

Roundtable on Sustainable Palm Oil
New Planting Procedure
Summary Report of Management and Monitoring Plan

PT. Citra Niaga Perkasa

Sebangki District
Landak Regency, West Kalimantan Province-Indonesia

List of Content

1. Executive Summary	4
1. Summary of Assessment Findings	4
2. Assessment result	5
2. Reference Documents	5
2.1. List of Reports	6
2.2. List of Legal documents, regulatory permits and property deeds related to the project area	6
2.3. Location maps – both at landscape level and Property level	6
2.4. Area of new plantings and time-plan for new plantings	10
3. SEIA and HCV management and Planning Personnel	10
3.1. Organizational Information/contact person	10
3.2. Personnel Involved in Planning and Implementation	10
3.3. Stakeholder to be Involved	11
4a. Summary of SEIA Management and Monitoring Plan	11
1. Company’s Social Impact Management for Social Sustainability of Local Communities	11
Impact to Human Capital	11
Impact to Natural Capital.....	12
Impact to Social Capital.....	13
2. Social Impact Management to Social Sustainability of Internal Estate Communities.....	13
Impact to Human Capital Component	13
Impact to Social Capital Component	14
Impact to Natural Capital Component	14
4b. Summary of HCV management and Monitoring Plan.....	15
1. HCV management plan	15
2. Management and Mitigation Plan for HCV1.2.....	17
3. Management and Mitigation Plan for HCV1.3.....	17
4. Management and Mitigation Plan for HCV3	17
5. Management and Mitigation Plan for HCV4.1	24
6. Management and Mitigation Plan for HCV4.2.....	24
7. Management and Mitigation Plan for HCV5	24
5. Management and Mitigation Plan for HCV6	24
5. Plan for HCV Monitoring and Regular Review Data	25
6. Internal Responsibility	

**Roundtable on Sustainable Palm Oil - New Planting Procedure
Summary Report of Management and Monitoring Plan**

1. Executive Summary

1.1. Summary of Assessment Findings

PT. Citra Niaga Perkasa is a company engaged in oil palm plantations and processing are located in the Landak Regency, West Kalimantan Province. PT. Citra Niaga Perkasa has been committed to meeting the RSPO principles and criteria to support the sustainable management of palm plantations. PT. Citra Niaga Perkasa is a subsidiary of a holding FELDA Bhd which is listed as a member of October 18, 2004 with a membership number 1-0013-04-000-00.

Total area PT. Citra Niaga Perkasa is 14,385 ha with a plan of its capacity is 60 Tons factory Tbs / hour. Obtain a location permit in accordance with by head of Landak No. 595.1/167.A/HK-2010, August 4, 2010 with extensive location permits for oil palm plantations area is 9596 ha and No. 595.1/264/HK-2009, December 17, 2009 with a total area is 4789 Ha. In addition the company has acquired Plantation Business Permit (IUP) from Regent by head of Landak regency No. 525/33/HK-2011, February 24, 2011 on the plantation business permits to PT. Citra Niaga Perkasa in Sebangki District, Landak Regency area is \pm 14 385 Ha.

The geographical location is 109°37'0,8" - 109°38'28" East and 0°8'48" - 0°9'43" North. While the administrative located in District Sebangki Landak Village, West Kalimantan Province. Based on the Ministry of Forestry and Plantations No. 259/Kpts-II/2000 about area assignment of forests and waters of West Kalimantan Province, PT. Citra Niaga Perkasa is in the area Other Use Land (APL). The boundaries area is Production Forest and oil palm plantations PT. Surya Multi Sukses, Kubu Kereng village, Agak village northern side, the Sambeh River, palm oil plantations of PT. Agro Timila Abadi and PT. Agro Nusa Investama east side and the Mandor River west side. PT. Citra Niaga Perkasa was ready to implement the environmental and social management plans that have been recommended in the detail document review High Conservation Value (HCV) and Social Impact Assessment (SIA). Environmental Impact Assessment (EIA) has been completed separately by the Center for Environmental Research (*Pusat Penelitian Lingkungan Hidup*) (PPLH) Tanjungpura University. While HCV study conducted by the Faculty of Forestry, Bogor Agricultural University on June 25 July 2, 2012 and SIA study conducted by the consulting community Rim Plantations on May 11 - 20, 2011.

Necessary legal document such as location permits, UKL / UPL (Environmental Management and Environmental Monitoring Workplan Exercise), HCV and SIA document is available. AMDAL studies with UKL and UPL has been approved by the commission AMDAL with the Landak District Number. 660.1/170/HK-201, September 13, 2011.

