RSPO New Planting Procedure

SUMMARY OF ASSESSMENT REPORTS AND MANAGEMENT PLANS

Lima Puluh Estate - PT Socfin Indonesia

November 2016

Contents

Chapter 1

1. Overview and background

Lima Puluh Estate is situated in Sub-districts of Lima Puluh and Talawi, District of Batubara, Province of North Sumatra, Indonesia. It comprises 1.601,18 ha of land currently planted with rubber that has been planted since 1920s. The estate is situated in two separate locations (Figure 1.1). From the 1.601.18 ha, 1.588 ha will be converted gradually into oil palm plantation and the conversion will be finished in 2025 (Table 1.1 and Figure 1.2). The conversion rate ranges from 141.00 ha per annum to 257.00 ha per annum.

Figure 1.1: Location of Lima Puluh Estate

The gradual conversion is intended to avoid a drastic change in the environment, in particular the air temperature, surface run-off, and soil erosion, and in the issues related to social factors. The defect of this approach is that it takes a longer period of time, and so the period of the impacts. However, sustainability is generally associated with more predictable and stable environment. In addition, gradual conversion is much easier to manage.

Table 1.1: Conversion Plan

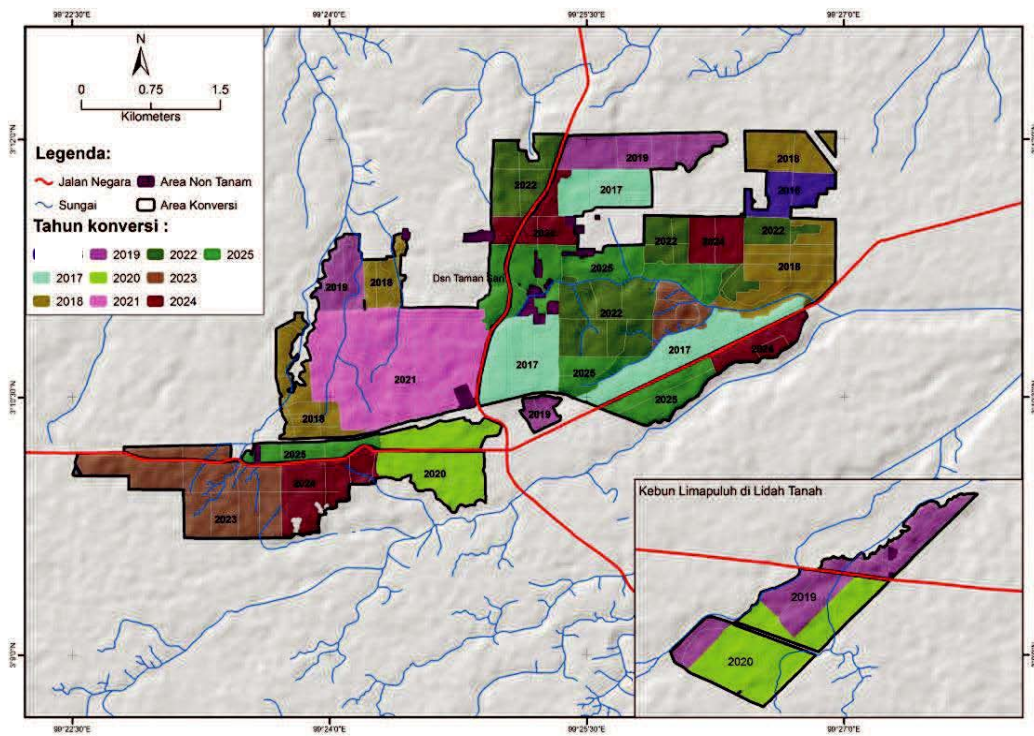| Year	Conversion to oil Palm (ha)	Cumulative plantation (ha)
2017	257,00	257,00
2018	142,61	399,61
2019	170,72	570,33
2020	168,47	738,80
2021	180,31	919,11
2022	209,00	1128,11
2023	162,00	1290,11
2024	141,00	1431,11
2025	156,89	1588,00

Figure 1.2: Conversion plan

The New Planting Procedure (NPP) requires any company of the RSPO member to provide a summary of SEIA, HCV assessment, soil and topography analysis, carbon stock assessment and GHG emissions, Land Use Change Analysis (LUCA), and FPIC processes. PT Sucfindo, as a member of the RSPO, prepares this summary to fulfil the requirement.

Chapter 2

2. Assessment process and methods

2.1 SEIA

The SEIA study was conducted from May 14 to June 14, 2016. The study was done in four steps:

1. Desk study: to establish the scope of the study, to identify hypothetical impacts, to determine high priority locations need to be checked in the field, to design survey and study process.

2. Field survey: to collect data needed and to verify if the hypothetical impacts are still valid, need to be removed or altered. The survey was divided into three steps, namely opening meeting, field survey, and closing meeting (Table 2.1).

Table 2.1: Data and location of SEIA study activities

Activity	Time	Location
Desk study	May 14-15, 2015	Aksenta Office, Jakarta
Travel to location	May 16, 2016	Jakarta - Medan - Dolok Masihul
Opening meeting	May 16, 2016	Bangun Bandar Office, PT Socfindo
Field survey	May 17-19, 2016	Lima Puluh Estate
Closing meeting	May 21, 2016	Tanah Gambus Office, PT SOCFINDO

3. Impact analysis: to establish the most probable impacts, both negative and positive, from each activity.

4. Report writing: to document the process, results obtained, and recommendations suggested for monitoring and managing the impacts.

