INTEGRATED ASSESSMENT

<p style="text-align: center;">PETA LOKASI Areal Kerja Perkebunan Kelapa Sawit PLASMA PT AGRO WANA LESTARI</p> <p style="text-align: center;">Kabupaten Kotawaringin Timur Provinsi Kalimantan Tengah</p> <div style="text-align: center;"> 1:25,000,000 </div> <p style="font-size: small;">Sumber: - Peta Rupa Bumi Indonesia Skala 1:50,000 - Peta Lokasi Plasma PT Agro Wana Lestari - Peta Administrasi Indonesia BPS 2013</p>	<p>LEGENDA</p> <ul style="list-style-type: none"> Areal Plasma PT Agro Wana Lestari Batas Lanskap Batas Adm. Kabupaten Batas Adm. Provinsi Batas Adm. Kabupaten Kab. Kotawaringin Timur 	<div style="text-align: center;"> <p style="font-size: small; color: red;">Areal yang dipetakan</p> </div> <div style="text-align: center;"> Date: 11/5/2021 </div>
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LEMBAR:

Boundary Maps owned by the company



HCV - HCS INTEGRATED ASSESSMENT

PETA REALISASI SCOPING
Areal Kerja Perkebunan Kelapa Sawit
PLASMA PT AGRO WANA LESTARI
 Kabupaten Kotawaringin Timur
 Provinsi Kalimantan Tengah

N
 1:175,000
 0 1.75 3.5 7
 Kilometers

Sumber:
 - Peta Izin Lokasi Plasma PT Agro Wana Lestari
 - Peta Administrasi Kabupaten BPS 2013
 - Citra Sentinel perekaman 2 Juni 2020, USGS
 - Peta Kemiringan Lereng, BIG
 - Peta Penutupan Lahan Hasil Analisis Citra Tahun 2021
 - Peta Realisasi Suvey

LEGENDA

Realisasi Track	Hutan Sekunder
Ruas Jalan	Belukar
Sungai	Semak Belukar
Sungai (Area)	Kebun Sawit
Areal Plasma PT AWL	Lahan Terbuka
Batas Lanskap	Lahan Terbangun
Batas Adm. Kabupaten	Awan dan Bayangan Awan

Titik Realisasi Scooping

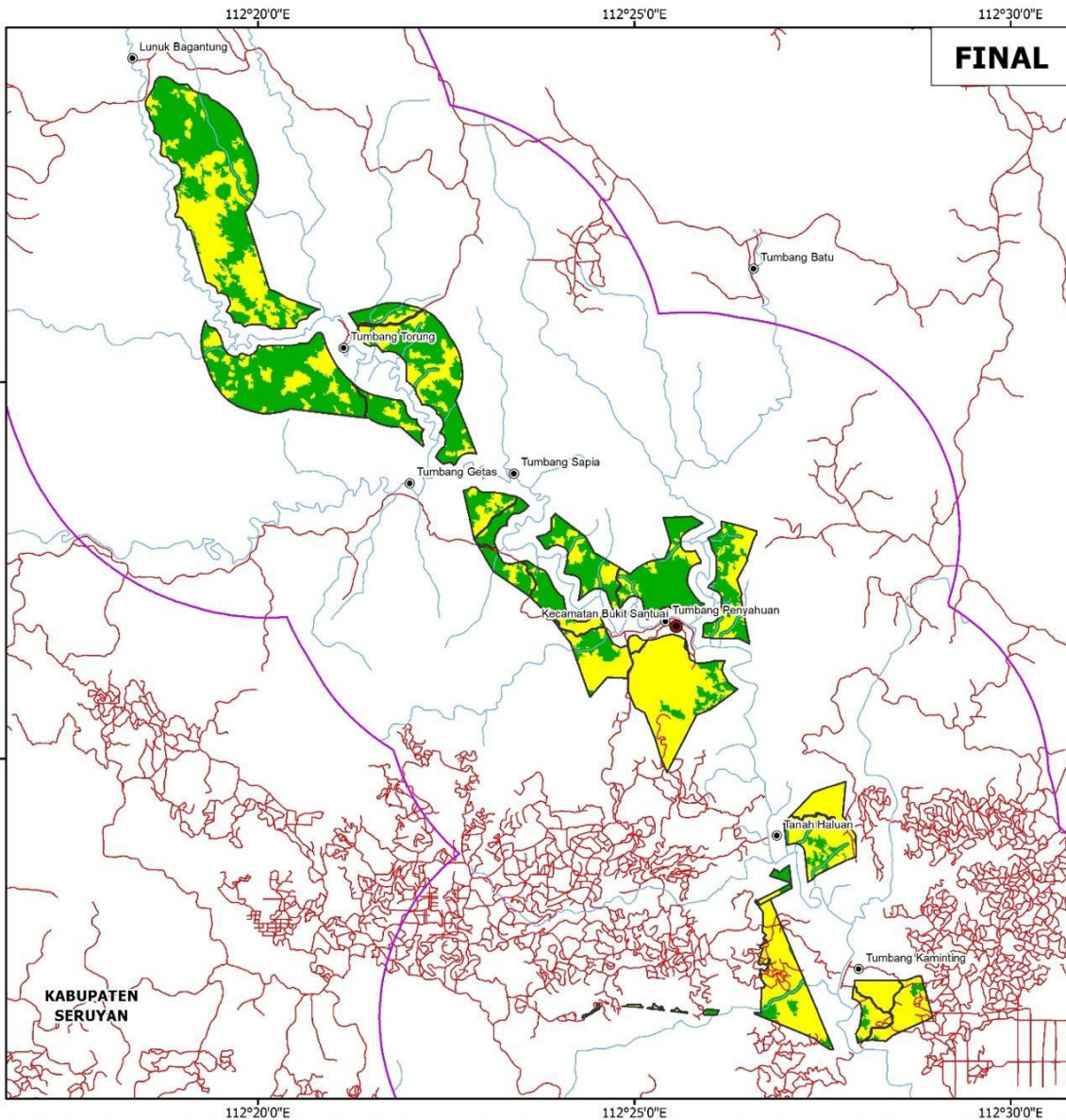
- Realisasi Survey Sosial
- Realisasi Survey Biodiv dan Jasing

Areal yang dipetakan

Date: 7/6/2022

LEMBAR:

Proposed NPP area Maps



FINAL

**KABUPATEN
SERUYAN**

HCV-HCS INTEGRATED

PETA GO & NO-GO AREA
Areal Kerja Perkebunan Kelapa Sawit
PLASMA PT AGRO WANA LESTARI
 Kabupaten Kotawaringin Timur
 Provinsi Kalimantan Tengah

N

1:131,311

0 1.25 2.5 5
Kilometers

Sumber:
 - Peta Rupa Bumi Indonesia Skala 1:50,000, Provinsi Kalimantan Tengah
 - Peta Lokasi Plasma PT Agro Wana Lestari
 - Peta Administrasi Kalimantan Tengah BPS 2013
 - Peta Tutupan Lahan, analisis citra satelit 2021
 - Peta hasil analisis NKT-SKT 2021
 - Data Survey Lapangan 2021

LEGENDA

- Desa
- Kecamatan
- ~ Sungai
- Jalan
- Izin Plasma PT AWL
- Batas Lanskap
- Batas Adm. Kabupaten

Area GO & No-Go

- GO AREA
- NO-GO AREA

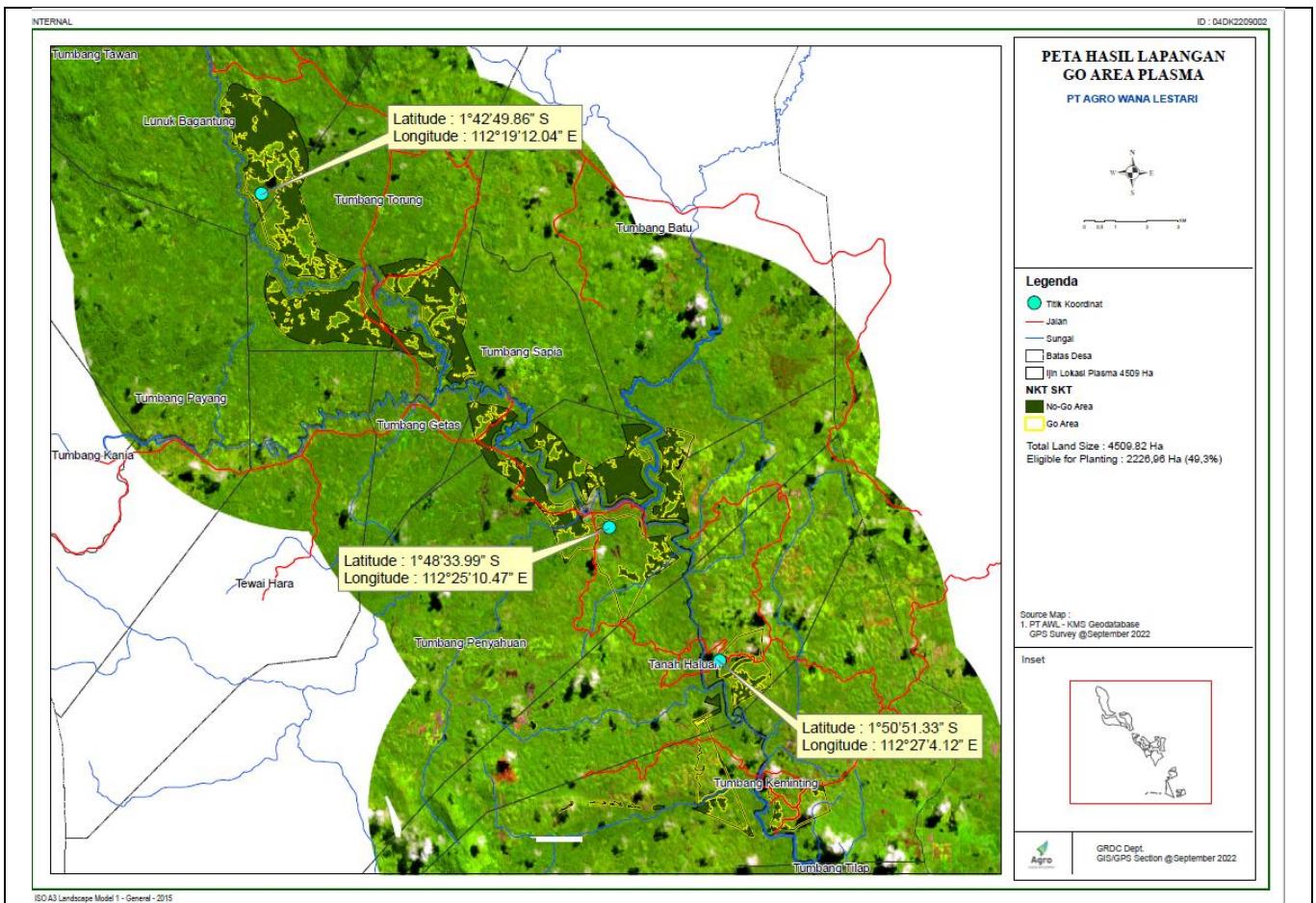
▨ Areal yang dipetakan

**re:mark
asia**

Date: 1/4/2022

LEMBAR:

Proposed NPP area Maps overlay with HCV and HCS areas



Result of Satellite Imagery to ensure there is no activity in NPP proposed area in PT AWL Plasma, using Satellite Imagery in HCV Report and overlay with coordinate field visit during audit on site on 1-2 Sep 2022

Section 3: SEIA

Guidance Note: This section is where the summary findings of SEIA is captured. References and pictorial evidence are recommended. What are the methodology(ies), people involved in the process, date of assessment and findings? Note: Should an assessment carried out by internal staff, just fill the name of the staff and his/her designation.

Environmental Impact Assessment (EIA) / Analisa Dampak Lingkungan (AMDAL) Plasma PT AWL

Method used for drafting the Environmental Impact Assessment (EIA) include scoping activities and limited assessment on significant impact, while the magnitude of the impact is measured by analysing number of people affected, the intensity of the impact, and number of components affected. Thus, the scope of the study is villages around the Plasma PT AWL operations that receive an important influence on the existence and operations of the company, study carried out by collecting field data. Data collection techniques include:

1. Document collection and secondary data; This method is used to obtain records of condition of demographic data as social life's background of local communities.
2. Dialogue: This method is used for the purpose of identifying the parties, exploring issues which could result, digging hopes, ideas, and aspirations for solutions to issues that occur, conducted through meetings both formal and non-formal and with special topics (Focus Group Discussion).
3. Field observations: This method is used to directly understand the facts that indicate the occurrence of

field issues and social impacts that occur.

4. In-depth Interview: to explore and gain a deeper understanding of the issues that arise, in-depth interviews conducted by interviewing selected key figures, speaker selection is based on knowledge or direct implementer or who is affected by the impact.
5. Triangulation: a combination of the above methods is integrated to mutually verify the issues, opinions, and ideas arise.
6. The next stage is the analysis of data. From the field findings obtained is then analysed to fully understand the context of their mutual relations and then conduct synthesis and drawing conclusions.

The assessment results are used as basis for developing environmental monitoring and environmental management plan to ensure the potential environmental impacts in the development. Environmental impact parameters that potentially arise due to company business plan/ activities covers:

Pra Construction Phase

This is the phase before land clearing. Data taken include public perception of new planting. Data collection method used is primary by discussion.

Construction Phase

this is the phase during land clearing. Data and information that will be collected during construction phase include, changes in soil quality, changes in surface water quality, pest and Plant Diseases, community economic changes, Vector Diseases, Environmental Sanitation, Health Resources, etc. Data collection method is primary and secondary.

Operational Phase

This is the maintenance and harvesting phase of the oil palm. Data and information that will be collected during construction phase include, changes in soil quality, changes in surface water quality, changes in air quality, pest and Plant Diseases, community economic changes, Vector Diseases, Environmental Sanitation, operational area noise, etc. Data collection method is primary and secondary.

Date of Assessment AMDAL/EIA:

16 November 2020 (based on the date of the environmental permit obtained by the company)

Name of Assessor:

CV Anugerah Enviropratama

Mr. Parluhutan Dodo Binoto, S.P, M.P

Competency Registration: 0101/LPJ/AMDAL-1/LRK/KLHK

Social Impact Assessment

Social Impact Study in the plasma plantation area of PT AWL is carried out through a FGD process and interviews with external and internal stakeholders from UM PT AWL. External stakeholders include village government officials, community leaders, traditional leaders, youth leaders, education leaders, women leaders, and several stakeholders related to the existence of PT AWL so far. After conducting FGDs and interviews, the study process was continued with field observations. For internal stakeholders, the process of opening meetings, interviews with several staff from UM PT AWL in three estates, studies of RKL/RPL documents, SOPs, and social observations in the PT AWL HGU area.

Purpose of management and monitoring report compilation is:

- a. Provide information on the implementation of environmental management and monitoring plan by PT AWL - PLASMA to government agencies and agencies to assist in monitoring environmental management by the regions.
- b. Provide information on management and monitoring implementation of PT AWL - PLASMA to central management to assist policy-making on environmental management.
- c. As control to the company for the implementation of management and monitoring in its operational area.
- d. Formulate the environmental management and monitoring plan (issues, strategies, programs and activities) that the company needs in managing the environmental aspect to create a healthy and safe environment.

Output:

- a. Output expected from the implementation of those activities are the formulation of environmental management and monitoring plan of PT AWL - PLASMA that contain issues/problem, and efforts to solve them (strategy, program, activity, location and time of implementation).