Location Plan and the area will be opening new land was not in the area of primary forest but on the Other Use Land (APL) in accordance with a map of the forest and the waters of West Kalimantan - Attachment of Minister of Forestry and Plantations No. 259/Kpts-II/2000 August 23, 2000 and the Letter of Determination Central Forest

Roundtable on Sustainable Palm Oil - New Planting Procedure

Summary Report of Management and Monitoring Plan

Region II Directorate Peoplesof Forestry Planning West Kalimantan Number S.628/BPKH-III/2012, July 30, 2012. In the PT. Citra Niaga Perkasa have not found any primary forest. Based on the observation and interpretation of Landsat imagery Path or Row 121/60 shooting on June 6, 2012, the condition of land cover in the areal study is settlement, Rubber Garden, Bush Grove, Garden Mix, secondary forest and open areas. Based on the map Land Semidetil on the permission area PT. Citra Niaga Perkasa conducted by PARAM Agricultural Soil Survey (M) Sdn, Bhd, Malaysia (2011) and observations, soil encountered in the study area comprises 9 different types of soil, namely Organosol Saprik (*Typic Haplosaprists*, *Typic Sulfihemists*) with the variety of deep land from the shoal up to very deep (50 - > 300 cm), Gleisol Histik (*Histic Sulfaquents*), Gleisol Tionik (*Sulfic Endoaquepts*), Nitosol Kandik (*Typic Kandiudults*), Nitosol Haplik (*Typic Paleudults*), Podsolik Gleik (*Aeric Paleaquults*), Podsolik Humik (*Typic Haplohumod*), Podsolik Plintik (*Lithic Hapludults*), and Podsolik Haplik (*Lithic Hapludults*).

Based on identification and analysis of HCV, the total area has been identified as having HCV is 1,825, consisting of 60 Ha is HCV1.2, HCV1.3, HCV3, HCV4.1, HCV4.2, HCV5 and HCV6. Components HCV1.3 HCV1.2 and rierevside (SS) in the area are SS Landak, SS. Mandor, SS. Layang, SS. Staik, Peat Land Block A Tanjung Sosor, Peat Land Block B Sungai Layang 2 and Rantau Panjang and Land with Slope > 40%. The endangered species were identified among which, Sunda pangolin (*manis javanica*) and alligator claws (*Tomistoma schlegelii*). While the types of incoming status of vulnerable (*vulnerable*) that Perepat (*Combretocarpus rotundus*), the Pig-tailed macaque (*Macaca nemestrina*), Sunda slow-loris (*Nycticebus coucang*) and Sambar deer (*Rusa unicolor*). The have been identified Areas as having HCV1.2 and HCV1.3 have a fairly good condition vegetation as habitat for biodiversity.

Important elements in the region of HCV3 that have rare or endangered ecosystems are Peat Land Block A Tanjung Sosor, Peat Land Block B Sungai Layang 2 and Rantau Panjang. Based on data RePPPProT 1987, land system in the PT. Citra Niaga Perkasa have 5 (five) Land systems, namely HJA (Honja), KHY (Kahayan), PLN (Pelanai), MDW (Mendawai) and GBT (Peat land). Of the 5 (five) existing land systems, that in land systems, the categorized rare ecosystems categorized and endangered ecosystems categorized of land system is GBT (Peat Land). But, in the Thick Peat Land (> 3 meters) of Land system has a lot of occupied MDW Sungai Segak Village and Rantau Panjang village for farming activities (rubber, fields and bushes) 585.34 ha region and occupied secondary forest 644.95 ha region. This was confirmed by the public statement that says the land has been and will be used for the cultivation and plantation agriculture. With the peatland ecosystem conservation thick (> 3 m), done in the area of closing conditions, including secondary forest land that has not public occupation.

The important component associated with HCV4.1 is important region or important ecosystem as water supply and flood control for public communities are river riparian (SS) Landak, Mandor, Layang, Staik, Peat Land Block A Tanjung Sosor, Peat land Block B Sungai Layang 2 and the Rantau panjang, spring water areas (KSMA) Arankng Pantingakng, Kankikng, Palu Dalam, Riamp, Mr. Dadang and Mr. Sikat and spring

Roundtable on Sustainable Palm Oil - New Planting Procedure

Summary Report of Management and Monitoring Plan

water area of Gunung Ciane. People use the rivers that are in and around the area of PT. Citra Niaga Perkasa. Existing rivers used by some people for transportation, toilets and fishing.