Secondary data resulted from either field survey or desk study are an important part in measuring both positive and negative impacts. Factors that can impact physical, biological, and socio-economic of environment are analyzed using those secondary data. Factors that can affect physical component of an environment are changes in erosion value in mineral soils, especially in land with slope greater than 8% and high erosion level; erosion on water cliff or rivers that can increase kinetic flow due to surface runoff increase; sedimentation resulted from erosion; changes in surface runoff due to land opening; and, changes in soil fertility due to erosion and organic reduction due to surface runoff increase.

Factors that can affect biological component of environment analyzed are wildlife and its habitat, which includes HCV area. Species under category of rare, threatened, and endangered are mainly the focus of the analysis. Assessment used reconnaissance survey to check important wildlife. Factors that can affect socio-economic analyzed are mainly focused toward workers placement and social distress in local community when conversion activities are conducted.

The assessment was performed by four experts, namely Nandang Mulyana, Iwan Setiawan, Yanto Ardiyanto, and Aulia Bahadhori Mukti. The first two assessors are Provisional Licensed, ALS15037NM and ALS15039IS consecutively. The four experts cover expertises of socio-cultural assessment, biodiversity assessment, environmental services assessment, and GIS (Table 2.2).

Table 2.2: Resume of assessors and their credentials

Name	ALS License	Expertise
Nandang Mulyana (nandang@aksenta.com)	Provisional ALS15037NM	Social and cultural field; has been doing HCV assessment since 2009
Iwan Setiawan (iwan@akasenta.com)	Provisional ALS15039IS	Wildlife research and survey, wildlife management, ornithologist, community biodiversity assessment facilitator, participation mapping; has done HCV assessment since 2012
Yanto Ardiyanto (yanto@aksenta.com)	N/A	Hydrologist, soil conservation, spatial analysis and remote sensing, water management system; has done HCV assessment since 2012
Aulia Bahadhori Mukti (aulia@aksenta.com)	N/A	Spatial analysis and remote sensing, land cover change analysis

2.2   HCV assessment

The HCV assessment summarized in this report took advantage of Common Guidance for the Identification of HCV (Brown et. al, 2013), HCV Assessment Manual (HCVRN, 2013), and Identification of High Valued Conservation Guidance in Indonesia (Consortium HCV Toolkit Revision Indonesia, 2008). Step-wise screening is used to synchronize referenced information. The referenced information used for assessment of HCV1-3 includes global, regional, and national; ground verification is conducted after all information is synchronized. HCV4-6 is conducted

and ground verified with emphasize on landscape or local region (Brown et. al, 2013).

The HCV assessment includes pre-assessment, field data gathering, stakeholder consul-tation, and HCV mapping and analysis. The pre-assessment was mainly done by interpreting satellite image to identify the probable areas that meet the criteria of HCV establishment. Hence, the main output of the pre-assessment is the hypothetical HVCs map that guide the HCV team in collecting data in the field. Field data and information gathering was focused onto areas most likely have HCV based on pre-assessment.

1. Mapping together with management of PT. Socfindo to focus target area for HCV ob-servation. Persons whom have deep knowledge regarding the targeted area have also contributed in this activity.

2. Field verification to ensure whether the interpretation of land cover resulted from satellite image is accurate.

3. Gathering field data to ensure whether assessed areas are areas with HCV. Field data for HCV5-6 are conducted by rapid assessment that uses purposive interview and direct observation at the chosen areas.

4. Interviewing local communities to further validate the existence or non-existence of HCV in the targeted areas. HCV5 was specifically conducted using by-design interview.

A stakeholder consultation or face to face dialogue with key stakeholders' representative was conducted during field assessment. The main goal of stakeholder consultation was to communicate process and early findings on HCV field assessment, acquire additional data, information, and further validation, and to acquire attention, feeling of unrest, and inputs to construct report and recommendation HCV mitigation plan. The assessment was conducted from May 14, 2016 to May 21, 2016, but the field assessment was done from May 14 to May 21, 2016 (Table 2.3).

Area boundaries with characteristics similar between field observation and satellite image are digitized onto the working map. From the digitize process, closed polygons that represent indicated boundaries of HCV areas are produced. Indicated boundaries of HCV areas are then validated in the field by taking coordinate points of the indicated boundaries of HCV areas. From the validation process, revisions over the indicated boundaries are then re-mapped.

The assessment was performed by four experts, namely Nandang Mulyana, Iwan Seti-awan, Yanto Ardiyanto, and Aulia Bahadhori Mukti. The first two assessors are Provisional Licensed, ALS15037NM and ALS15039IS consecutively. The four experts cover expertises of socio-cultural assessment, biodiversity assessment,

environmental services assessment, and GIS (Table 2.4). Besides performing direct observation and survey in the field, the team also collected data and information from various sources to strengthen the analysis.

Table 2.3: Date and location of HCV study activities

Activity	Time	Location
Preparation and pre-assessment	May 14-15, 2016	Jakarta
Opening meeting and HCV basictraining and participation mapping	May 18, 2016	Meeting room at Kebun Tanah Gambus, PT Socfindo , Kec. Lima Puluh,Kab. Batubara
Field survey	May 19-21, 2016	Lima Puluh plantation
Data recap and preparation of presentation material for public consultation closing meeting, and interim report	May 19-20, 2016	Guest house at Kebun Tanah Gambus
Public consultation	May 20, 2016	Meeting room at Kebun Tanah Gambus, PT Socfindo , Kec. Lima Puluh,Kab. Batubara
Closing meeting and interim report	May 21, 2016	Meeting room at Kebun Tanah Gambus, PT Socfindo, Kec. Lima Puluh,Kab. Batubara
Drafting report	May, 28 to 28 June,2016	Jakarta

2.3 Soil and topography

Soil data was derived from soil survey done by PT Sucfindo in 2008. While the topographic information was derived from analysis of the topographic map and field verification.