Benefits:

- a. As a guideline for the company to manage significant environmental aspects resulting from the company's activities to minimize significant environmental impacts.
- b. As material for the company in creating environmental management programs, both short-term, medium-term and long-term programs, based on applicable laws and regulations.

To foster harmonious relationship between the company and the surrounding community

PT Agro Wana Lestari intends to build oil palm plantations for plasma and has obtained a Location Permit based on the Decree of the Head of the Investment and One Stop Service Office of East Kotawaringin Regency, Number: 01/DPMPTSP/IL/I/2020 covering an area of ± 45,098,151.58 m² (4,509 ha) in the villages of Tumbang Kaminting, Tanah Haluan, Tumbang Penyehuan, Tumbang Sapia, Tumbang Getas, Tumbang Batu, Tumbang Torung, and Lunuk Bauntung in Bukit Santuai District, East Kotawaringin Regency, Central Kalimantan Province.

Previously, PT Agro Wana Lestari had a cooperation agreement for the management of plasma plantations with 3 villages around the PT AWL Core Plantation HGU. The villages are Tumbang Pengahuan Village, Tumbang Kaminting, and Tanah Haluan.

The operation of PT AWL's Core Plantation and Plasma Plantation, which is located in the Bukit Santuai District, East Kotawaringin Regency, Central Kalimantan Province, has had a positive impact on the surrounding community. The positive impact is mainly the opening of job opportunities for the community and improving the economy of the surrounding community, the CSR assistance provided by PT AWL to the surrounding community, as well as the opening of road access by PT AWL. The management of the oil palm partnership plantation by PT AWL which follows the procedures and regulations of the local government, the international organization RSPO, as well as a good approach to the community from the early stages of socialization, land clearing, and management does not cause many problems.

The partnership between PT AWL and 3 Plasma Farmer Cooperatives has had a significant positive impact on the economic growth of the surrounding community. This can be seen from the existence of:

1. Involvement of local communities in PT AWL's oil palm plantation management activities, as well as employment of local residents.
2. The surrounding community began to develop palm oil commodities independently.

Regarding the plan to develop PT AWL's plasma oil palm plantations covering an area of ± 4,509 Ha in 8 villages, the community expressed their full support and hoped that the PT AWL plasma plantations could be realized soon. However, behind the full support of the community, there are also social issues conveyed by the community in the form of problems, hopes, and concerns of the community regarding the presence of oil palm plantations in their village. These social issues are:

1. Flood disaster is a classic problem faced by people in all villages in Bukit Santuai District, including the 8 study villages. Floods that occur as a result of overflowing river water levels, especially the Kuayan River and the Mantobar River.
2. Concerns from some communities that if PT AWL's plasma plantations are built, there will be pollution of the rivers which are the community's main water sources.
3. The community's concern is that the community's garden and agricultural land will be reduced if the PT AWL plasma plantation is realized.
4. The opening of PT AWL's plasma plantations raises concerns that the community's source area for firewood will be reduced, because these areas have been turned into oil palm plantations.
5. The level of public education is still quite low. Apart from economic factors, road accessibility also affects people's ability to send their children to school.
6. Expectations about increasing community capacity in managing oil palm plantations. Community skills can be increased by working as employees or involvement in the management of plasma plantations.
7. Expectations that the workforce that will be absorbed by the plantation will be prioritized for village residents, especially the owners of land acquired by PT AWL.
8. The development of the plasma plantation of PT AWL is expected by the community to be a starting point for the realization of community welfare. With the existence of plasma, it is hoped that the community will get additional income and improve the welfare of the local community.
9. If PT AWL succeeds in establishing a plasma plantation, then the community wants PT AWL to be able to carry out its obligations in the form of a CSR program.
10. Concerns about social conflict as a result of PT AWL's plasma plantation development plan which has not been well socialized to the community in the Study Villages, especially understanding of who will receive the plasma program, or in other words, plasma in plasma.
11. The problem of road accessibility is very limited. The condition of road infrastructure is a problem faced by almost all communities in the 8 study villages. The river transportation route is the community's choice in every socio-economic activity, even though it takes longer and has high costs.
12. It is difficult for all areas in the study villages to get a cellular communication network, so access to information and communication with other regions is also limited.
13. High costs in meeting electricity needs as a result of the absence of the PLN electricity network in Bukit Santuai District.

The community hopes that the management of PT AWL through the plan to develop plasma plantations in 8 villages can answer their problems, hopes and concerns. The response of PT AWL's management to the social issues above is highly expected by the community and needs to be done immediately by conveying true information regarding the plan to develop PT AWL's plasma plantations.

General recommendations based on the results of the study of social impact studies in the environment around the PT AWL plasma plantation area are made based on developing issues, CSR programs that have been carried out by PT AWL, general conditions of the community, social impacts felt by the surrounding community, and risks involved. may arise in the future from the development and management of PT AWL's plasma plantations.

SDS activities are carried out for approximately 1 week. This does not rule out the possibility that information or data obtained during activities in the field still have many shortcomings and bias occurs. UP PT AWL knows more and understands the situation and conditions that occur between UP PT AWL and the surrounding community. Recommendations will also be adjusted to the programs that will and have been planned by the UP PT AWL.

General recommendations for the development of PT AWL's plasma oil palm plantations are as follows:

1. Socialization, counseling, and communication regarding the plasma plantation development plan must be carried out intensively, including information regarding the community receiving the plasma program. This needs to be done to minimize negative perceptions, avoid social conflicts, and answer concerns that arise in the community.
2. CSR programs are adapted to the conditions and needs of the surrounding community and are distributed more evenly and are based on a participatory approach to the surrounding community.

3. Development of CD programs aimed at improving the community's economy and developing the quality of local community resources with mutually beneficial cooperation, especially to support PT AWL's plasma plantation management activities and adapted to human resources, natural resources, and the interests of the surrounding community.
4. As a follow-up to the activities, it is necessary and important to plan the implementation of FPIC activities in accordance with the RSPO criteria in detail and sustainably at each stage of the development of PT AWL's plasma oil palm plantations in the future.

Date of assessment SIA: 29 Aug – 7 Sept 2021

Name of Assessor SIA: Aslinda Nur Mazida (Team Leader), Nofrian Adhitya Wardhana, Roro Dyah Triastuti

Assessor Designation and Company: Remark Asia (Best on letter # 164/BAOM/RMA-AWL/HCV-HCS_Int-SIA-LUCA-CSA-SOIL-FPIC/VIII/2021 on 27 Aug 2021)

Section 4: HCV-HCSA Assessment; OR

ALS HCV and Standalone HCSA assessment

RSPO Note: A reference should be made to the full report. All the related maps should be included here. What are the methodology(ies), people involved in the process, date of assessment and findings? Note: Should an assessment carried out by internal staff, just fill the name of the staff and his/her designation.

ALS Satisfactory Date Obtained (ALS HCV & HCV-HCSA assessment): 07 June 2022

[Assessment Report of Integrated High Conservation Value \(HCV\) and High Carbon Stock \(HCS\) of Plasma Plantation Area PT Agro Wana Lestari in Central Kalimantan | HCV Network](#)

In this assessment of threats to HCV/HCV and HCS/HCS, the method used is the Threat Reduction Assessment. As described in the General Guidelines for HCV management and monitoring published by the HCVRN (September 2014), this Method is a widely developed strategy for assessing the effectiveness of conservation and development projects. This strategy describes the priority (indirect) and immediate (direct) threats, also separating threats as internal and external threats to the project (Salafsky and Margoluis 1999).

Furthermore, in the assessment of potential threats to the presence of HCV/HCV and HCS/HCS in the study area of the PT AWL plasma plantation, it is based on field observations, interviews and information from the community including current and previous community activities and activities related to the socio-cultural conditions of the community, and community economic growth and the existence of central and local government policies and regulations related to oil palm cultivation licensing, regional development and development by the government, the danger of forest and land fires during the dry season, natural disasters, and other factors that can threaten the existence of HCV/ HCV and HCS/HCS in the study area of PT AWL's plasma plantations. An assessment of threats to HCVs is an important step in making management recommendations to maintain and/or enhance their values. The following are some of the identified potential threats to the presence of HCV/HCV and HCS/HCS in the Study area.

Table of presence of HCV and HCS in PT AWL's Plasma Plantation

Environmental and social values to be conserved	HCV area (Ha) where values are found (inside UM only)	HCV/KPNKT Management Area (Ha) (only within UM area)
Forest HCS	2.175,41	2.175,41
Peat	n/a	n/a

HCV 1. Biodiversity concentration	1.184,08	1.198,17
HCV 2. Ecosystems at the broad landscape level and ecosystem mosaics.	n/a	n/a
HCV 3. Ecosystems and habitats.	2.175,41	2.175,41
HCV 4. Ecosystem services	1.202,77	1.202,77
HCV 5. Basic needs for communities.	2.281,61	2.281,61
HCV 6. Cultural identity of the community	n/a	n/a
Local community land (if any additional for HCV 5 & 6). Maybe indicative.	n/a	n/a
Total Area of Integration of HCV and HCS	2.282,85	2.282,85
HCV area only	107,45	107,45
The extent of HCV and HCS overlapped	2.175,41	2.175,41

In order for the management and monitoring of HCV and HCS areas to run properly and their conservation values to be maintained, it is necessary to have cooperation between government agencies, between community institutions and plasma cooperative institutions and core companies. For this reason, cross-sectoral recommendations that need to be carried out are as follows:

- 1. The PT AWL company that establishes partnerships and plasma with the community must have the same commitment, especially in the environmental aspect, especially in maintaining the presence of HCV and HCS areas in their management areas.*
- 2. Provide explanations and socialization to relevant government agencies in charge of plantations (Plantation Service) and nature/forest conservation (Forestry Service) and Land Affairs (BPN), Mining Service regarding the presence of HCV and HCS in the working area of PT AWL plasma plantations and plasma plantations /partnership gardens and can establish cooperation in the management of the area.*
- 3. Provide explanations and socialization to the local government so that there are no regional development plans that will use and utilize the HCV and HCS areas in the PT AWL plasma plantation work area.*
- 4. Integrate and synergize the management of its HCV-HCS areas with other conservation areas around the PT AWL plasma plantation location, especially with conservation programs that have been launched by the provincial and district governments (if any).*

The next steps that must be carried out immediately are as follows:

- 1. The Plasma Cooperative Institution PT AWL as a partner or plasma of PT Agro Wana Lestari shall demarcate the boundaries of the HCV (HCV) and HCS (HCS) areas that have been identified and issue the area as a conservation area and issue it as land to be cleared for plantations. This is done starting from land clearing planning activities as outlined in the land clearing plan map.*
- 2. Conduct consultations and socialization to the community, especially to cooperative members regarding the existence of HCV and HCS areas as well as future management and monitoring plans.*
- 3. Finalize and finalize agreements with the community, especially members of the cooperative regarding the plasma plantation development plan in partnership with PT AWL as the last step as part of the FPIC (FPIC) process.*

4. Resolve agreements with villages that have not yet formed a cooperative and have not partnered with PT AWL.
5. Finalize the ICLUP plan map that has been mutually agreed upon by referring to the results of the HCV and HCS studies and input from stakeholders.
6. Carry out land clearing activities that refer to the final ICLUP.

Plasma PT AWL also committed to carrying out HCV/HCS management and monitoring recommendations as follows:

Area	Management recommendations	Monitoring recommendations
Forest HCS	<ul style="list-style-type: none"> - Socialization and prohibition of taking wood and opening fields in conservation areas to the community in the NKT/SKT area and the socialization of applicable laws and regulations related to protected plant protection - Installation of a wishing board regarding the prohibition of taking wood and opening fields in the conservation area (NKT and SKT) and the remaining forested areas - Routine patrols for securing conservation areas - Carry out measures to prevent land/forest fires, with socialization, installation of fire hazard boards, prohibitions of actions that can cause fires - Provision of firefighting equipment - Improve the ability of employees, contractors, and the community in handling fires - Make a wishing board about the material to burn land - Make a fire hazard index board - Making land fire monitoring tower in each estate - Coordinate with other parties be it private, government, as well as the community to prevent land/forest fires - Providing fire extinguishers in each estate to facilitate handling in the event of land fires in the plantation area does not run smoothly - Creating and imposing SOP for prevention and control of forest and land fires - Establish a community caring for fire as a form of participation with the community in preventing the dangers of land/forest fires 	<ul style="list-style-type: none"> - Routine patrols to safeguard conservation areas from wood taking - Remote sensing to confirm there is no increase in deforestation, or fragmentation - Routine fire patrols and monitoring, especially during the dry season. - Check the function of fire extinguishers regularly whether it is still functioning or not - Hot spot monitoring routinely during the dry season - Installing a fire tower





<p>HCV 1</p>	<ul style="list-style-type: none"> - Socialization of types of protected and/or rare type of wildlife, especially those with RTE status to the community and the socialization of applicable laws and regulations - Installation of hunting prohibition boards, especially in the Conservation Area (HCV) - Installation of a wishing board about the importance of the existence of protected Satwaliar - Continuation of the importance of wildlife for the community and the area where the wildlife is located - In collaboration with BKSDA and security forces (police) for prevention and law enforcement of protected animal trade - Socialization and prohibition of taking wood and opening fields in conservation areas to the community in the NKT/SKT area and the socialization of applicable laws and regulations related to protected plant protection - Installation of a wishing board regarding the prohibition of taking wood and opening fields in the conservation area (NKT and SKT) and the remaining forested areas - Routine patrols for securing conservation areas - Carry out measures to prevent land/forest fires, with socialization, installation of fire hazard boards, prohibitions of actions that can cause fires - Provision of firefighting equipment - Improve the ability of employees, contractors, and the community in handling fires - Make a wishing board about the material to burn land - Make a fire hazard index board - Making land fire monitoring tower in each estate - Coordinate with other parties both private, government, and community to prevent land/forest fires - Providing fire extinguishers in each estate to facilitate handling in the event of land fires in the plantation area does not run smoothly 	<ul style="list-style-type: none"> - Routine patrols in conservation areas mainly. - Annual survey of protected species population/ RTE - In collaboration with academics or NGOs for habitat quality surveys (feed plants, habitat conditions) - Invasive species monitoring uses survey data from strategic monitoring - Routine patrols to safeguard conservation areas from wood taking - remote sensing to confirm there is no increase in deforestation, or fragmentation - Routine fire patrols and monitoring, especially during the dry season. - Check the function of fire extinguishers regularly whether it is still functioning or not - Hot spot monitoring routinely during the dry season - Installing a fire tower - Monitoring the development of district spatial plans
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	<ul style="list-style-type: none"> - <i>Creating and imposing SOP for prevention and control of forest and land fires</i> - <i>Establish a community caring for fire as a form of participation with the community in preventing the dangers of land/forest fires</i> - <i>Socialization of the NKT/SKT area to the government and the importance of the functions of the area</i> - <i>Provide input so that there is no development of infrastructure and regional development in the NKT/SKT area</i> 	
HCV 3	<ul style="list-style-type: none"> - <i>Socialization and prohibition of taking wood and opening fields in conservation areas to the community in the NKT/SKT area and the socialization of applicable laws and regulations related to protected plant protection</i> - <i>Installation of a wishing board regarding the prohibition of taking wood and opening fields in the conservation area (NKT and SKT) and the remaining forested areas</i> - <i>Routine patrols for securing conservation areas</i> - <i>Carry out measures to prevent land/forest fires, with socialization, installation of fire hazard boards, prohibitions of actions that can cause fires</i> - <i>Provision of firefighting equipment</i> - <i>Improve the ability of employees, contractors, and the community in handling fires</i> - <i>Make a wishing board about the material to burn land</i> - <i>Make a fire hazard index board</i> - <i>Making land fire monitoring tower in each estate</i> - <i>Coordinate with other parties both private, government, and community to prevent land/forest fires</i> - <i>Providing fire extinguishers in each estate to facilitate handling in the event of land fires in the plantation area does not run smoothly</i> - <i>Creating and imposing SOP for prevention and control of forest and land fires</i> 	<ul style="list-style-type: none"> - <i>Routine patrols to safeguard conservation areas from wood taking</i> - <i>remote sensing to confirm there is no increase in deforestation, or fragmentation</i> - <i>Routine fire patrols and monitoring, especially during the dry season.</i> - <i>Check the function of fire extinguishers regularly whether it is still functioning or not</i> - <i>Hot spot monitoring routinely during the dry season</i> - <i>Installing a fire tower</i> - <i>Monitoring the development of district spatial plans</i>