The important component associated with HCV4.2 important region for prevention of erosion and sedimentation are identified according to the results of the calculation and analysis of the Erosion Hazard Rate (TBE) is hill with Slope > 40% and Rock Hill. The analysis in the areas, TBE including moderate to very severe if the land opened / land clearing, however if done with moderate farm management - both the TBE's going to decline dramatically to 1.65 to 218.87 tons/ha/year the attrition rate is very low - very heavy. In the area of PT. Citra Niaga Perkasa have with slopes > 40%.

The important component in the HCV5 is spring water areas (KSMA) Arangkng Pantingakng, Kangkikng, Palu Dalam, Riamp, Mr. Dadang and Mr.Sikat and spring water area of Gunung Ciane. The areal is used by the local community to meet the needs of clean water for drinking, Wash bath outhouse and irrigation fields. While important component associated with HCV6 is Public cemetry RT 4 Tanjung Sosor village, Public cemetry of Tanjung Sosor village (a), Public cemetry Tanjung Sosor village (b), Public cemetry of Tanjung Sosor village (c), Public cemetry Retok majau village, Tombs Sacred Sayyid (Retok majau village), Public cemetry Sungai Segak 1, Public cemetry Sungai Segak 2 village, Public cemetry Sungai Segak 3 village, Sacred Tombs KH Abdul Djalil. Sacred Tombs KH Abdul Aziz, Public cemetrys Sungai Layang 2, Family Tomb Mr. Selamat, Public cemetry in Communities Group (RT) 3 (a) Sungai Layang 1 village, Public cemetry RT 3 (b) Sungai Layang 1 village, Public cemetrys RT 2 Sungai Layang 1 village, Public cemetrys RT 4 (a) Sungai Layang 1 village, Public cemetry RT 4 (b) Sungai Layang 1 village, Public cemetry of Catholicism (RT 1 Sungai Layang 1 village), Public cemetry RT 10 Sungai Pogok village, Public cemetrys RT 12 Sungai Pogok village, Public cemetry RT 11 (a) Sungai Pogok village, Public cemetry RT 11 (b) Sungai Pogok village, Public cemetry Nurul Hidayah, Public cemetrys Stoket, Public cemetry Sambeh Dalam, Ibul 2 village, Sacred Empago Papang, Sacred Tabar Batu, Sacred penyugu Gentekng, Sebangki village, Sacred Penyugu Ranyam, Mr. Liung village, Sacred Penyugu Palu, Setaik village, Sacred Batu Bongkesan and Sacred Batu Cina.

SIA study conducted by LINKS in generally concluded that the presence of PT. Citra Niaga Perkasa can provide two kinds of impacts are positive and negative. The impact can be explained in the executive summary in the study of SIA.

1.2. Assessment Result

PT Citra Niaga Perkasa opted for a document audit. Mutuagung Lestari auditors has conducted desk study and discussions with Senior General Manager and Public Relation manager during the audit. Two Mutuagung Lestari auditors were conducted the audit at their office in Pontianak, Kalimantan Barat on 26th to 27th November 2012 to review and verify the relevant document and also interview with the management representatives.

The SEIA (AMDAL) conducted by the government approved consultants as well as the

Roundtable on Sustainable Palm Oil - New Planting Procedure

Summary Report of Management and Monitoring Plan

HCV and SIA assessments conducted by RSPO accredited and approved assessors. PT Citra Niaga Perkasa has adhered to RSPO New Planting Procedure and documented the assessments and plans are comprehensive and professionally carried out according to RSPO requirements and comply with the applicable RSPO Principles, Criteria and Indicators for new plantings.

2. Reference Documents:

2.1. List of Reports

- 1). Report of Social and Environmental Impact Analysis (AMDAL) of PT. Citra Niaga Perkasa by Pusat Penelitian Lingkungan Hidup (PPLH) Tanjungpura University - Pontianak, Landak Regency 2011.
- 2). Report of identification and analysis of High Conservation Value (HCV) presence in the area of PT. Citra Niaga Perkasa by Faculty of Forestry – Bogor Agricultural University, Bogor 2012.
- 3). Report of Social Feasibility Study PT. Citra Niaga Perkasa by Lingkar Komunitas Sawit (LINKS), 2010.
- 4). Report of UKL/UPL (Environmental Management and Environmental Monitoring Workplan Exercise) PT. Citra Niaga Perkasa by PPLH of Tanjungpura University. 2011