2.4 LUCA

Desk study of LUCA is heavily relied on interpretation of satellite image to identify and categorize land cover. On the basis of the land cover, sampling method, number sample points, and their distribution are determined. There were 35 sample points observed in the field with the distribution as follows: 25 points in the rubber plantation, 5 points in settlement area, and 3 points in bare land. The placement of the sample points followed the *stratified purposive sampling*.The field verification was

done to check whether or not the interpretation is correct. The LUCA was conducted from mid May to mid June 2016.

Field verification activities mainly are to directly observe areas chosen based on survey design with emphasize on locations whose land covers are similar with land covers in November 2005 to acquired the loss of land covers. If land covers in the chosen locations do not represent land covers in 2005, then sampling point locations are taken outside of assessed area.

Land covers based on satellite image analysis are validated usingKappa Accuracy and Overall Accuracy. Comparing field validated land cover data on land cover data based on satellite image, contingency matrix used to conduct change detection analysis is given in Table 2.6.

Referring to RSPO document: Remediation and Compensation Procedure (RaCP) Re lated to Land Clearance Without Prior to High Conservation Value (HCV) Assessment version 12 November 2015, page: 11, Tabel 2.7 provides the coefficients to process land cover maps into maps that will show liabilities for PT. Socfindo.

Table 2.4: Resume of assessors and their credentials

Name	ALS License	Company	Role	Expertise
Nandang Mulyana (nandang@aksenta.com)	Provisional ALS15037NM	Aksenta	Team leader; HCV5 and HCV6 assessor	Social and cultural field; has been doing HCV assessment since 2009
Iwan Setiawan (iwan@aksenta.com)	Provisional ALS15039IS	Aksenta	Team member, biodiversity assessment (HCV1-3)	Wildlife research and survey, wildlife management, ornithologist, community biodiversity assessment facilitator, participation mapping; has done HCV assessment since 2012
Yanto Ardiyanto (yanto@aksenta.com)	N/A	Aksenta	Team member, environmental service sassessment (HCV4)	Hydrologist, soil conservation, spatial analysis and remote sensing, water management system; has done HCV assessment

| | since 2012 |

Aulia Bahadhori Mukti (aulia@aksenta.com)	N/A	Aksenta	Team member, GIS specialist	Spatial analysis and remote sensing, land cover change analysis

2.5 FPIC process

FPIC is a requirement in HCS Approach. FPIC was conducted by Aksenta team using document review, interview, and field observation. Document review was done on all documents related to legal matters. Local communities were interviewed as required when conducting FPIC. Guide for RSPO members (2015) (Colchester et all, 2015) and HCS Approach Toolkit (2015) were the main references when conducting FPIC assessment.

To verify whether decision making has fulfilled FPIC can be done by (i) a government body if FPIC has been required by regulation, (ii) independent auditor or assessor if FPIC is not required by regulation but is part of an accepted standard by third parties (Colchester and Ferrari, 2007). FPIC implementation in HCS assessment refers to document named Free, Prior, and Informed Consent: Guide for RSPO members (2015) (Colchester et all, 2015).

There are several steps necessary when doing HCS assessment. First step is to use high quality satellite data for the area being assessed and plot validation in the field to determine the vegetation class when identifying potential forest area with high carbon stock.

The second step is to identify forest area that can still be preserved or return to its eco-logical function as a forest. In this step, the process began with mapping local communities' land by their participation so that areas being used by local communities are properly identified. The last or third step is to acquire consent and support from the local and traditional communities in attempt to preserve, manage, and protect the relevant forest.

Table 2.5: Resume of main data or information sources

HCV	Main data/information source
1,2,3	Map of area licensed for use to PT. Socfindo. Forest and water conservation map of Sumat-era Utara (SK Menhut No. 579/Menhut-II/2014 tanggal 24 Juni 2014). Spatial Plan Map of Province Sumatera Utara (Perda Provinsi Sumatera Utara No. 7/2003, tanggal 15 September 2003). Spatial Plan Map of District Serdang Bedagai (Perda Kabupaten Serdang Bedagai No. 12/2013, tanggal 7 Oktober 2013). Spatial Plan Map of District Batubara (Perda Kabu-paten Batubara No. 10 Tahun 2013). Indicative map new permit delays (PPIB) forest uti-lization, use of Forests and forest area designation change and other land