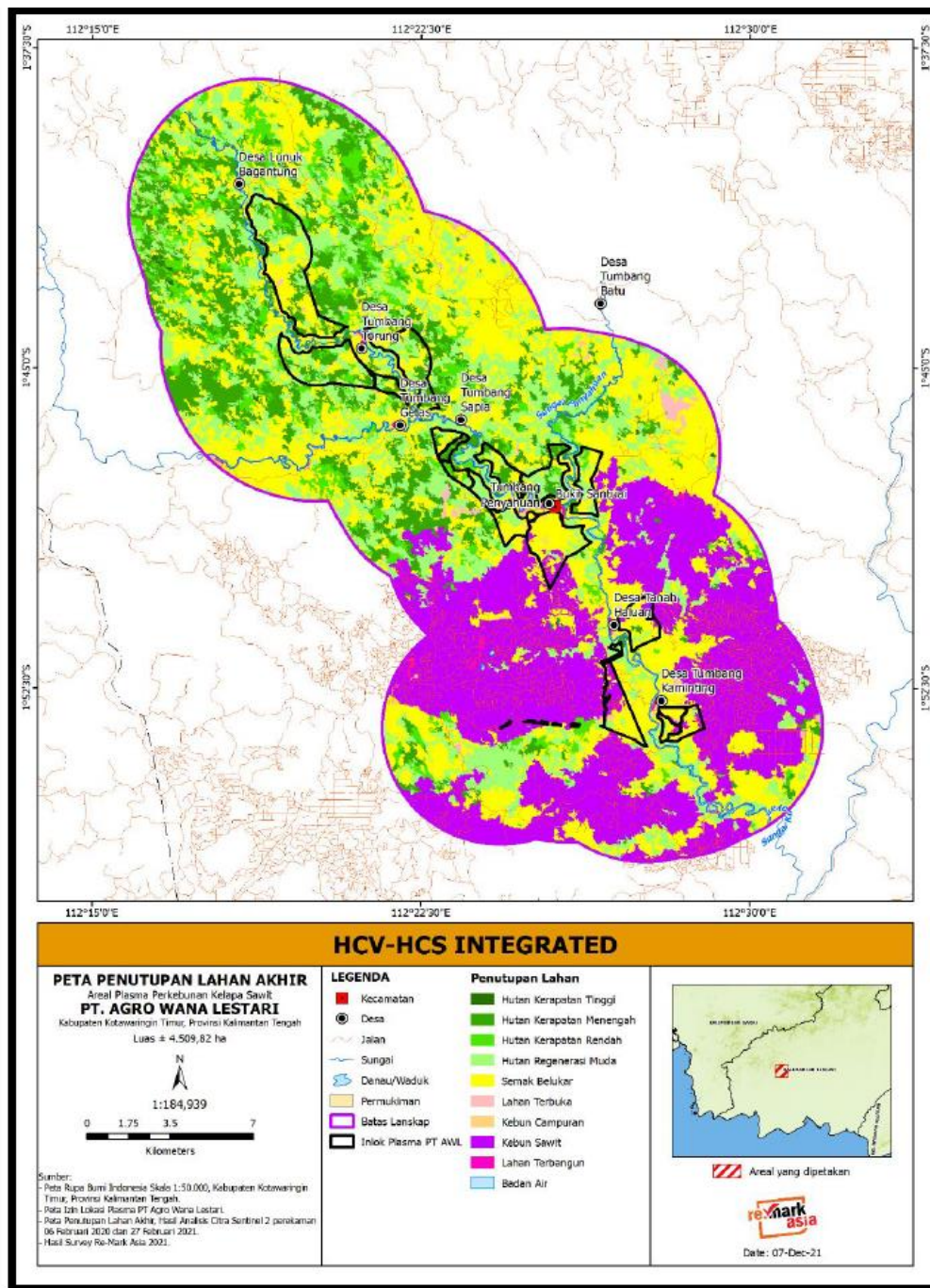
	<ul style="list-style-type: none"> - Establish a community care for fire as a form of participation with the community in preventing the dangers of land/forest fire - Socialization of the HCV/HCS area to the government and the importance of the functions of the area - Provide input so that there is no development of infrastructure and regional development in the NKT/SKT area 	
HCV 4	<ul style="list-style-type: none"> - Socialization and prohibition of taking wood and opening fields in conservation areas to the community in the NKT/SKT area and the socialization of applicable laws and regulations related to protected plant protection - Installation of a wishing board regarding the prohibition of taking wood and opening fields in the conservation area (NKT and SKT) and the remaining forested areas - Routine patrols for securing conservation areas - Carry out measures to prevent land/forest fires, with socialization, installation of fire hazard boards, prohibitions of actions that can cause fires - Provision of firefighting equipment - Improve the ability of employees, contractors, and the community in handling fires - Establish SOPs for banning or restrictions for the use of agricultural chemicals (fertilizers, herbicides, and pesticides) in the garden area near water sources (bubban zones) such as rivers and water sources - Provide socialization of the SOP to garden workers and community owners of partnership/plasma gardens - Use of environmentally friendly agricultural chemicals 	<ul style="list-style-type: none"> - Routine patrols to safeguard conservation areas from wood taking - Remote sensing to confirm there is no increase in deforestation, or fragmentation - Routine fire patrols and monitoring, especially during the dry season. - Check the function of fire extinguishers regularly whether it is still functioning or not - Hotspot monitoring routinely during the dry season - Installation of Fire Monitor Tower - Monitoring of river water quality standards, routinely - Supervision of workers in the field by the foreman in work locations that use agricultural chemicals, especially in locations close to water sources - Making erosion observation plots in steep sloped areas - Monitor and monitor water quality
HCV 5	<ul style="list-style-type: none"> - Socialization and prohibition of taking wood and opening fields in conservation areas to the community in the NKT/SKT area and the socialization of applicable laws and regulations related to protected plant protection 	<ul style="list-style-type: none"> - Routine patrols to safeguard conservation areas from wood taking - remote sensing to confirm there is no increase in deforestation, or fragmentation - Routine fire patrols and monitoring, especially during the dry season.

	<ul style="list-style-type: none"> - <i>Installation of a wishing board regarding the prohibition of taking wood and opening fields in the conservation area (NKT and SKT) and the remaining forested areas</i> - <i>Routine patrols for securing conservation areas</i> - <i>Carry out measures to prevent land/forest fires, with socialization, installation of fire hazard boards, prohibitions of actions that can cause fires</i> - <i>Provision of firefighting equipment</i> - <i>Improve the ability of employees, contractors, and the community in handling fires</i> - <i>Make a wishing board about the material to burn land</i> - <i>Make a fire hazard index board</i> - <i>Making land fire monitoring tower in each estate</i> - <i>Coordinate with other parties both private, government, and community to prevent land/forest fires</i> - <i>Providing fire extinguishers in each estate to facilitate handling in the event of land fires in the plantation area does not run smoothly</i> - <i>Creating and imposing SOP for prevention and control of forest and land fires</i> - <i>Establish a community caring for fire as a form of participation with the community in preventing the dangers of land/forest fires</i> 	<ul style="list-style-type: none"> - <i>Check the function of fire extinguishers regularly whether it is still functioning or not</i> - <i>Hot spot monitoring routinely during the dry season</i> - <i>Installing a fire tower</i>
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HCS and HCV Classification:

Land Cover Class	Physical description of land cover, such as species mix, forest type (pioneer, regenerating, primary etc.), diameter distribution, structural indices, maturity indicators, etc.	Photo
High Density Forest (HDF)	High Density Forest has an average dbh of 11 cm for poles and 31 cm for trees. With an average density for the pole level of 1,300 stems/ha and for the tree level density of 350 stems/ha. The dominating plants are the Ubar species at the pole level and the Pelawas species.	
Medium Density Forest (MDF)	Medium density forest has an average dbh of 11 cm for poles and 30 cm for trees. With a density for the pole level of 1,141 stems/ha and for the tree level density of 273 stems/ha. The dominating plant is the Ubar species at the pole and tree level.	
Low Density Forest (LDF)	Low Density Forest has an average dbh of 11 cm for poles and 27 cm for trees. With a density for the pole level of 663 stems/ha and for the tree level density of 268 stems/ha. The dominating plants are the type of anchors for the pole and tree levels.	
Young Regenerating Forest (YRF)	Young Regenerating Forest has an average dbh of 10 cm for poles and 28 cm for trees. As for the density at the pole level, it was 1,096 stems/ha and for the tree level, it was 181 stems/ha. The dominant plants are Kamasulan for the pole level and Meranti (Shorea spp.) for the tree level.	

Shrubs (S)	Semak Belukar/Belukar muda memiliki lantai vegetasi yang padat ditumbuhi tumbuhan bawah, semak, pancang dan tiang. Untuk tiang memiliki DBH rata – rata sebesar 10 cm dan pohon 18 cm. Memiliki kerapatan pada tingkat tiang sebesar 910 batang/ha dan pohon memiliki kerapatan sebesar 120 batang/ha. Tumbuhan yang mendominasi adalah jenis Halaban (<i>Vitex spp</i>) untuk tingkat tiang dan jenis Merkubung untuk tingkat pohon.	
Open Land (OL)	Berupa hamparan lahan terbuka maupun area dengan dominasi rerumputan, tumbuhan bawah, paku-pakuan, semai dan pancang. Beberapa kondisi ditemukan tiang dalam jumlah yang sangat sedikit.	
Agriculture	In the form of expanses of agricultural land or plantations in the form of rubber gardens (<i>Hevea brasiliensis</i>), etc	
Palm Oil	Homogeneous plantation planted with Oil Palm.	
Built-up Land	Land that is generally made and is permanent, such as settlements, offices and emplacements.	



The complete attachment can be seen at the following link:

[Dropbox - Assessment Reports of Agro Wana Lestari - Simplify your life](#)

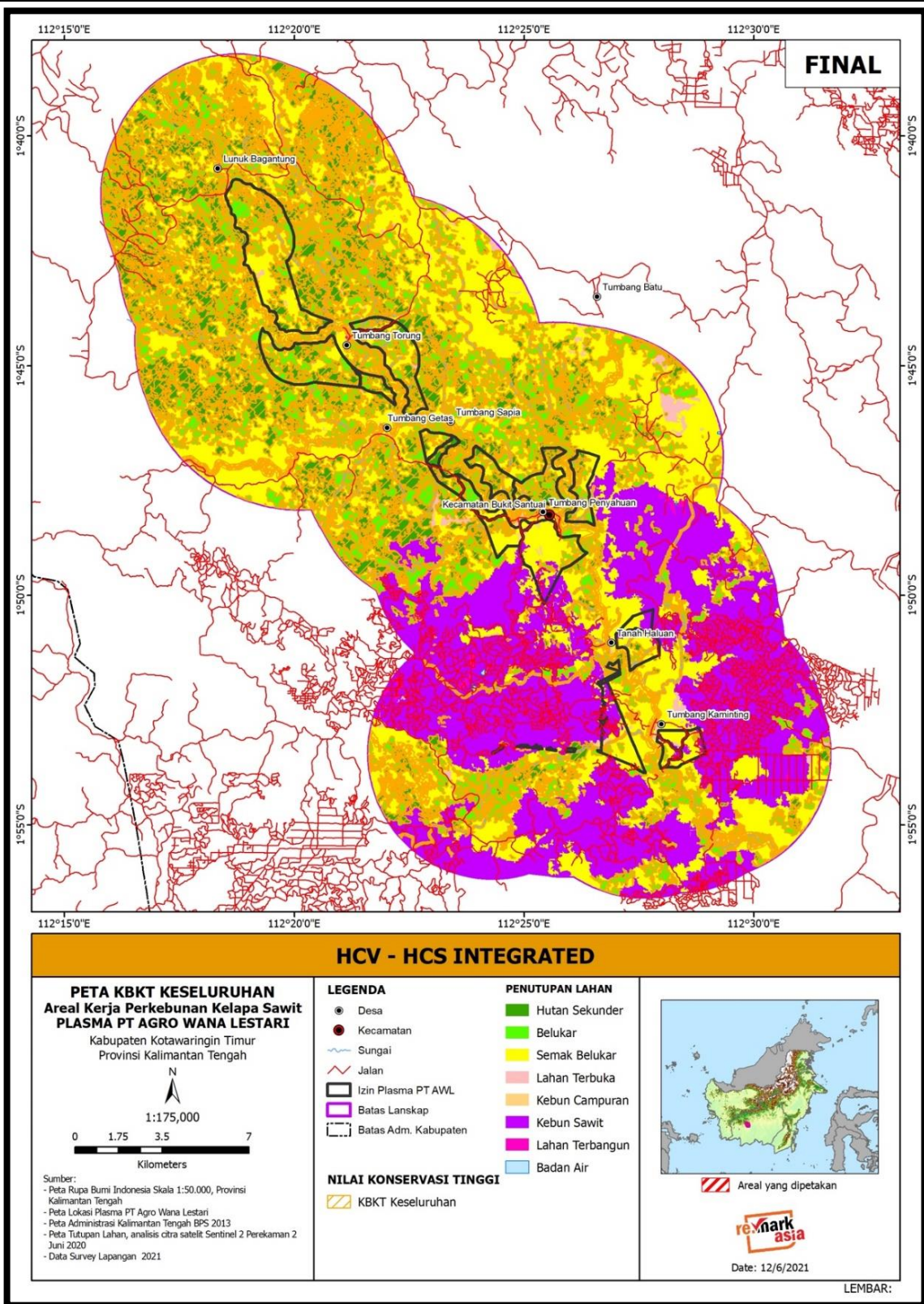
Nama of Stakeholders involved during HCV/HCS assessment:

- Drs. Pungkal, MSM as Head of District Bukit Santuai
- Yudi Kurniawan as Village Secretary Tanah Haluan
- Lide as Kasi Kesra Tumbang Penyahuan Village
- Dermansyah as Head of Village Tumbang Sapia