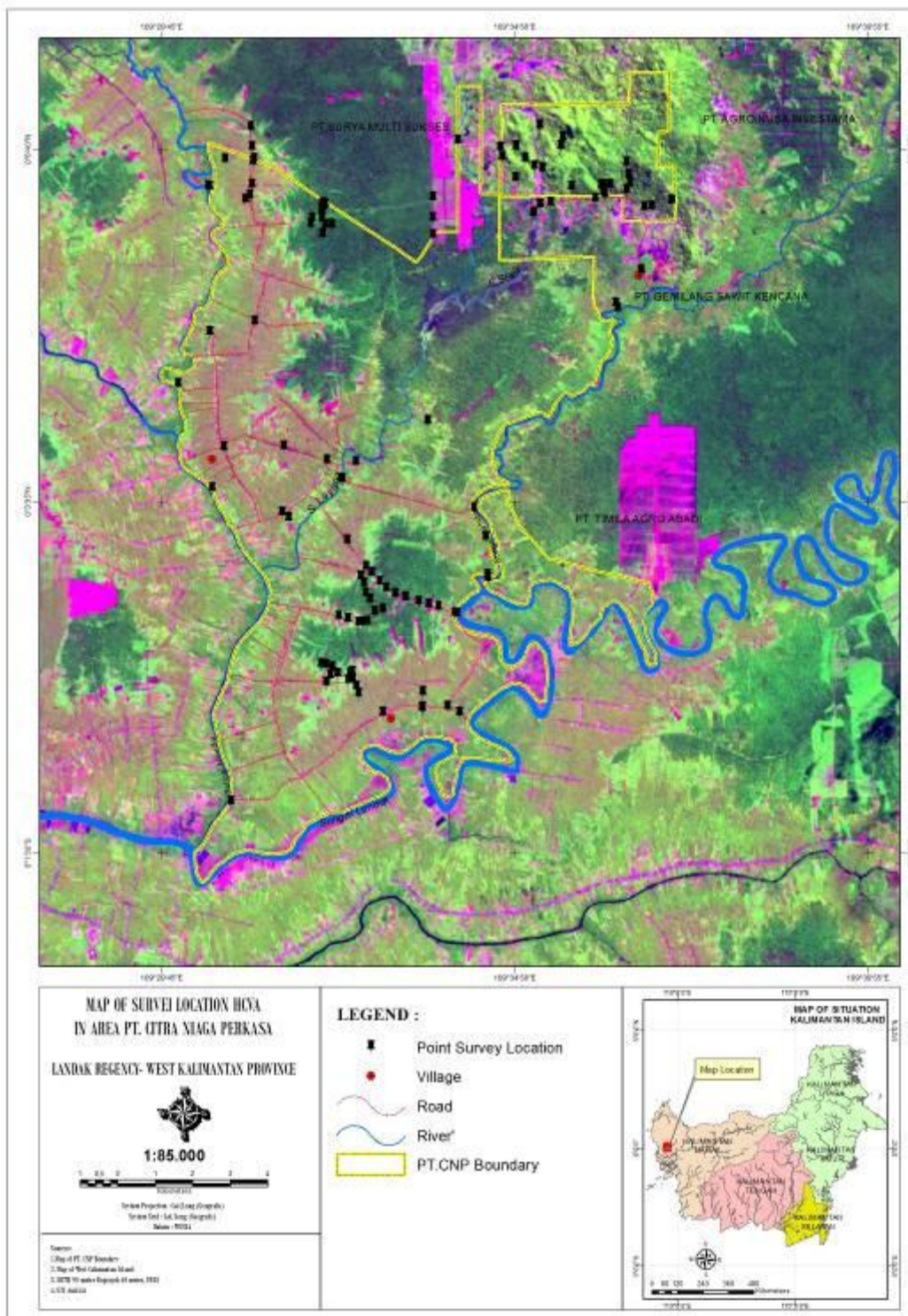
2.2. List of legal documents, regulatory permits and property deeds related to the areas assessed:

1. Letter Decree of Landak Regent No. 595.1/167.A/HK-2010, Agustus 4, 2010 total permit area for oil palm plantation is 9.596 Ha.
2. Letter Decree of Landak Regent No. 595.I/264/HK-2009, 17 December 17, 2009 total permit area for palm oil plantation is 4.789 Ha
3. Letter Decree of Regent No. 525/33/HK-2011, 24 February 24, 2011 on the plantation business permits to PT. Citra Niaga Perkasa in Sebangki District, Landak Regency area is \pm 14 385 Ha
4. Decree of Forestry and Plantation Minister No. 259/Kpts-II/2000 on Assignment of forest and estuary area West Kalimantan Province.
5. Laws No. 32 Tahun 2009 on Management and Environmental protection.
6. Government Regulation No. 82, 2001 on Water Quality Management and Pollution controlling.
7. Regulation of Environmental Minister No. 11, 2006 on Business Plan and/or operational must completed by Social Environmental Impact Assessment (AMDAL).
8. Regulation of Environmental Minister No. 08, 2006 on the turning guidance of Social Environmental Impact Assessment (AMDAL).
9. Regulation of Environmental Minister No. 45, 2005 on reporting of Environmental Management and Monitoring Plan (RKL/RPL).
10. Decree of head Agency of Environmental Impact Controlling No. Kep-015, 1997 on Implementation Guidance of Environmental Management and Monitoring Plan (RKL/RPL)