	use, revision IX (SK MenLHK No. 5385/MenLHK-PKTL/IPSDH/2015, tanggal 20 November 2015). Peatland distri-bution map, area, and carbon content in Kalimantan (Wetland International-Indonesia Pro gram.2004). Land cover from Landsat 8 image (USGS, Maret dan April 2016). Field guide of mammals in Borneo, Sabah, Sarawak and Brunei Darussalam (Payne et al, 2000). Pri-ority sites for conservation in Sumatra: Key Biodiversity Areas (CI Indonesia, Departemen Kehutanan RI, LIPI, Universitas Andalas, Universitas Syiah Kuala, World Conservation Soci-ety, 2007). Birds in Sumatera, Jawa, Bali, and Kalimantan, LIPI dan BirdLife Indonesia Pro-gramme (MacKinnon et all, 2000). Indonesian and Papua New Guinea turtles and aligators, with notes on types in South East Asia, IUCN, ITB dan World Bank (Iskandar, 2000). Pan-duan Lapangan Amfibi Kawasan Ekosistem Leuser [amphibians field guide Leuser ecosys-tem] (Mistar et al, 2003). Status Keterancaman Species [endangered species status], Down-loaded in July 2013 from www.iucnredlist.org. Appendices I, II and III, valid from 9 May 2016. UNEP, Geneva, Switzerland. Downloaded in May 23, 2016. (CITES, 2013). The Ecology of Sumatra. The Ecology of Indonesia Series, Volume 1. Periplus Edition, HK. (Whitten et al., 2000). Endemic Bird Area Factsheet: Sumatera and Peninsular Malaysia (BirdLife Interna-tional, 2012). Downloaded from http://www.birdelife.org on August 29, 2012. Important Bird Areas in Asia: Key Sites for Conservation. (Birdlife Conservation Series No. 13. Cambridge, UK. (Birdlife International, 2004). Area Ramsar di Indonesia [areas of Ramsar in Indonesia], http://www.ramsar.org/cda/en/ramsar-pubs-notes-anno-indonesia/
4	Map of area licensed for use to PT. Socfindo. Landsat 8 image (USGS, Maret dan April 2016). Digital Shuttle Radar Topography Mission Elevation Data (USGS, 2004). Peta Sistem Lahan [land system map] - Land System (RePPProt, 1989). Altitude map (result from processing SRTM data). Slope class map (result from processing DEM SRTM data). Land cover map (result from processing Landsat 8 image, December 2015)
5,6	Map of area licensed for use to PT. Socfindo. Serdang Bedagai dalam angka 2015 [Serdang Berdagai in numbers 2015] (Statistics Indonesia Kabupaten Serdang Bedagai, 2016). Keca-matan Dolok Masihul Dalam Angka 2016 [Dolok Masihul districts in numbers 2016] (Statistics Indonesia Kabupaten Serdang Bedagai, 2016). Batubara dalam angka 2015 [Batubara in num bers 2015] (Statistics Indonesia Kabupaten Batubara, 2016). Kecamatan Lima Puluh dalam angka 2015 [Lima Puluh districts in numbers 2015] (Statistics Indonesia Kabupaten Batubara, 2016). Land cover from Landsat 8 image (USGS, Maret dan April 2016). Peta sebaran potensi desa di Kecamatan Dolok Masihul,

	Kabupaten Serdang Bedagai [distribution map of potential villages in Dolok Masihul districts, Serdang Berdagai district] (source: Statistics Indonesia). Peta sebaran potensi desa di Kecamatan Lima Puluh, Kabupaten Batubara [distribution map of potential villages in Lima Puluh districts, Batubara district](source: Statistics Indonesia)

Table 2.6. Contingency matrix

		Verification Result			∑pixel	User Accuracy
		A	B	C		
Classified Class	A	X_{AA}	X_{AB}	X_{AC}	X_{A+}	X_{AA} / X_{A+}
	B	X_{BA}	X_{BB}	X_{BC}	X_{B+}	X_{BB} / X_{B+}
	C	X_{CA}	X_{CB}	X_{CC}	X_{C+}	X_{CC} / X_{C+}
∑pixel		X_{+A}	X_{+B}	X_{+C}	N	
Producer Accuracy		X_{AA} / X_{+A}	X_{BB} / X_{+B}	X_{CC} / X_{+C}		

Table 2.7. Vegetation coefficient

Land cover	Coefficient
Primary forest	1.0
Secondary forest	0.7
Thicket	0.7
Agroforestry	0.4
Shrubs	0.0
Bush	0.0
Bare land	0.0

Table 2.8. FPIC schedule

Activity	Time	Location
Desk study	May 14-15 2016	Aksenta office, Jakarta
Trip to location	May 16, 2016	Jakarta to Medan, Medan to Dolok Masihul
Opening meeting	May 16, 2016	Bangun Bandar office, PT Socfindo
Field survey	May 17-19, 2016	Lima Puluh plantation
Closing meeting	May 21, 2016	Tanah Gambus office, PT Socfindo

Table 2.8. FPIC assessors

Name	Expertise and role
Pramitama Bayu	Carbon stock assessment, HCS Approach, Land Use Change Analysis, GIS remote sensing, and spatial analysis. Team leader
Nandang Mulyana	Social impact assessment, social HCV assess ment, and social-economics. Team member.
Sujatnika	Forest and social management, Social impactassessment, Social management, HCV assessment, HCS identification, and FPIC. Project supervisor

Chapter 3

3. Summary of findings

3.1 SEIA

PT. Socfindo has implemented conversion policy of at most 10% of total plantation area per annum. This policy is intended so that conversion activities will not disturb rubber production. There is no serious environmental impact that will be produced from the conversion from the rubber plantation to oil palm plantation. Some of the impacts that may occur include:

1. Physical components. The impacts are mainly resulted from the loss of soil cover, such as increased surface run-off, soil erosion, and sedimentation. Because the area is flat, those impacts are predicted to be very weak. Negative impact mitigation from conversion activities to physical component are focused on soil and water conservation. PT. Socfindo has years of experience and the proper SOP on conserving soil and water.

2. Biological components. The existing rubber plantation has been habitat for certain wildlife. Eliminating the rubber plantation will eliminate habitat of the wildlife and that in turn the wildlife itself. However, there is no critically important species involved (rare, threatened, endangered).

3. Socio-economic components. The main economic activity of the local communities is being a farmer. They work as an employee of PT. Socfindo in palm and rubber plantations for additional income. As employee, they and their family live within the company's rubber plantation. Those in local communities about 5% of total population, who do not have any land to be used for farming, are mostly farm workers. PT. Socfindo plans to involve the local community more in the conversion activities either by employing them or hire them as a contractor to reduce any negative perceptions.

3.2 HCV assessment

The entire estate of Lima Puluh has no HCV of any category. It is just a logical consequence of the fact that the entire area has been planted mono-culturally with rubber for decades and totally controlled by PT Socfindo.