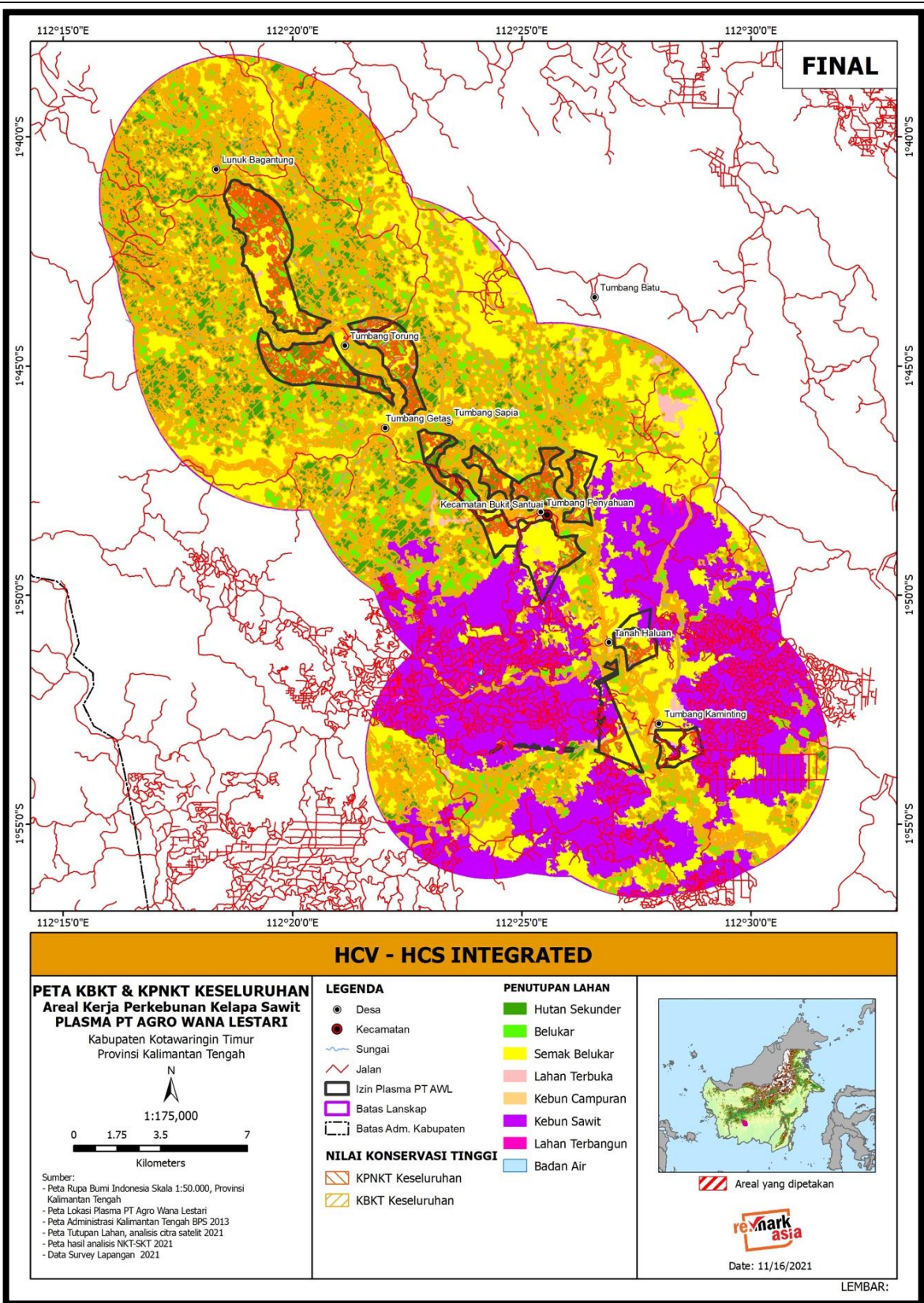
Data of Assessment:

- Pre-Assessment: 5 – 9 July 2021
- Participatory Mapping: 30 August – 04 September 2021
- Field Survey: 30 August – 04 September 2021
- Data Analysis: 5 – 19 September 2021
- Stakeholder consultation: 23 December 2021
- Submission and reporting: March 2022

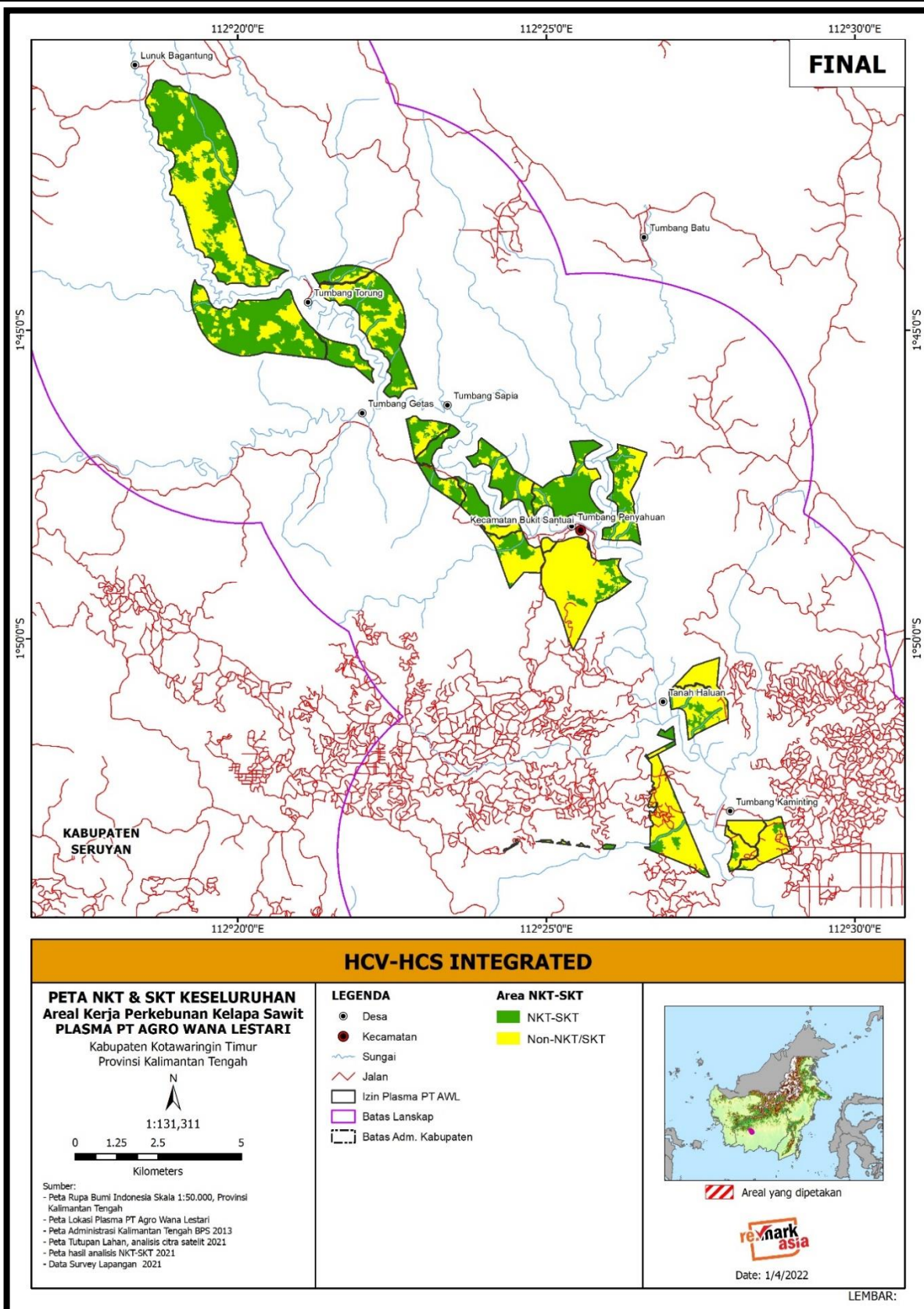
Summary map



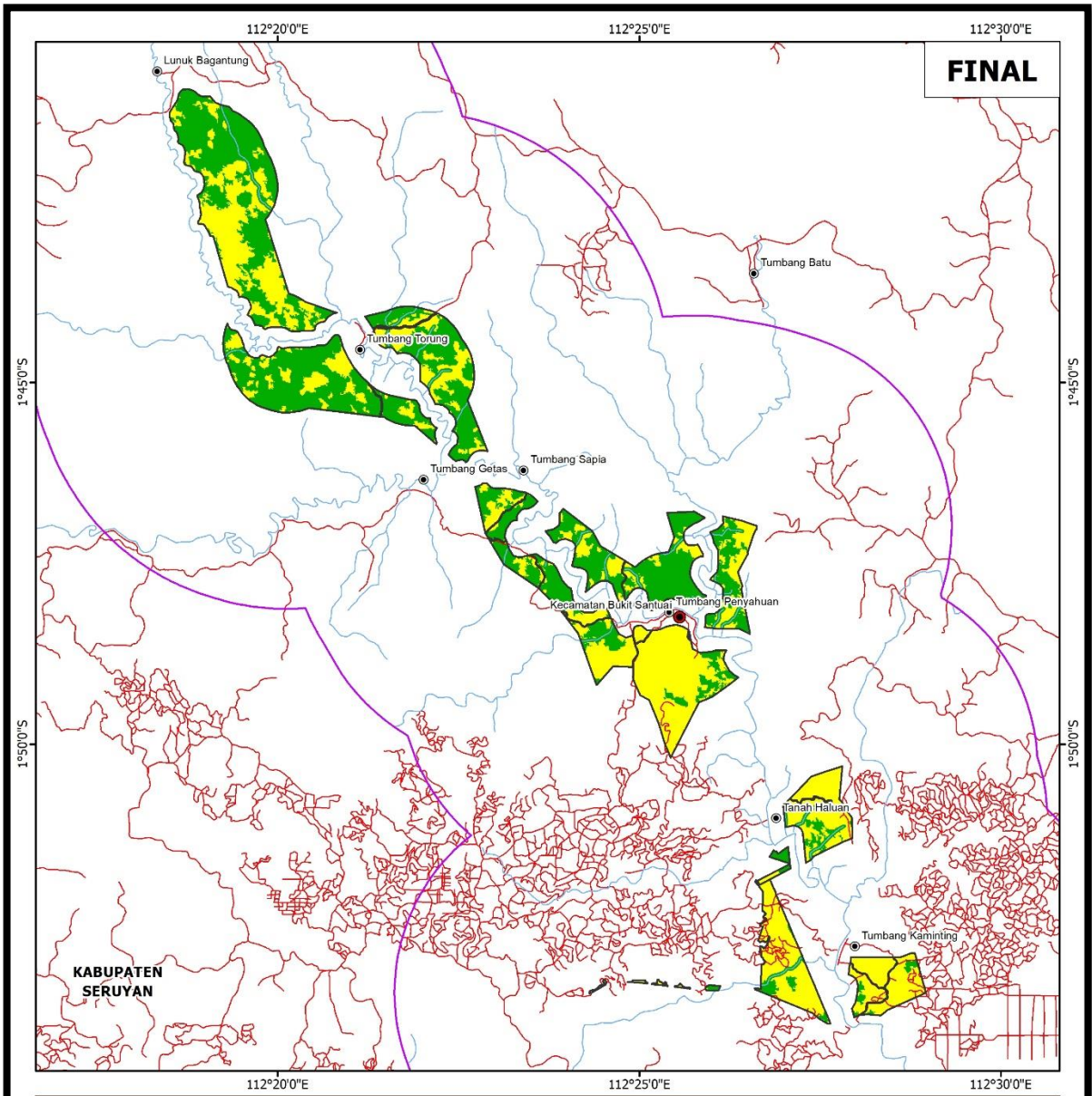
Area Map of High Conservation Value Area in PT AWL Plasma Plantation



Map of High Conservation Value Management Area in PT AWL . Plasma Plantation



Map of integration of HCV and HCS in PT AWL's Plasma Plantation



FINAL

HCV-HCS INTEGRATED

PETA GO & NO-GO AREA
Areal Kerja Perkebunan Kelapa Sawit
PLASMA PT AGRO WANA LESTARI
 Kabupaten Kotawaringin Timur
 Provinsi Kalimantan Tengah

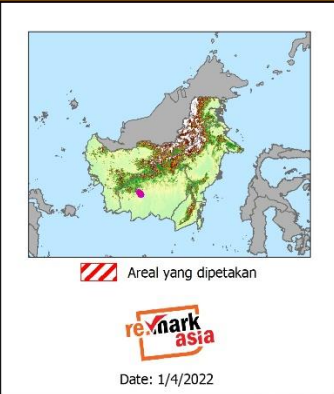
N

1:131,311

0 1.25 2.5 5
 Kilometers

Sumber:
 - Peta Rupa Bumi Indonesia Skala 1:50.000, Provinsi Kalimantan Tengah
 - Peta Lokasi Plasma PT Agro Wana Lestari
 - Peta Administrasi Kalimantan Tengah BPS 2013
 - Peta Tutupan Lahan, analisis citra satelit 2021
 - Peta hasil analisis NKT-SKT 2021
 - Data Survey Lapangan 2021

- LEGENDA**
- Desa
 - Kecamatan
 - Sungai
 - Jalan
 - Izin Plasma PT AWL
 - Batas Lanskap
 - Batas Adm. Kabupaten
- Area GO & No-Go**
- GO AREA
 - NO-GO AREA



LEMBAR:

Map of Go and No Go areas in PT AWL Plasma Plantation

ALS Satisfactory Date Obtained (ALS HCV & HCV-HCSA assessment):

<https://www.goodhopeholdings.com/sustainability/commitment#project2>
HCSA ASSESSMENTS | High Carbon Stock Approach

HCSA peer review completion date and link to HCSA summary report (HCSA website):

HCSA ASSESSMENTS | High Carbon Stock Approach

Name of Assessor: Cecep Saepulloh (Team Leader), Nanang Khairul Hadi, Rhama Budhiana, Dwi Budi Siswantono, Aslinda Nur Mazida, Roro Dyah Tri Astuti, Marlan, Filian Basri Irpan, Nofrian Adhitya Wardhana, Riyanda Yusufdiyaga, Hendry Pramono

ALS Number Team Leader: ALS15020CS (Fully Licensed Assessor sejak 20 Januari 2015)

Section 5: FPIC

Guidance Note: This section is where the information on stakeholder mapping is put and all required information that the building blocks for FPIC have been conducted. References and pictorial evidence are recommended. What are the methodology(ies), people involved in the process, date of assessment and findings?

The presence and operation of PT AWL - Plasma oil palm plantations has the potential to give social impact on the communities in the surrounding villages of the company's HGU areas and associated employees. The impacts arise from various activities undertaken relating to the development process and operations of the estate.

Discussion of impacts are identified from the facts or sources of occurring impact within the employee, community surrounding the company, as well as within the scope of neighbourhood, village, sub-district and district and can have both negative and positive dimensions on Pentagonal Assets. The explanation are as follows:

- Social impacts are positive or negative changes to one or more of social pentagon assets occurred at the time of the assessment as a direct or indirect result due to company operations (estates and mill); policies of management practices or corporate social management performance.
- Potential social impacts are positive or negative changes to one, or more, possible social pentagon assets that may occur in the future as a direct or indirect result due to company operations (estate and mill); policies of management practices or corporate social management performance.
- Social risks are social conditions, social issues or social reactions that are likely to disrupt the performance of the company's operations and or sustainability.
- Social issue in this case is the perception of a particular social group about a matter.

Explanation on the relation and explanation on social impacts of PT AWL - Plasma's existence to society, social impact on employees, and on the end, on social risks, and social issues faced by the company. Explanations on impact relationships, potential impacts, social risks and social issues need to be done so that we can understand the cause-and-effect relationship between these three issues and the source of the cause.

Social Risk

Social risk is a social condition that has the potential to cause material or immaterial losses/damage for the company so that the company is forced to stop operating or has to bear high social cost due to social issues. The source of the risk in question comes from the surrounding community as an outside party. Based on the social conditions in the study area and the conditions of the people who have interaction with the company, it was found that there are social risks faced by the company. There are three risks identified by reviewing the condition of the community:

- Prohibition of any activities until the request of the Villages community is approved, which stems from the failure to reach an initial agreement with the Villages community. The problem is that there are some

requests or expectations that are quite demanding from certain individuals or groups.