3.2.1 Findings and decision on the absence of HCV

1. HCV 1, HCV 2, HCV 3: Assessment on the area found that the requirements for HCV 1 establishment are not fulfilled. Additionally, during the time of assessment, RTE species such as Symphalangus syndactylus, Hylobateslar, Helarctos malayanus, Manisjavanica, and Ciconiastormi were not found either by plantation caretaker and the people of local community or field observation.

Land cover conditions on the studied area are only in the form of shrubs (36.9%), rubber plants (40.8%), and Bare land (15.3%). There is no natural corridor connecting the studied area with forest.

2. HCV 4: Land physiographic of Lima Puluh plantation to be between 4-55 meters above ocean level. No major body river across the studied area of Lima Puluh plantations. There is no wetland within the studied area.

3. HCV 5: There is no forest within the studied area. The area has already been rubber plantation since 1920s. Local communities are not traditional communities. Basic needs of carbohydrates and animal protein are acquired through purchasing. There are adequate infrastructures such as road, health center, educational facilities, economic activities, energy, and communication, accessible for the communities in the studied area.

4. HCV 6: There no more forest area that provide natural resources or landmarks for the purpose of cultural/ritual or sacred places. The area has been used by various companies in over 100 years. Local communities in the studied area are composed by various ethnicities or have a high cultural diversity. Islam, Christianity, and Catholic are the religions that have influenced cultures within the local communities.

3.2.2 Stakeholder consultation

Consultation is implemented by direct interviewing during field activity and long distance consultation using electronic mail (e-mail). Stakeholders were categorized into groups based on relation and interest to the assessed area and object being assessed. There are 3 groups of stakeholders that have been used to categorize interviewed individual stakeholder. Those groups are local communities, management unit, and environmental organization and academician.

Local communities were interviewed during field survey. Management unit, such as village administrators (village head, village secretary, village development governmental body, and community leader) and plantation management, was interviewed during survey, presentation and pre-assessment analysis, formal meeting in the field, and discussion during public consultation. Environmental organization and academician were interviewed using e-mail.

Exploitation of natural resources, Current locations and conditions of RTE species, and occurred threats were the aspects of HCV 1-3 that were consulted to local communities. The existence of RTE species in the assessed area and its surrounding was consulted to the employees of PT. Socfindo. Interaction or usage of assessed area was consulted to communities. Aspects of biodiversity study of HCV (HCV 1-3) consulted to the local community is on the utilization of local natural resources;

current existence and locations of RTE species, and threats that occur. To the staff / employees of companies consulted about the presence of RTE species in the study area and its surroundings, interactions or utilization of the study area by the public. RTE species distribution in the assessed area was consulted to Head of BKSDA of Sumatera Utara province and Orangutan Information Centre.

Important environmental services directly exploited by communities (HCV 4 aspects) were consulted to local communities. Extreme incidences that have occurred in the assessed area were consulted to company's management or local authority. Assessing HCV 5 and HCV 6, consultation to local communities is a requirement. Consultation to local communities include natural resources exploitation history, basic needs fulfillment and source of income, origin, various local traditions, sacred/religious areas, historical tradition regarding natural resources and its exploitation, past and present status, and possibility into the future. From the aforementioned topics, the most important topic consulted was the existence of interaction between local communities and the assessed area and the response of local communities regarding the conversion of the assessed area into palm plantation.

3.2.3 HCV management areas

Pre-assessment analysis had shown that the entire assessed area situated within region that had been part of commercial agriculture for more than 90 years. The region had been intensively exploited for wood product, rubber plantation, palm plantation, people placement, and infrastructure development. On national scale and landscape, it is very unlikely to find HCV area within the assessed area. The assessed area is located and surrounded by agricultural lands that contributed for the non-existence of high landscape value, especially species diversity.

Majority of pre-assessment results have been confirmed in field survey. Assessed area is located within rubber plantation, palm plantation, and local communities' agricultural land. Therefore, the land covers in the assessed area are in the form of rubber plant, shrubs, and bare land.

Based on public consultation, especially with local communities surrounding the assessed area, all communities interviewed have no concerns or objections over land opening for palm plantation. Thus, the non-existence of HCV area and HCV management area in the assessed area yield no threats that require recommendations for management plan and monitoring.

3.3 Soil and topography

The Estate of Lima Puluh is mostly covered by Typic Dystrudepts and followed by Typic Eutrudepts (Figure 3.1). The former is less fertile (lower pH) than the latter. The entire area is flat with a slope less than 8% as a part of dry low land ecosystem (Figure 3.2). Soil erosion risk should not be a significant threat.
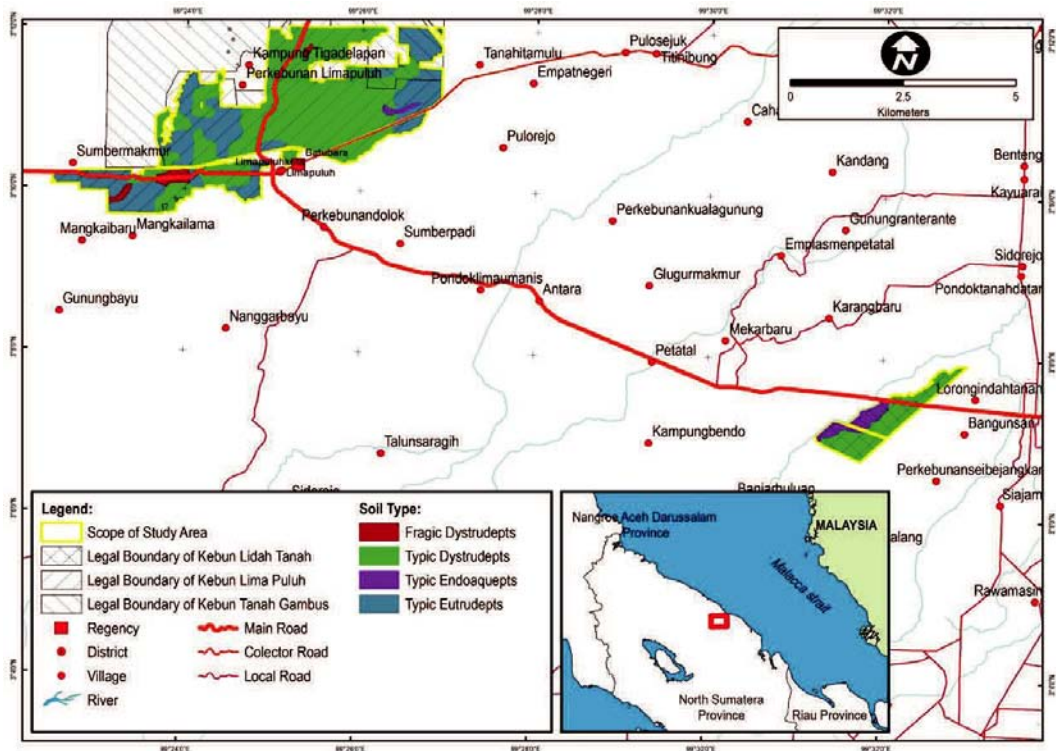
Figure 3.1: Soil of Lima Puluh Estate

3.4 LUC analysis

The size of area planned to be converted from rubber plantation into palm plantation is 1,706.3 ha (size is based on GIS measurement by Aksenta). Table 3.1 shows the changes in land covers since November 1, 2005. From the table, settlement area make a consisten 1.34% of total area to be converted. Bare land makes about 4.36% of total area in 2005, then increased to 6.20% of total area in 2007. By 2016, bare land composition in the area becomes 0% of total area 1,706.3 ha. However, in 2014, bare land makes about 5.32% of total area, an increased from 0% of total area in 2010.
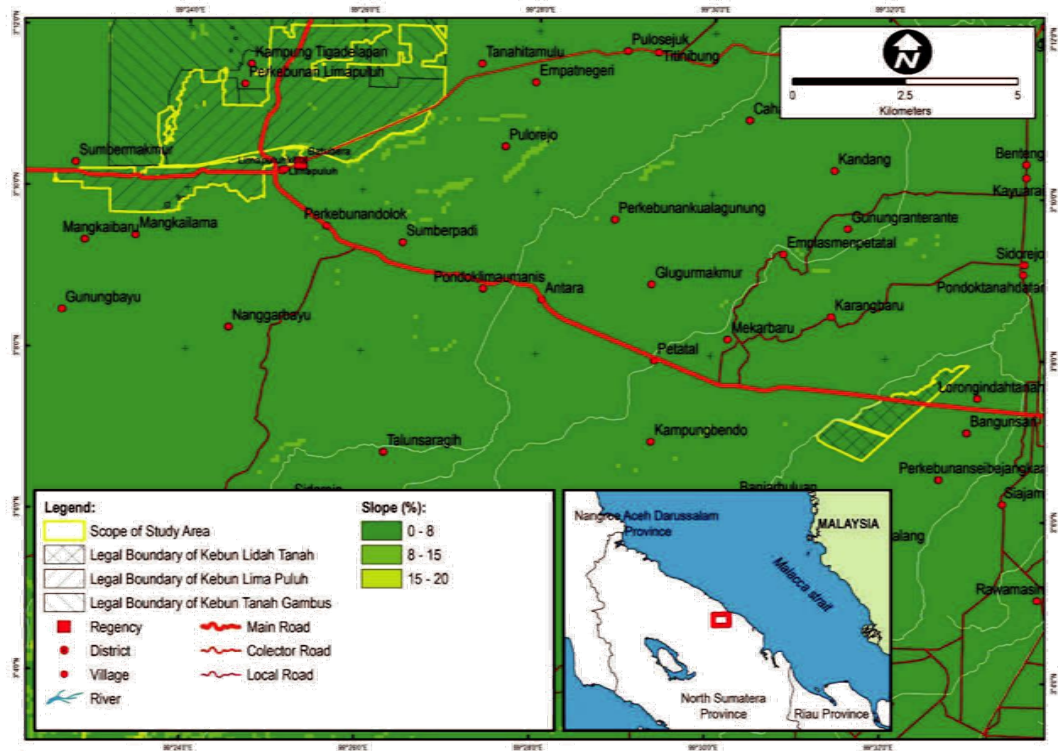
Figure 3.2: Slope of Lima Puluh Estate

The increase and decrease of bare land compositions in those years become the increase and decrease in rubber plants composition. Thus, those bare land covers are nothing more than lands that have been planted and re-planted rubber plants. Table 3.2 strengthens the information provided by Table 3.1 as there are no land covers correspond to the land cover vegetation coefficients considered.

Table 3.3 shows the area size that has become PT. Socfindo responsibility to compensate from 2005 to 2016. There are no lands needed to be compensated from November 1, 2005 to April 12, 2016 (Figure 3.3 dan 3.4).