- Low land acquisition rates and high social costs due to land disputes and conflicts. The low level of land acquisition is classified as operational risk, but because the source comes from the community who controls the land in the HGU area, it can be categorized as social risk.
- Disturbance from the community which has high social costs originating from the development of plasma plantations which if not carried out in conjunction with the nucleus plantations.

The level of risk is highly dependent on the company's attitude, leadership policies/decisions, and ways of communicating. The level of risk is categorized as high if the land acquisition is far below the target and the company's plantation development planning is hampered. In addition to the risks mentioned above, there are other risks with a medium or low level, the sources of which are the internal environment itself or the control measures tend to be less complex which do not depend on external parties or factors:

- Did not get full support from all community groups. There are community groups in Villages who feel that the company is only communicating with a certain person or community group. This group feels less involved in matters related to PT AWL - PLASMA.
- Reputational risk. The long process of developing the plantations and the lack of communication and openness have made the community view that the new management of PT AWL - PLASMA is the same as other companies that are not serious about investing in the village area.

Objective(s)	Action(s)	Timeline
Communication, social relations and partnerships, forms of activities include: Socialization of land clearing plans and plasma development plans	<ol style="list-style-type: none"> 1. Re-identification of current social conditions includes assessing the impact and control to existing social issues. Changes in perceptions that occur in the field today need to be done study first. 2. Creat FPIC plans through key stakeholder engagement. Among others: <ul style="list-style-type: none"> • Establish communication and consultation mechanisms as a guide in communicating effectively to the community • Determine FGD schedules or regular meetings to collect information relating to level of public perception towards the company • Periodic analysis against developed strategic issues within the community resulted from FGD results or community perceptions surveys • Adopt an accountable Community development program, such as donations of religious activities, 	At the time of the plantation development plan will be initiated (2022-2024).

		<p>communication and coordination assistance, superior fruit seed support, national day activities assistance, provision of working capital such vegetable carts, community economic improvement in the form of women group assistance, fish farming assistance , home finance management training, educational assistance, assisting women's groups in home industry products, indigenous activities assistance, financial assistance for youth organization</p> <p>3. Building public trust back through socialization and/ or community activities prior to plantation development plan at PT AWL - PLASMA is commenced</p> <p>4. Establishment of a committee to resolve the status of plasma land</p> <p>5. Transparency and socialization of plasma location development plan (location map).</p>	
	Land acquisition process	<p>Implementation of FPIC to:</p> <ol style="list-style-type: none"> 1. Develop a participatory mechanism in handling conflict / complaints. 2. Socialization, FGD. 3. Participatory mapping during land acquisition including joint review for HCV determination & SIA review. 4. Transparent land acquisition process 5. Implement an accountable community development program. 6. Preparing the community for the changes that will occur and their implications Plans/ system / model of plasma division 	During land acquisition process is undertaken.
	Nursery	<ol style="list-style-type: none"> 1. Informing nursery jobs to affected villages in accordance with skills and 	During nursery activities

		<p>expertise required. For local people who are not recruited to work in the company, can be developed through the community empowerment program through improving self-skills training and soft capital loans</p> <ol style="list-style-type: none"> 2. Establishing environmental management aspects, policies and procedures. Environmental management and monitoring are conducted periodically including HCV/ flora fauna studies prior to land clearing for nursery 3. Ensuring that the aspects of OHS & environment management are properly implemented and monitored. Environmental programs that can be applied such as road watering especially on the village roads that are located within company immediate vicinity and often used by the company as access road. 	undertaken.	
	Land clearing	<p>Implementation of FPIC for:</p> <ol style="list-style-type: none"> 1. Ensure that the community has a perceptual understanding of land clearing plans. 2. Local communities accept land clearing plan. 3. Conduct HCV & SIA studies prior to land clearing. 3. Develop program and mitigation plan of social impact arising from land clearing. 4. Strengthening local institutional capacity and intensive assistance for the independence of local organizations. 5. Land clearing activities are done in stages <p>Ensuring the aspects of OHS & environment management are properly implemented and monitored. Environmental programs that can be applied such as road watering, especially village roads that are located</p>	During land clearing activities undertaken.	

		within immediate vicinity of company's location and often used by the company.	
Planting		Implementation of FPIC for : 1. Developing a program and mitigation plan social impact, one of which is counseling, socialization 2. Strengthening local institutional capacity and intensive facilitation for local organizational independence 3. Ensuring the aspects of OHS & environment are implemented and monitored properly	During planting activities undertaken.
Plant upkeep		1. Company must have all clear working procedures on the oil palm plantations upkeep activities. 2. Socialization and training activities to workers. 3. Ensure environmental management and monitoring are implemented well. 4. Provision of PPE to all workers and installation of traffic signs at estate roads and housing and periodic health checks to all workers.	During the operations of the company.

Field activities for the FPIC process in the plasma plantation area of PT AWL has started from 30 August – 5 September 2021, by consultant Remark Asia ie: Aslinda Nur Mazida (Team leader), Nofrian Adhitya Wardhana and Roro Dyah Triastuti, location at Tumbang Penyahuan, Tanah Haluan, Tumbang Kaminting, Tumbang Sapia, Tumbang Getas, Tumbang Batu, Tumbang Torung, Lunuk Bagantung Villages, Bukit Santuai District, Kotawaringin Timur Regency, Central Kalimantan Province, Indonesia. The stages of the FPIC process carried out are:

1. Identifying relevant stakeholders
2. Prepare the next process with identified stakeholders
3. Mapping rights, resources, land, and evaluating the impacts that occur
4. Provide information to the indigenous community or local community regarding the risks that will occur
5. negotiate and provide opportunities for local communities to determine the results of negotiations from the FPIC process
6. Arrange, verify, implement, and supervise the agreed decisions.

There are many stakeholders involved in the FPIC process including:

- Jhonsen Ginting, Head of BPN Kotawaringin Timur Regency
- Kurnain, Section Head of Plantation Agency Kotawaringin Timur Regency
- Fuad Sidiq Head of Manpower Agency Kotawaringin Timur Regency
- Toni Sitohang Section Head of Environment Agency Kotawaringin Timur Regency
- Drs. Pungkal Head of district (Camat)
- Candui as Mantir Adat
- Dante Jambag as community
- Nederson as community
- Tehelson as Head of Tumbang Kaminting Village
- Lalang Antunius as Head of Mantir Adat
- Dermansyah as Head of Tumbang Sapia Village
- Tengang as Head of Tumbang Batu Village
- Mantikei as Head of Lunuk Bagantung Village
- Elpair as head of Tumbang Torung Village
- and many more stakeholders involved

Participatory mapping activities are carried out simultaneously at the time of FGD. Specifically for participatory mapping in addition to the participants who attended the FGD, also specifically involved the representative of the landowners and other participants who understood and understood the conditions and situation of the village (village officials, traditional elders, community leaders, and traditional leaders). The number of people involved in PM is all FGD participants in each village when the FGD is carried out. While residents who were involved in checking the field results of the PM map were approximately 3-4 people per village, consisting of 1 representative from the village government and 2-3 landowners, the election of representatives in the implementation of the PM field was agreed upon in the FGD.

Participatory mapping steps in each village study:

a. Preparation of participatory mapping activities.

b. Preparing socialization materials (NKT and Padiatapa) to be conveyed to the community.

c. Determine villagers' representatives through discussions/FGDs to assist participatory mapping activities (making village map sketches based on the concession area map).

d. The team showed the map of PT AWL's concession area, then representatives of residents (community leaders) were asked to show where the location or area in the concession that residents were still used as a place to meet basic needs and meeting the needs of cultural activities were still used as a place to meet basic needs as well as meeting the needs of cultural activities.

e. Representatives of villagers make a sketch of concession maps and village maps which include:

- The location and size of the affected settlement/village includes indicative administrative boundaries between villages or villages with other villages.
- The livelihoods of villagers who have dependence on natural resources (SDA) both agriculture, fisheries, gathering, hunting, etc.
- Water sources used for household interests.
- Land control system (official and legality of customary rights, land rights). Land claims and resources overlap with the assessment area
- Infrastructure (roads, education, health services, markets, dams
- History of settlements, cultural values and beliefs related to overlapping with the assessment area

f. After a participatory mapping (concession map sketch and village map) then a discussion back to the community to be commented and corrected. Then a decision made related to the Social NKT area (NKT 4, 5 and

6) including other conservation areas with a good cover for plans to be maintained into conservation areas and carbon reserve areas in the future.

The final participatory map is the result of collaboration between the assessment team and community representatives. Mapping can identify community land that must be excluded from the SKT forest classification and/or project development. From the results of participatory mapping sketches then overlay with GIS -based maps.

The photo of FPIC assessment as follow:



Section 6: Soil and topography

RSPO Note: This section should indicate the type of soil identified and the area of it. Sampling points should be indicated. Topographic maps will be included here as well. Any potential areas identified as steep terrain according to the P&C 2018 definition should be mentioned accordingly. What are the methodology(ies), people involved in the process, date of assessment and findings? Note: Should an assessment carried out by internal staff, just fill the name of the staff and his/her designation.

Activity Location and Time

The soil analysis study was carried out at PT Agro Wana Lestari's plasma plantation located in the Bukit Santuai District, East Kotawaringin Regency, Central Kalimantan Province. This activity was carried out from 29 August – 7 September 2021

Method

Land survey activities are carried out at the exploration level with a reference in the form of a map of the Indonesian land system. The land system concept is based on ecological principles by assuming that there is a close relationship between rock type, hydroclimate, landform, soil, and organisms. The same land system will have the same combination of ecological or environmental factors. Therefore, land systems are not unique to one place, but can be found anywhere with the same environmental characteristics. With this concept, land system mapping in Indonesia was carried out, the results of which are presented in the RePPPProT map (1987). Furthermore, in the map it is stated that a land system consists of a combination of parent rock, soil and topography, climate and others which reflect the similarity of potential and limiting factors.

Soil classification in PT AWL's plantation area based on the Soil Taxonomy System (USDA, 1982) and its equivalent according to the Bogor Soil Research Center Classification System (1981) there are 2 associations of soil types in plasma and landscape areas, while the dominant soil types in PT AWL's plantation area are Ultisols (tropudults) and Inceptisols (Dystropepts, and Tropaquepts).

Inceptisol; is a young soil, but more developed than Entisol. Inceptisol comes from the word Inceptum which means beginning. Generally have a cambic horizon. This land is not yet developed, so most of it is quite fertile.

Matches with the old classification system include Alluvial, Andosol, Regosol and Glei humus soils. The Inceptisol soil order developed from alluvial material in the form of clay deposits on sand deposits, the reaction of the soil was very acidic to acidic, ripe and drainage was hampered. Horizon A is very dark gray to light gray. Sometimes there is yellowish brown rust, the texture is clay to dusty clay, the consistency is sticky and slightly plastic, the soil reaction is very acidic to sour. This layer contains sulfidic material (pyrite) at a depth of >50 cm from the surface.

Ultisols; is clay stockpiling soil in the lower horizon, acidic, base saturation (KB) at a depth of 180 cm from the soil surface is less than 35%. KB < 35% can be approximated by measuring pH (soil acidity) < 6.5. Detail see table below:

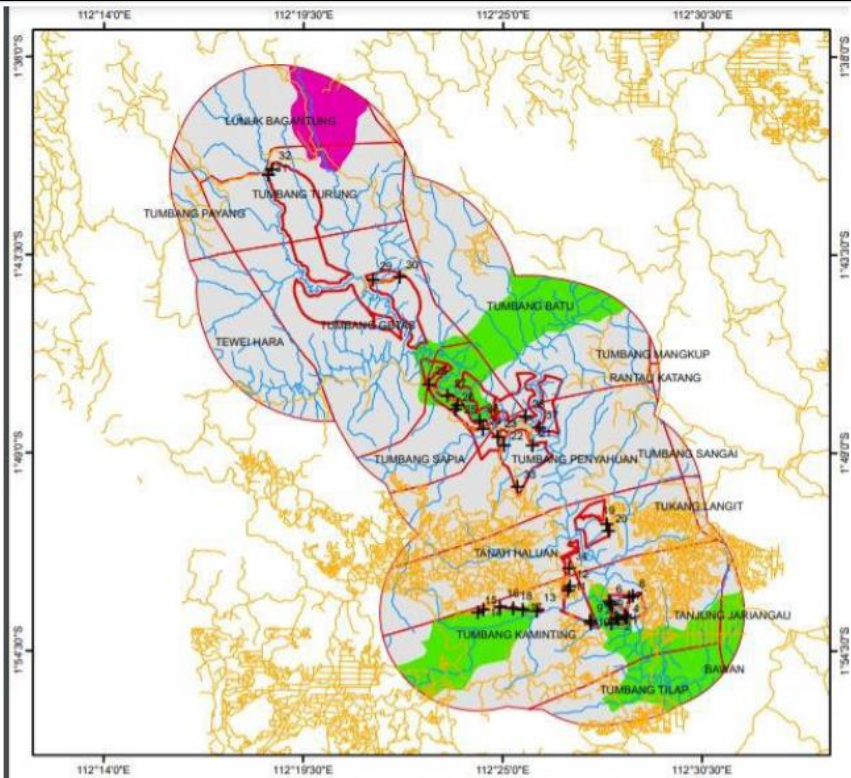
No	Soil Name	Plasma Area (HA)
1	Inceptisol	440.28
2	Ultisol	4,069.54
	Total	4,509.82

Based on the image of the National Digital Elevation Model (DEMNAS) of the Geospatial Information Agency with a spatial resolution of 8 meters. The topography of PT AWL's plasma plantation area is at an altitude between 7 to 219 masl. In general, the slope in the PT AWL plantation area is dominated by a slope of 0 – 8% (flat). See detail table below:

No	Hight (MDPL)	Plasma Area (HA)
1	7-36	1,766.03
2	36-54	2,322.34
3	54-79	367.87
4	79-115	37.52
5	115-162	12.41
6	162-219	3.63
	Total	4,509.82

No	Slope (%)	Plasma Area (HA)
1	0-8	1,860.58
2	8-15	1,580.76
3	15-25	857.24
4	25-45	197.87
5	>40	13.38
	Total	4,509.82

The following map of soil sampling location:



KAJIAN TANAH DAN TOPOGRAFI

PETA TITIK PENGAMATAN TANAH
Areal Kerja Perkebunan Kelapa Sawit
PLASMA PT AGRO WANA LESTARI

Kabupaten Kotawaringin Timur

Provinsi Kalimantan Tengah



- Sumber :
1. Peta Rupa Bumi Indonesia skala 1 : 50.000
 2. Peta lokasi lokasi plasma PT Agro Wana Lestari
 3. Peta administrasi Kabupaten BPS 2013
 4. Peta excoasi tanah Repond 1995