Table 3.1: Historical land use change

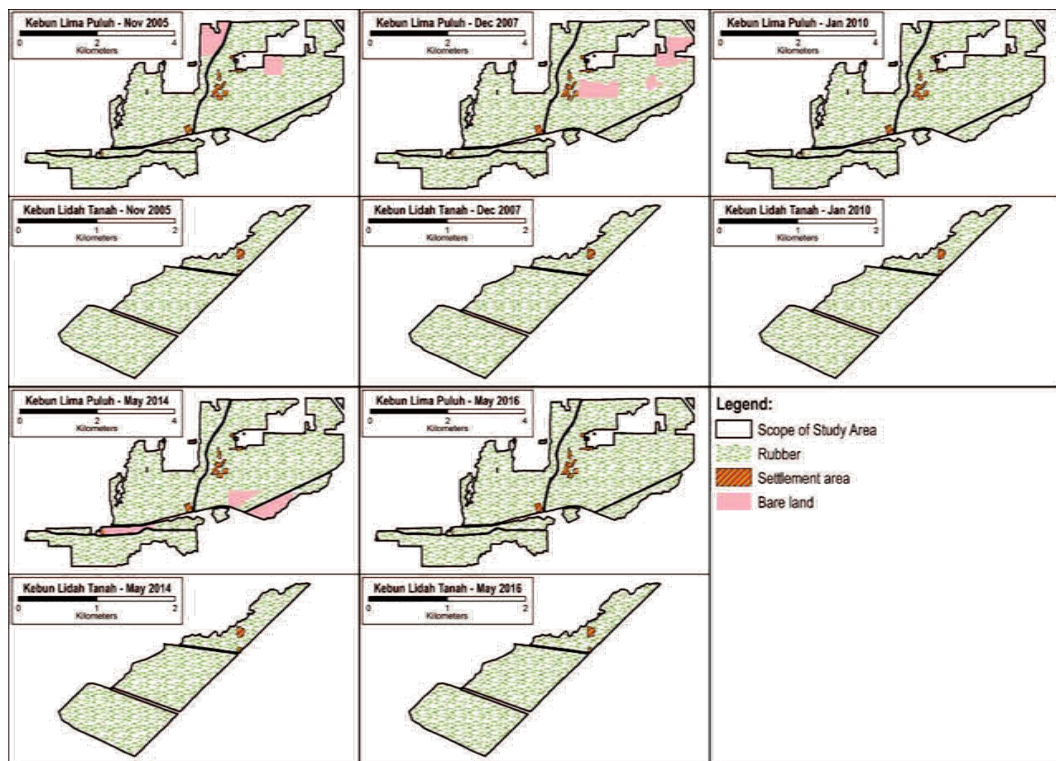| LandCover (ha)	1 Nov 2005	1 Dec 2007	1 Jan 2010	9 May 2014	12 April 2016
Rubber	1,609.0	1,577.9	1,683.4	1,592.5	1,683.4
Settlement	22.9	22.9	22.9	22.9	22,9
Bare land	74.4	105.5	-	90.9	-
Total			1,706.3		

Figure 3.3: Historical land use change raw map

3.5 FPIC process

According to the Free, Prior, and Informed Consent: Guide for RSPO members (2015) it is not necessary for PT Socfindo to conduct FPIC in the studied area, Lima Puluh plantation. The area has already been used for rubber and palm plantations. None of land that is planned to be planted with oil palm is owned by local community. Nevertheless, the company needs to inform the local communities regarding its plan of converting the rubber plantation into oil palm plantation.

From field identification and interview processes, it has been gathered that there are no legal right other than the right of PT. Socfindo within the proposed project area. From the interview process with the local communities, it is cleared that the proposed project area has always been legally controlled by PT. Socfindo before there were any villages existed within the proposed project area. Surrounding communities have all acknowledged the legal boundaries of proposed project area controlled by PT. Socfindo.

Since there are no villages/housing estate within the proposed project area either individually or by group, thus referring to Free, Prior, and Informed Consent: Guide for RSPO members (2015), there is no need for FPIC to be conducted.
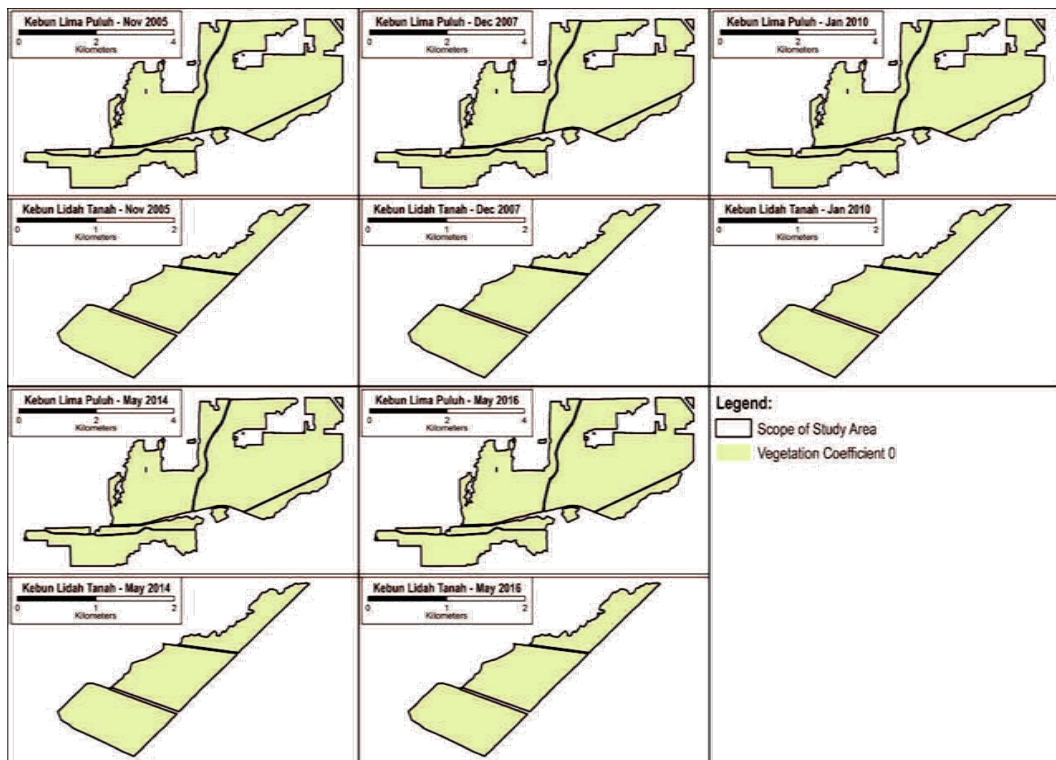
Figure 3.4: Historical land use change processed map

Table 3.2. LUCA result after multiplying with vegetation coefficient

Land cover class	Vegetation coefficient	1 Nov 2005-30 Nov 2007	1 Dec 2007 – 31 Dec 2009	1 Jan 2010 – 8 May 2014	9 May 2014 – 12 April 2016
One or more land cover classes which fulfill the cri terion of vegetation coeffi cient	1.0	0	0	0	0
One or more land cover classes which fulfill the cri terion of vegetation coefficient	0.7	0	0	0	0
One or more land cover classes which fulfill the cri terion of vegetation coeffi cient	0.4	0	0	0	0
One or more land cover classes which fulfill the cri terion of vegetation coeffi cient	0.0	0	0	0	0
Total (sum of rows)					

Table 3.3. Compensation liability

Period of land clearance	Land controlled by a non-member	Land controlled by an RSPO member at the time of clearance. This includes land acquired from other RSPO members
May 9, 2014 to April 12, 2016	NA	0
January 1, 2010 to May 8, 2014	NA	0
December 1, 2007 to De cember 31, 2009	NA	0
November1,2005to November 30, 2007	NA	NA
Total (sum of rows)	0	0

Chapter 4

4. Summary of Management Plans

4.1 Team responsible for developing management plans

    a. Hasan Bisri Kasyhuri : Head of Sustainability PT Socfin Indonesia.
    b. Atas Wijayanto   : Manager of Lima Puluh Estate PT Socfin Indonesia

4.2 Social and Environmental Impacts

As mentioned previously, social and environmental impacts of conversion plan is not significant. Nonetheless, several impacts or issues need to be addressed, in particular to enhance positive effect of the presence of PT Sucfindo and to make sure potential negative impact can be managed properly.
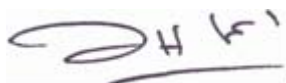
Table 4.1:Management and mitigation plan of social environmental impact

Parameter to be monitored	Mitigation measure	Location	Measurement	Frequency	Responsibility	Time-frame for completion
Cover crop	Planting cover crop	Land cleared	Land coverage	Once and repeated when fail	Estate manager/ Field assistant	1 year for each newly planted land
Employment of local people	Labor recruitment	Villages of Perkebunan Tanah Gambus, Karang Baru, Perkebunan Lima Puluh, Binjai Baru, Empat Negeri, Lima Puluh, Sumber Makmur, Mangkei Lama,Mangkei Baru	Percentage o flocal labor	Once a year	Human resource	Until conversion is completely finished.
General disturbances	Socialization	ditto	Public complain	Yearly	Estate manager/ Field assistant	Until conversion is completely finished.

5. Acknowledgement of Internal Responsibility

The oil palm grower signs to confirm that the necessary assessments have been done and completed in accordance to the relevant RSPO procedures.

Signed for and on behalf of PT. Socfin Indonesia

Hasan Bisri Kasyhuri
Head of Sustainability Dept
Date: December 27, 2016

Signed for and on behalf of PT. Gagas Dinamiga Aksenta

Nandang Mulyana
Team Leader
Date: December 27, 2016

6. Organizational Information

1.	Company Name	PT Socfin Indonesia
2.	RSPO Membership No.	1-0017-04-000-00
3.	Address	Jl. KL Yos Sudarso No. 106 Medan 20115 Indonesia.
4.	Location of proposed new planting	PT Socfin Indonesia – Lima Puluh Estate Lima Puluh and Talawi Sub-district, Batubara District, North Sumatra Province, Indonesia.
5.	Type of Business	Rubber Plantation / Oil Palm Plantation
6.	Contact persons	Hasan Bisri Kasyhuri
7.	E-mail address	hasan@socfindo.co.id;
8.	Geographical location	N 3^0 06′ 44″ - 3^0 07′ 56, E $99^0$31′ 16″ - $99^0$33′ 00″; N $3^0$09′ 41″ - $3^0$12′ 32″ E $99^0$22′ 30″ - $99^0$26′ 58″

7. List of legal documents and regulatory permits and property deed

No	Documents Name	Number & Date	Issued by
1	Land Title Certificate (Sertifikat HGU)	No. 2, dated 28 January 1998; No. 2, dated 23 July 1997.	Land Office of Asahan District.
2	Decree of Land Title (Surat Keputusan HGU)	No. 76/HGU/BPN/1997, dated 15 July 1997; No. 8/HGU/22.07/1997, dated 28 February 1997	National Land Agency
3	Plantation Business Permit (izin Usaha Perkebunan)	HK.350/83/Dj.Bun.5/II/2002, dated 25 February 2002.	Directorate General of Estate Production, Ministry of Agriculture.
4	Deed of Establishment	23 dated 21 June 1968	Notary: Chairi Bahri
5	Tax Registration Code Number	01.001.806.7.092.000	Directorate General of Taxes and Ministry of Finance

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