LEGENDA

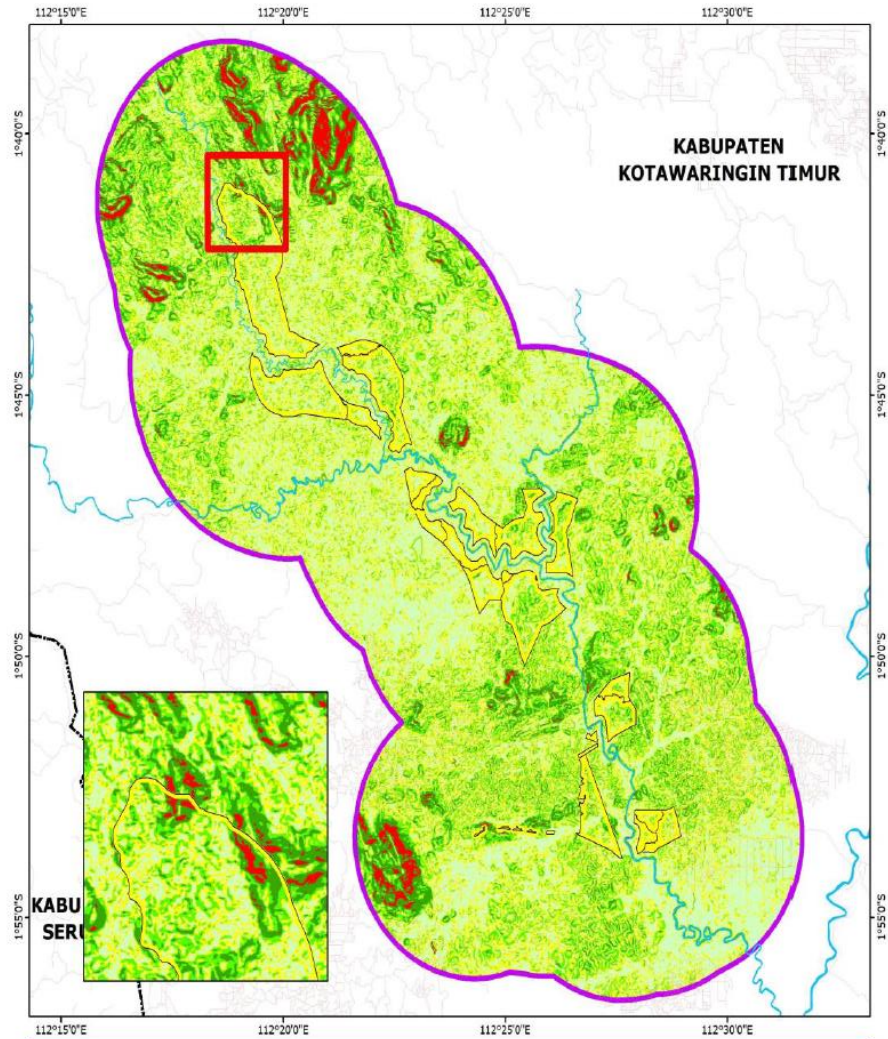
- + Titik Pengamatan Tanah
 - Jalan
 - Sungai
 - Areal Plasma PT Agro Wana Lestari
 - Batas Desa
- Jenis Tanah**
- dystropepts
 - tropaquepts
 - tropudults



Areal yang dipetakan

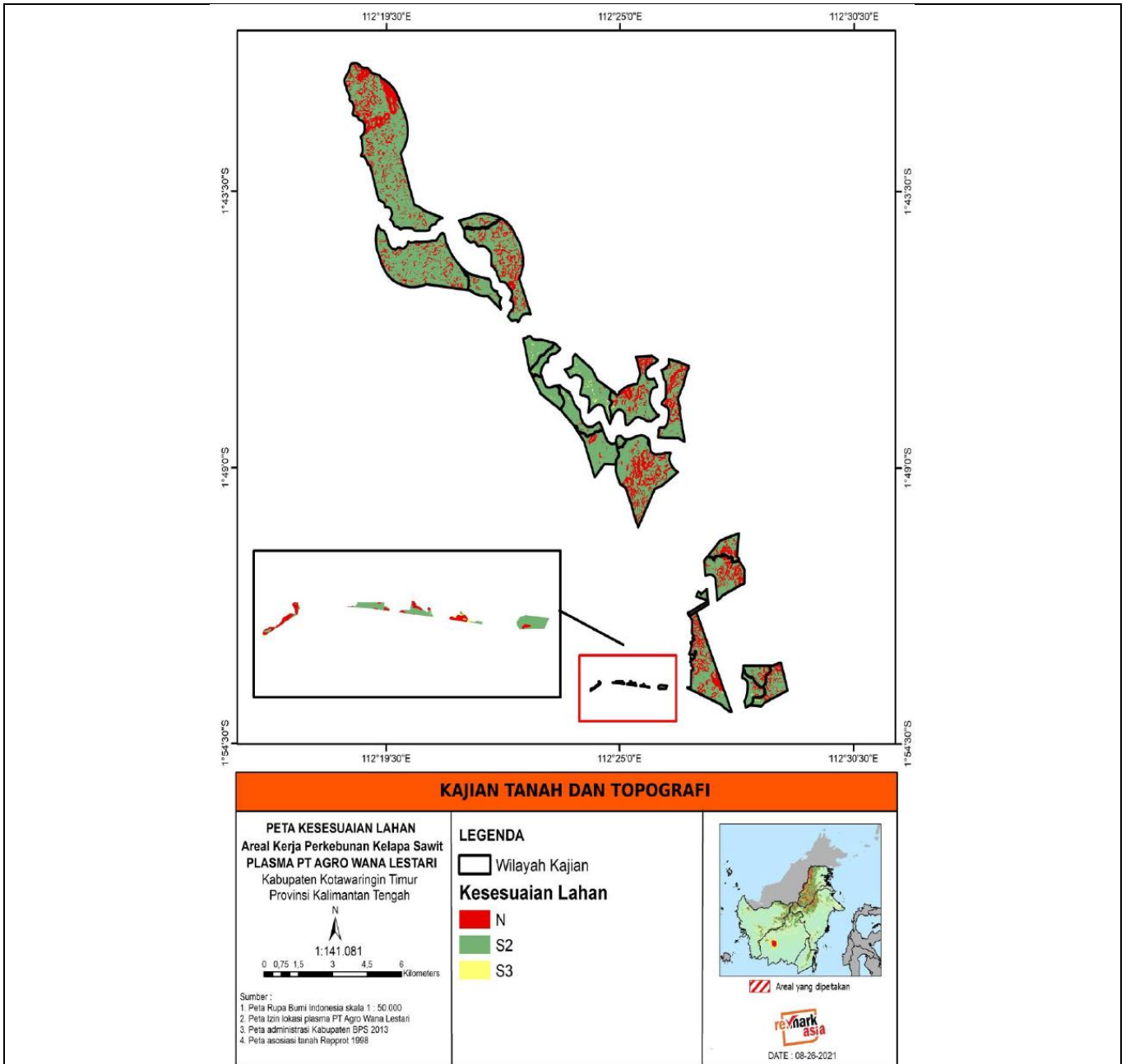


DATE : 08-26-2021



KAJIAN TANAH DAN TOPOGRAFI		
<p>PETA KEMIRINGAN LERENG Areal Kerja Perkebunan Kelapa Sawit PLASMA PT AGRO WANA LESTARI Kabupaten Kotawaringin Timur Provinsi Kalimantan Tengah</p> <p style="text-align: center;">N 1:175,000</p> <p style="text-align: center;">0 1.75 3.5 7 Kilometers</p> <p>Sumber: - Peta Izin Lokasi Plasma PT Agro Wana Lestari - Peta Administrasi Kabupaten, BPS 2013. - PETA DEMNAS BKG - Peta Kemiringan Lereng DEMNAS, BKG.</p>	<p>LEGENDA</p> <ul style="list-style-type: none"> Ruas Jalan Sungai (Area) Areal Plasma PT Agro Wana Lestari Batas Lanskap Batas Adm. Kabupaten <p>Kemiringan Lereng (%)</p> <ul style="list-style-type: none"> 0 - 8 15 - 25 25 - 45 8 - 15 > 45 	<p> Areal yang dipetakan</p> <p style="text-align: center;">re:mark asia</p> <p>Date: 7/30/2021</p>

LEMBAR:



Date of Assessment: 30 Aug – 4 Sep 2021

Name of Assessor: Cecep Saepulloh (Team Leader), Nanang Khairul Hadi, Rhama Budhiana, Dwi Budi Siswantono, Aslinda Nur Mazida, Roro Dyah Tri Astuti, Marlan, Filian Basri Irpan, Nofrian Adhitya Wardhana, Riyanda Yusufdiyaga, Hendry Pramono

Assessor Designation and Company: Remark Asia (Best on letter # 164/BAOM/RMA-AWL/HCV-HCS_Int-SIA-LUCA-CSA-SOIL-FPIC/VIII/2021 on 27 Aug 2021)

Section 7: Greenhouse Gas (GHG)

RSPO Note: this section should be used to explain the findings that come out from the usage of the New Development GHG calculator. Please include what are the significant sources and type of emissions expected from this area. What are the methodology(ies), people involved in the process, date of assessment and findings? Note: Should an assessment carried out by internal staff, just fill the name of the staff and his/her designation.

The objects of mitigation and monitoring within the scope of new plantations are divided into three categories, namely (1) land clearing, (2) use of fuel, and (3) use of fertilizers. Land clearing is one of the mitigation objects because potential lands for new plantations (land that have not been planted) have potential for biomass carbon stocks, especially on lands covered with forest and scrub. The use of fuel and fertilizers is also the main object of mitigation because they are a significant source of GHG emissions. In the calculation, the production rate of fresh fruit bunches (FFB) per hectare is obtained from data from surrounding companies (Group Goodhope Kalteng), which is on average 14-15 tons-FFB/ha. Explanation of the mitigation object, as follows:

Plantations scope:

1. High Carbon Stock (HCS) and High Conservation Value (HCV) areas

Biomass carbon stocks on potential lands for new planting were identified through the HCSA assessment and high value areas were determined from the HCV assessment results. Low-medium density secondary forest (HKR) is the area with the highest AGB carbon stock in the PT AWL - PLASMA area, followed by young regeneration forest (HRM) or Shrubs. Meanwhile, open land (shrubs and inland swamps) is the area with the lowest AGB carbon stock. In the GHG emission mitigation plan, the company's management unit decided to exclude areas of conservation value and high carbon stock from the development plan (defined as non-development areas). This mitigation plan is embodied in the land use plan in the field for new developments and conservation.

2. Projected fuel use in plantation area

GHG emission mitigation plans through fuel use planning are carried out based on projections of fuel use based on the planned area of new plantation development. The amount of fuel used is a variable in plant maintenance that depends on the area of the new plantation. Therefore, land use plans in GHG mitigation efforts have a direct effect on the projection of fuel use.

Table IV-9. Projected fuel use in plantation areas

No	Fuel Type	Usage per Year per Hectare (liter/ha)	Total Usage per Year (liter)*	Projected GHG Emissions (ton CO ₂ e/Year)
1	Diesel	99.37	571,780.87	1,784
2	Premium	1.88	10,817.63	30

3. Projected use of fertilizers in plantation areas

The GHG emission mitigation plan through fuel use planning is carried out based on the projected use of fertilizers based on the types of fertilizers used and the area of new plantations. Like the projected use of fuel, the amount of fertilizer use is also directly and directly proportional to the area of land use for new plantations.

Table IV-10. Projected use of fertilizers in plantation areas

No	Fertiliser Type	Usage Per Year per Hectare (ton/ha)	Total Usage per Year (ton)*	Projected GHG Emissions (ton CO ₂ e)		
				Transportation	N ₂ O Emissions	CO ₂
1	Urea	0.314	1806.8	2,861.75	5,152.21	1,324.97
2	RP	0.203	1168.1	971.72	-	-
3	MOP	0.321	1847.1	819.91	-	-
4	Kieserite	0.149	857.4	380.58	-	-

Milling scope:

PT AWL - PLASMA does not plan to build a palm oil mill. The results of the FFB will be brought to the nearest PKS, namely Bukit Santui POM (PT AWL - Bukit Santui POM). Therefore, GHG mitigation originating from mill is not under the authority PT AWL - PLASMA, but in the management of the Perdana POM unit. The amount of emission from this mill depends on the contribution of FFB supplied by PT AWL - PLASMA's plantation. The

parameters used in estimating GHG emissions from the scope of palm oil (CPO) production are presented in Table III-43.

Mitigation and monitoring plan

GHG emissions strategic

The GHG emission mitigation strategy is prepared based on practical achievements that can be realized as part of the company's operational activities. In addition, the GHG emission mitigation strategy also considers increasing productivity. In other words, an increase in productivity without an increase in the amount of significant emissions is also a form of reducing GHG emissions relative to the level of production, while a decrease in GHG emissions that causes a decrease in productivity will increase the amount of GHG emissions relative to the level of production.

Mitigation and monitoring plans can be divided into two, namely specific mitigation and monitoring plans, and general mitigation and monitoring plans. In the new plantation development plan stage, specific GHG emission mitigation plans are focused on land use as the main variable affecting the amount of emissions from other operational activities (the scope of FFB production and the scope of palm oil production). Mitigation plans for other operational activities are implemented through planning the use of measurable emission source materials. In other words, the implementation of specific GHG emission mitigation and monitoring plans can be carried out in a practical and measurable manner by following the land use plan and the amount of fertilizer and fuel use that has been determined.

A general mitigation and monitoring plan is made for components of GHG emission sources that cannot be projected by the company. In this case, the components of GHG emission sources from the palm oil production process. The company does not yet have a mill, so measurable measures to reduce GHG emissions from mill operational activities are not yet relevant.

General mitigation plan

General GHG emission mitigation activities apply to all aspects within the company's operational scope. The successful implementation of general mitigation activities will be recorded in periodic records in management, for example the decrease in fuel use due to rearrangement of FFB transport routes, decrease in fertilizer use due to technology application, etc.

The success achieved in the implementation of a general mitigation plan can also be applied as a specific and measurable mitigation plan to be implemented in the next period. Therefore, recording in management is important. In simple terms, a general mitigation plan is an experimental space for companies to implement new innovations in an effort to reduce emissions, either directly or by increasing productivity.

Some of the recommended general mitigation plans include:

1. Arrangement of FFB transport routes in the plantation.
2. Turning off vehicle engines when not in use for transportation.
3. Save electricity consumption, especially those that are generated with fuel.
4. Preventing fires.
5. Maintain and manage conservation areas.
6. Maintain and/or enhance oil palm growth.
7. Implementing new technologies that support GHG emission mitigation efforts.

Implementing the use of alternative materials that support GHG emission mitigation efforts.

GHG emission assessment for new planting

After knowing the estimated value of carbon deposits in various classes of land cover in the PT AWL plasma plantation, then the results are integrated with information on the results of the high conservation value analysis

(NKT) or High Conservation Value (HCV). The final results obtained are in the form of information on the location and area which will be indicated into conservation areas or may not be opened for oil palm plantation activities.

Based on the results of the analysis, the area of NKT/HCV in PT AWL's plasma garden is 2,282.85 ha. The NKT/HCV area also has the distribution of areas that have carbon deposits (Table 8). The land closure class contained in Table 9. Land cover classes included in the HCV/NKT area include high density forests (HKT), medium density forests (HKM), low density forests (HKR), young regeneration forests (HRM), coconut gardens palm oil, mixed gardens, open land, and shrubs. All areas of HKT, HKM, HKR, and HRM enter the HCV/NKT area with low to very high carbon savings class. Oil palm plantations which are included in the HCV/NKT area are only 0.10 while for mixed gardens, open land, and shrubs covering an area of 2.44 ha, 2.94 ha, and 101.96 ha.

Areas that are not included in the NKT/HCV area of 2,226.96 ha which include the class of 1,858.45 ha of shrubing land cover, 40.04 ha mixed plantations, 291.58 ha of oil palm plantations, and 36 open land, 89 ha. All areas that are included in the Non-NKT/HCV area are areas that have very low and low carbon savings.

Information area included in the area of NKT/HCV and Non NKT/Non HCV at PT AWL:

No	Conservation Area	Carbon Stock	type of land closure	Area		Carbon Stock	
				Ha	%	Ton C/ha	Ton C
1	Non-HCV	Very Low	shrubs	1,858.45	41.21	27.76	51,590.57
2			Open field	36.89	0.82	4.38	161.58
3		Low	heterogeneous plantations	40.04	0.89	49	1,962.10
4			Palm Oil	291.58	6.47	36	10,496.88
Sub Total Non-HCV				2,226.96	43.38		64,211.13
5	HCV	Very Low	shrubs	101.96	2.26	27.76	2,830.41
6			Open field	2.94	0.07	4.38	12.86
7		Low	heterogeneous plantations	2.44	0.05	49	119.77
8			Palm Oil	0.1	0.002	36	3.60
9			young regeneration forest	1,155.18	25.61	58.64	67,739.76
10		medium	low density forest	200.66	4.45	83.5	16,755.40
11		High	medium density forest	815.93	18.09	107.45	87,671.68
12		Very High	high density forest	3.64	0.08	164.46	598.14
Sub Total HCV				2,282.85	50.62		175,731.61
Total				4,509.81	100		239,942.74

Proposed development scenarios for new planting activities (new planting)

After the area to be known to be conserved and the area to be developed for the construction of oil palm plantations, then determined various scenarios that allow it to be done. The scenarios are prepared as consideration in determining the next step when going to construction of oil palm plantations. The main purpose of the preparation of these scenarios is an effort to mitigate GHG emissions in PT AWL's plasma plantation. The main consideration in the preparation of scenarios is carbon deposits in various classes of land cover and the calculation of GHG emission balance from activities in the field and production of crude palm oil (CPO) in the

factory (PKS) in accordance with RSPO rules. Proposed scenarios that have been prepared for the construction of oil palm plantations in the PT AWL plasma plantation can be seen in the following table:

Scenario	Description
Scenario 1	<ul style="list-style-type: none"> • NKT/HCV area of PT AWL covering 2,282.85 ha. The area is in line with areas that have high carbon deposits and are very high so that it becomes the main conservation area. • Other conservation areas intended for forests do not exist. • Potential areas to be developed and planted with 1,935.38 ha. The area includes shrubs covering an area of 1,858.45 ha, open land covering 36.89 ha and a mixed garden covering an area of 40.04 ha. • Existing areas have been planted with oil palm in PT AWL's plasma garden covering 291.58 ha.
Scenario 2	<ul style="list-style-type: none"> • NKT/HCV area of PT AWL covering 2,282.85 ha. The area is in line with areas that have high carbon deposits and are very high so that it becomes the main conservation area. • Another conservation area intended for forests in the form of a class of 185.85 ha shrubs. • Potential areas to be developed and planted with 1,749.54 ha. The area includes shrubs covering an area of 1,672.61 ha, open land covering 36.89 ha and a mixed garden covering an area of 40.04 ha. • Existing areas have been planted with oil palm in PT AWL's plasma garden covering 291.58 ha.
Scenario 3	<ul style="list-style-type: none"> • NKT/HCV area of PT AWL covering 2,282.85 ha. The area is in line with areas that have high carbon deposits and are very high so that it becomes the main conservation area. • Other conservation areas intended for forests in the form of classroom closure classes covering 371.69 ha. • Potential areas to be developed and planted with 1,563.69 ha. The area includes shrubs covering an area of 1,486.76, open land covering 36.89 ha and a mixed garden covering 40.04 ha. • Existing areas have been planted with oil palm in PT AWL's plasma garden covering 291.58 ha.
Scenario 4	<ul style="list-style-type: none"> • NKT/HCV area of PT AWL covering 2,282.85 ha. The area is in line with areas that have high carbon deposits and are very high so that it becomes the main conservation area.

	<ul style="list-style-type: none"> • Another conservation area intended for forests in the form of a 557.54 ha. • Potential areas to be developed and planted with 1,377.85 ha. The area includes shrubs covering an area of 1,300.92 ha, open land covering 36.89 ha and a mixed garden covering an area of 40.04 ha. • Existing areas have been planted with oil palm in PT AWL's plasma garden covering 291.58 ha.
Scenario 5	<ul style="list-style-type: none"> • NKT/HCV area of PT AWL covering 2,282.85 ha. The area is in line with areas that have high carbon deposits and are very high so that it becomes the main conservation area. • Another conservation area intended for forests in the form of a class of 743.38 ha shrubs. • Potential areas to be developed and planted with 1,192 hectares of oil palm. The area includes shrubs covering an area of 1,115.07 ha, open land covering 36.89 ha and a mixed garden covering an area of 40.04 ha. • Existing areas have been planted with oil palm in PT AWL's plasma garden covering 291.58 ha.
Scenario 6	<ul style="list-style-type: none"> • NKT/HCV area of PT AWL covering 2,282.85 ha. The area is in line with areas that have high carbon deposits and are very high so that it becomes the main conservation area. • Other conservation areas intended for forests in the form of class closure classes covering an area of 929.23 ha. • Potential areas to be developed and planted with oil palm area of 1,006.16 ha. The area includes a 929.23 ha shrub, an open land area of 36.89 ha and a mixed garden covering an area of 40.04 ha. • Existing areas have been planted with oil palm in PT AWL's plasma garden covering 291.58 ha.

GHL emission projections in PT AWL's plasma plantation only include emissions originating from garden activities because the new PT AWL plasma plantation area will carry out development activities so that it does not yet have a Palm Oil Mill (PKS). In practice, the main parameters that are part of the emission calculation are divided into two categories, namely contributors to emissions (emission sources) and emission absorber (emission credit). Emission contributors originating from garden activities include: 1). Carbon in lost biomass (release) during land clearing, 2). Emissions originating from the activities of making, transporting, and using fertilizer include N₂O production, and 3). Cultivation activities on peatlands. Emission absorbers (emission credit) originating from garden activities include: 1). Absorption of carbon in the form of biomass of oil palm plants, and 2). Carbon absorption in forested conservation areas both NKT/HCV areas and high carbon areas. Because PT AWL has not yet carried out planting and oil palm production activities, its emission contributors only come from land clearing activities. In addition, the manager has not carried out maintenance and other farming processes

in managing the garden so that the source of emissions only comes from land cleaning. The results of the analysis of GHK emission projections at PT AWL for the proposed scenario can be seen in the following table:

Description	GHG Projection according to scenario					
	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Scenario 6
Land Conversion	197,130.78	178,197.04	159,263.30	140,329.56	121,395.82	102,462.08
CO2 Emission from Fertilizer	0	0	0	0	0	0
N2O Emission	0	0	0	0	0	0
Peat Oxidation	0	0	0	0	0	0
Fuel Consumption	0	0	0	0	0	0
Plant Absorption from Existing Oil Palm Plantations	-38,523.55	-38,523.55	-38,523.55	-38,523.55	-38,523.55	-38,523.55
Absorption in Conservation Areas	-644,935.06	-663,868.80	-682,802.54	- 701,736.28	- 720,670.02	- 739,603.76
Plantation Emission netto (tCO2e)	- 486,327.83	- 524,195.31	- 562,062.79	- 599,930.27	- 637,797.75	- 675,665.23
Plantation Emission netto (tCO2e/ha)	-107.84	-116,23	-124,63	-133,03	-141,42	-149,82

Optimal Development Scenario

The results of the GHG emission projection analysis for the 6 proposed scenarios as shown in the table above show different net emission values. In addition to emission values, the effectiveness of area use must also be considered in determining the scenario to be used for the development of oil palm plantations in PT AWL's plasma plantation area. Based on the results of these considerations, scenario 1-3 is the scenario that is best implemented by PT AWL in carrying out the development and development of oil palm plantations in its plasma plantations. In scenario 1, the conservation area covers all areas designated as HCV/HCV areas, while for scenarios 2 and 3 there is an additional area to be used as a conservation area, which is as much as 10% and 20% of the total area of shrub land cover. An overview of the development area based on scenarios 1 to 3 can be seen in the table. If scenario 1 is chosen, then this is acceptable considering that the area designated as the HCV/HCV area covers almost 50% of the total area of PT AWL's plasma plantations. However, if you want to maximize the

potential for carbon sequestration, then scenarios 2 and 3 can be taken into consideration because they still pay attention to the factor of the effectiveness of land use for later conservation and oil palm production activities.

Date of Assessment: 30 Aug – 4 Sep 2021

GHG Calculator: Version 3

Name of Assessor: Cecep Saepulloh (Team Leader), Nanang Khairul Hadi, Rhama Budhiana, Dwi Budi Siswantono, Aslinda Nur Mazida, Roro Dyah Tri Astuti, Marlan, Filian Basri Irpan, Nofrian Adhitya Wardhana, Riyanda Yusufdiyaga, Hendry Pramono

Assessor Designation and Company: Remark Asia (Best on letter # 164/BAOM/RMA-AWL/HCV-HCS_Int-SIA-LUCA-CSA-SOIL-FPIC/VIII/2021 on 27 Aug 2021)

Section 8: Land Use Change Analysis (LUCA)

RSPO Note: This section will be used to analyse that there has been no land clearing in the area before the NPP is submitted. Arrangement should be following the proxy dates indicated in section 2.2.7 of the current NPP Document. Please ensure that the minimum resolution is 300 dpi. What are the methodology(ies), people involved in the process, date of assessment and findings? Note: Should an assessment carried out by internal staff, just fill the name of the staff and his/her designation.

Assessment Method

Effective 1st January 2010, RSPO members are required to follow the New Planting Procedures (NPP) policies before starting land management, including anything related to development, for the planting of new oil palm plantations. The NPP policy is intended so that new oil palm plantings do not have a negative impact on HCV, HCS, peatland, fragile and marginal lands, or impact on the rights of local communities, including their rights to the land to be developed. Therefore, the company carried out a Land Use Change Analysis (LUCA) as one of the requirements in the 2021 NPP to identify the presence or absence of changes in primary forest or any area needed to maintain or enhance HCV since November 2005 and HCS since November 2018.

This land use change analysis was carried out in the Plasma area of the PT Agro Wana Lestari concession, in accordance with the Decree of the Head of the Investment and One-Stop Service Office of Kotawaringin Timur Regency No. 01/DPMPSTP/IL/I/2020 dated January 7, 2020, covering an area of ± 4,509 ha (± 45,098,151.58 m²), where this plantation has an operational permit for an area of 4,509.82 ha. Administratively, these plantations are in Tanah Haluan Village, Tumbang Keminting Village, Tumbang Penyahuan Village, Tumbang Sapia Village, Tumbang Batu Village, Tumbang Torung Village, Tumbang Getas Village and Lunuk Begantung Village. All of them are in Bukit Santuai District, East Kotawaringin Regency. The assessment standard refers to the principles and criteria since the RSPO was first formulated until the latest update, which includes:

- a) Before November 2005 (RSPO Principles & Criteria first applied).
- b) November 2007 (deadline for trial implementation of the RSPO Principles & Criteria).
- c) Before 1 January 2010 (start of the introduction of the RSPO New Planting Procedure).
- d) After May 2014 (After the New Planting Procedure was enacted).

The stages in the land use analysis change process refer to the Remediation and Compensation Procedure document issued by RSPO. The procedure for each stage includes:

- 1) Procurement process, including downloading of satellite imagery data with specifications of a minimum resolution of 30 meters.
- 2) Pre-processing or initial processing, including atmospheric effect correction, geometric correction and satellite image data processing operations from the period to be used.

3) Interpretation, including the process of interpreting land cover from satellite imagery data that has been processed which refers to the vegetation coefficient according to remediation and compensation procedures. This interpretation process is carried out in 3 stages, including:

4) Detection carried out to find out data that is visible or not or determination of the presence of an object globally.

5) Identification, intended to recognize an object depicted in the image through recording by the sensor. This stage is semi-detailed and yet can recognize objects based on three main characteristics, namely (a) Spectral characteristics, which are characteristics produced by the interaction between electromagnetic energy and objects. In this feature the object is expressed using hue and color. (b) Spatial characteristics can recognize objects using elements of interpretation which include hue, shape, pattern, size, shadow, association, and texture because these characteristics reveal the type of earth's surface. (c) Temporal characteristics, related to the object at the time of recording, for example the record of the river in the rainy season looks bright while in the dry season the river looks dark.

6) Analysis, learning activities and analysis of identification results so that they can be produced in the form of tables, graphs, or thematic maps.

7) Ground truthing (field verification), includes verification activities in the field by proving field conditions on the results of the initial interpretation of satellite imagery of land cover.

8) Image validation and re-interpretation, the process of validating satellite image results from previous interpretations by making corrections referring to the results of field checks.

9) Make a map of the results of the Change analysis, the process of making a layout of the land cover results map that has been validated with the results of field checks to be displayed in the report.

This LUCA document was created with the intention of providing information on land cover changes that need to be attached to the RSPO remediation and compensation process, with the aim of:

a) Identify land cover and calculate the area of each land cover and its changes over a certain period of time,

b) Identify the type of land cover that changes based on the value of the vegetation coefficient in a certain time period, and

c) Calculating the area for which compensation and remediation will be charged due to land clearing before the HCV/HCV assessment is carried out.

This land use change analysis was carried out in the Plasma concession area of PT Agro Wana Lestari, in accordance with the Decree of the Head of the One Stop Investment and One Stop Service Office of East Kotawaringin Regency No. 01/DPMP/TSP/IL/1/2020 dated January 7, 2020, covering an area of $\pm 4,509$ ha ($\pm 45,098,151.58$ m²), of which this plantation has an operational permit covering an area of 4,509.82 ha. Administratively, these plantations are located in Tanah Haluan Village, Tumbang Keminting Village, Tumbang Penyehuan Village, Tumbang Sapia Village, Tumbang Batu Village, Tumbang Torung Village, Tumbang Getas Village and Lunuk Beuntung Village. All of them are located in Bukit Santuai District, East Kotawaringin Regency. The assessment standard refers to the principles and criteria since the RSPO was first formulated until the latest update, which includes:

a) Prior to November 2005 (RSPO Principles & Criteria first applied).

b) November 2007 (the deadline for the pilot application of the RSPO Principles & Criteria).

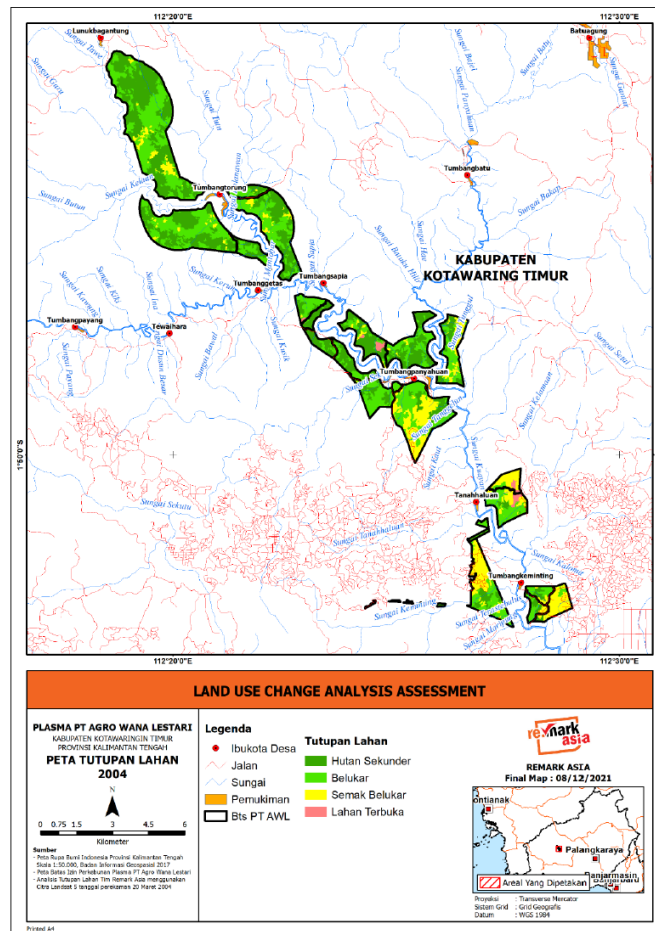
c) Before January 1, 2010 (started the introduction of the RSPO New Planting Procedure).

d) After May 2014 (After the New Planting Procedure is enacted).

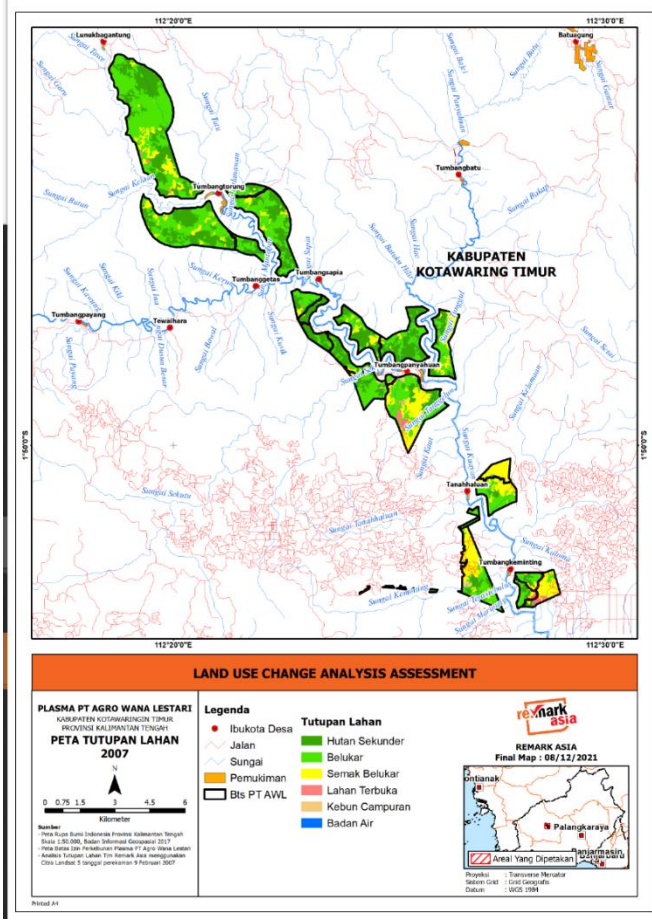
This study was conducted to obtain data and information as accurately as possible, so it is recommended to use high to very high resolution image maps derived from the recommended coverage. In addition, image variability

that may arise requires the initial image analysis process to be carried out by combining image maps from various sources (eg Landsat, 30 m resolution; SPOT, 10 m resolution; or RapidEye, 5 m resolution). The initial analysis in this study used high-resolution image maps close to the period set by the RSPO because the RSPO recommended coverage map was not available.

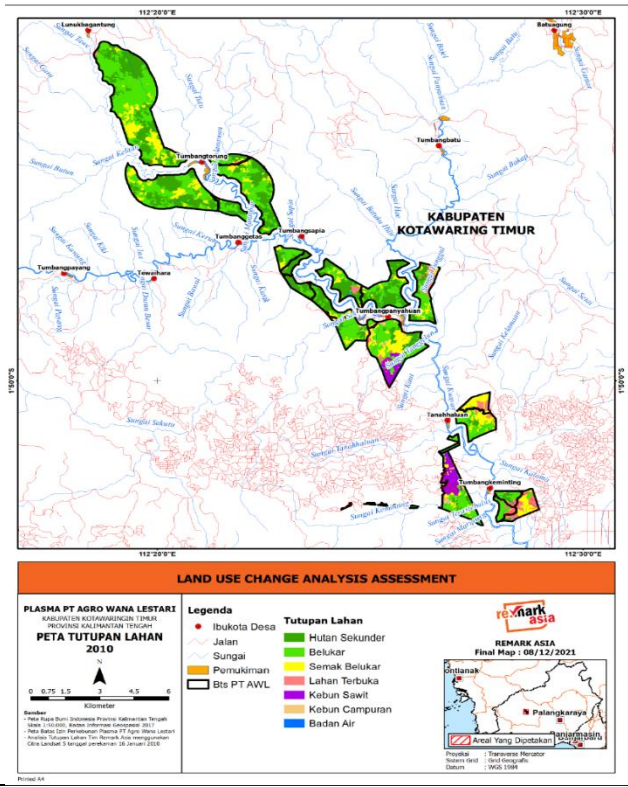
Satellite image coverage data period	Satellite image data used	Cloud Cover (%)	Satellite image data source
Citra satelit periode sebelum November 2005	Landsat 5 TM akuisisi tanggal 20 Maret 2004	<10%	http://earthexplorer.usgs.gov
Citra satelit periode November 2005 - November 2007	Landsat 5 TM akuisisi tanggal 9 Februari 2007	<10%	http://earthexplorer.usgs.gov
Citra satelit periode November 2007 - Desember 2009	Landsat 5 TM akuisisi tanggal 16 Januari 2010	<10%	http://earthexplorer.usgs.gov
Citra satelit periode 1 Januari 2010 – 9 Mei 2014	Landsat 8 OLI/TIRS akuisisi tanggal 16 Desember 2015	<10%	http://earthexplorer.usgs.gov
Citra satelit periode 10 Mei 2014 - penilaian HCV dilakukan	Sentinel 2 akuisisi tanggal 2 Juni 2020	<10%	http://earthexplorer.usgs.gov



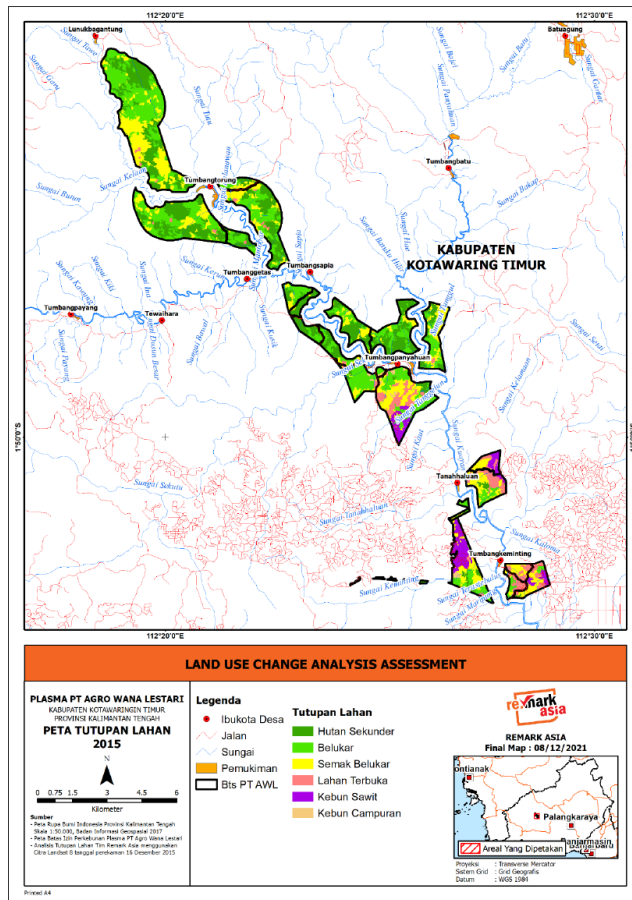
Satellite imagery landsat 5, 2004



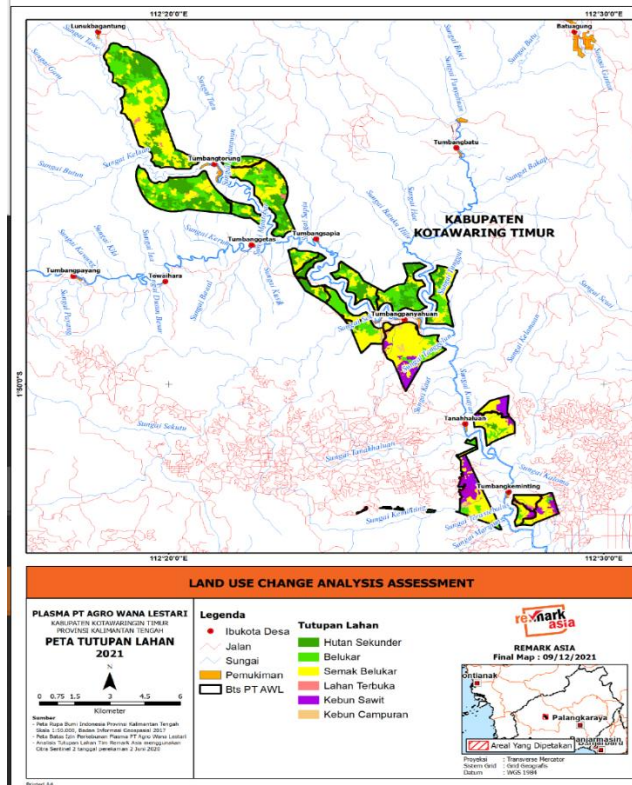
Satellite imagery landsat 5, 2007



Satellite imagery landsat 5, 2010



Satellite imagery landsat 5, 2015



Satellite imagery landsat 5, 2021

Conclusion

- a) There were 6 types of land cover found in the Plasma area of PT AWL and some of them were not primary forest. Changes in land cover generally occur due to a combination of various reasons, including the need for land for plantations by local residents, and timber extraction.
- b) There is no compensation area in the PT AWL Plasma area. Although there was a change in land cover to oil palm, the change occurred in the land cover class of shrubs and open land with a vegetation coefficient of 0.
- c) There is remediation for riparian areas or river borders of 0.10 ha from land clearing carried out by the community.

Recommendation

In the Palma land clearing activities, PT AWL is expected not to open areas that are designated as areas with high conservation value.

Date of RSPO approval as satisfactory:

Name of Assessor: Nanang Khairul Hadi (Team Leader), Hendry Purnomo, Riyanda Yusfidiyaga

Assessor Designation and Company: Remark Asia (Best on letter # 164/BAOM/RMA-AWL/HCV-HCS_Int-SIA-LUCA-CSA-SOIL-FPIC/VIII/2021 on 27 Aug 2021)

Section 9: Conclusions

RSPO Note: Please conclude all the findings of the assessment and how this will be translated into a management plan. If there is any known significant issue, the RSPO member needs to acknowledge its existence and ensure it is a priority for the management to address those issues.

Based on field visit to Plasma AWL area, known that the wishes of the communities whose plasma areas are identified as HCV, are still to plant oil palm. However, PT AWL remains committed to maintaining the HCV area as recommended by the HCV assessor. the company will approach the community for the plasma area identified as HCV. the company is committed to monitoring the clearing of the area according to the recommendations of the HCV assessor after the NPP is approved.

It is the opinion of the SGS Certification and the lead auditor that PT AWL Plasma has complied with the RSPO New Planting Procedures enforced on 2015, version 3 and confirmed that the assessments and plans are comprehensive, professional and compliant with RSPO requirements. Based on the review of the reports for Social Environment Impact Assessment, HCV Assessment, Land Usage Change Analysis and High Carbon Stock and GHG Assessment that include the analysis of the carbon stock on land use change, carbon emissions and sequestration.

Section 10: Confirmation of Report

RSPO Note: This section is used to confirm that all findings are accepted by the grower company and will be responsible for its ownership and development process for as long as it is within their control.

Formal Signoff by The Company

This document is the Summary of Assessments and Management Plan for the New Planting Procedures for Plasma PT Agro Wana Lestari (PT AWL) concession under the company management.

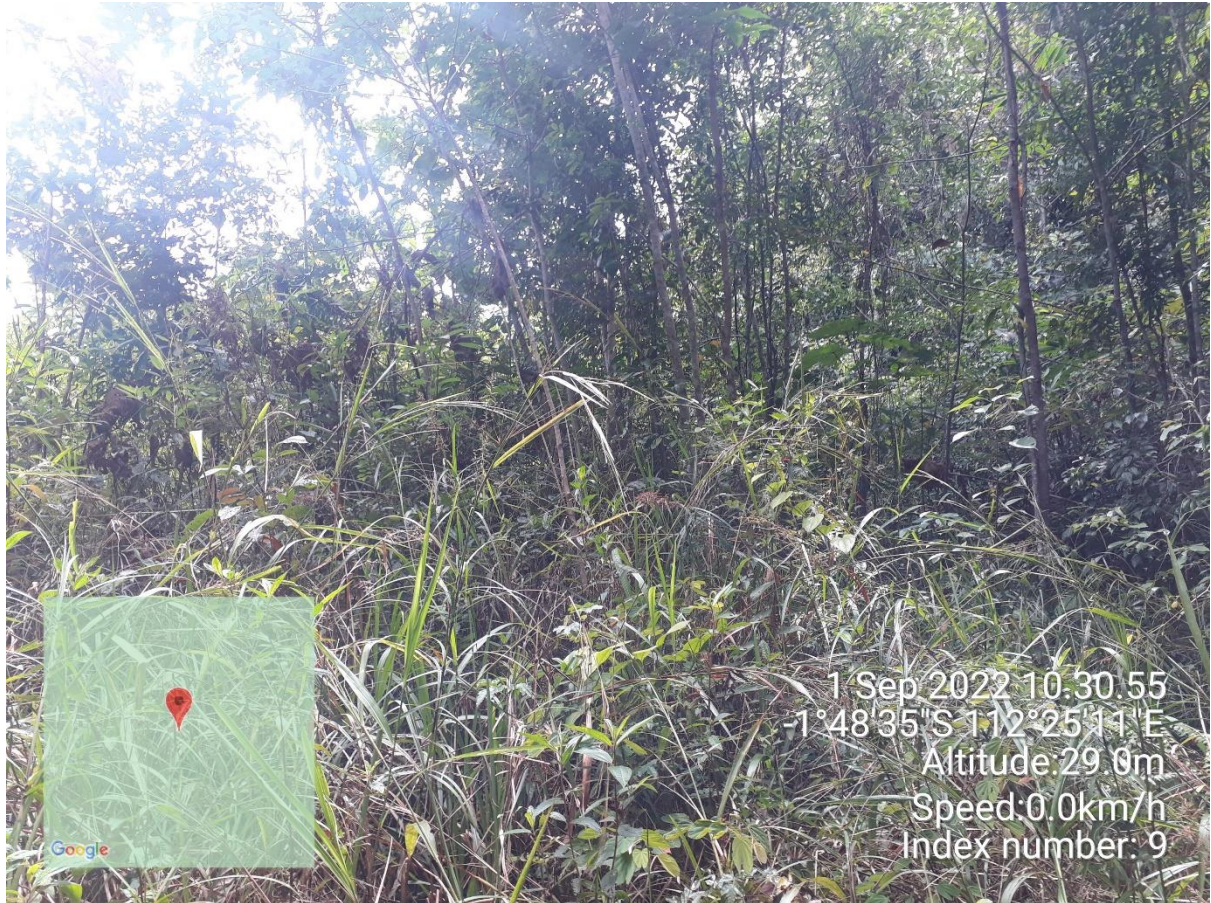
PT Agro Wana Lestari



Donald Ginting
Senior Manager Sustainability

Date of Completion	12 Sep 2022
Signature	
Name	Donald Ginting
Position	Senior Manager Sustainability

Onsite condition in proposed area for new planting. Take on 1 Sep 2022.



Tumbang Penyahuan village location, Coordinate Latitude : 1° 48' 33.99\" S and Longitude 112° 25' 10.47\" E



Tanah Haluan village location, Coordinate Latitude : 1° 50' 51.33" S and Longitude 112° 27' 4.12" E



Lunuk Bagantung Village location, Coordinate Latitude : 1° 42' 49.86" S and Longitude 112° 19' 12.04" E