2.3. Location maps – both at landscape level and property level:

**Roundtable on Sustainable Palm Oil - New Planting Procedure
Summary Report of Management and Monitoring Plan**

3. Satellite Imaginary of PT. Citra Niaga Perkasa



**Roundtable on Sustainable Palm Oil - New Planting Procedure
Summary Report of Management and Monitoring Plan**

3. SEIA and HCV Management and Planning personnel:

3.1. Organisational Information/Contact Person

Contact details of the company are as follows:

Company name	:	PT. Citra Niaga Perkasa
Address	:	Head office: Jalan Kartini No. 52 Sanggau Telp. 0564 – 21458, Fax.0564 – 21752 Sebangki District, Landak regency – West Kalimantan Regional Office: JL. S Parman No. 9A Pontianak – West Kalimantan Province, Indonesia Telp. 0561 – 741617, Fax. 0561-595196 Site: Sebangki sub-village, Sebangki village, Sebangki District, Landak Regency – West Kalimantan Province
Contact person		Mohamed Affandi Mohamed Yusof
Deed in Corporation		Letter of Judiciary Minister No. 777.Ht. 03.01 year 1999
Capital Status		PMA (Penanaman Modal Asing)/Foreign Investment Company
Status Business Land		<ul style="list-style-type: none"> • Location Permit. District Head of Landak Decree Number 595.1/264/HK-2009, dated 17 December 2009 with total area 4,789 Ha. • Location Permit. District Head of Landak Decree Number 595.1/167.A/HK-2010, dated 4 August 2010 with total area 9,596 Ha. • Plantation Business Permit (IUP). District Head of Landak Decree Number 525/ 33/ HK-2011, dated 24 February 2011 with total area 14,385 Ha
Total Area	:	14.385 Ha

3.2. Personnel Involved in Planning and Implementation

Those involved in the planning and implementation will be Asst. General Manager, Senior Estate Manager, Social Department, Environmental Health and Safety Department and Community Development Officer and also HCV Division.

3.3. Stakeholder to be involved

Local communities that are affected by the development of PT. Citra Niaga Perkasa as identified in the Social Impact Assessment report. Relevant government department will also be involved.

4a. Summary of SEIA Management and Monitoring Plan

Management and monitoring plan SIA PT. Citra Niaga Perkasa made and prepared based on the findings of a study conducted in May 2011 by the reviewer (assessor) who have certified from Lingkar Komunitas Sawit (LINKS). Meanwhile, Environment management and monitoring plan (UKL / UPL) conducted by the Center for Environmental Research (PPLH) Tanjungpura University which is a government agency that is certified as AMDAL

Roundtable on Sustainable Palm Oil - New Planting Procedure

Summary Report of Management and Monitoring Plan

consultants. UKL / UPL was approved in September 2011 by the Regents Landak by Decree No. 660.1/170/HK - 2011 dated 13 September 2011. In principle, the development efforts PT. Citra Niaga Perkasa has to comply with regulations in Indonesia. Stages of preparation and creation of management plans and monitoring of HCV and SIA as follows:

1. Company's Social Impact Management for Social Sustainability of Local Communities

Impact to Human Capital

1. Community unrest

- a). Doing formal and informal socialization especially people who are expected to be directly affected by the business operational.
- b). Desire to accommodate the aspirations of the people as far as the ability of the company through its community development / CSR.
- c). Conduct an inventory of land ownership in the community prior to land acquisition
- d). Cooperation with the village to promote business activity plan for formal socialization
- e). Cooperation with tribal elders and community leaders to plan activities for the dissemination plan informal socialization and involvement in the introduction of the mechanism of ownership in land acquisition

2. The existence and Seek Employment Opportunities

- a). Prioritizes company recruitment of labor from the community surrounding the site plan of activities / business, and community leaders involved in the determination of recruitment.
- b). Not all lands liberated society so that people still have an alternative livelihood.
- c). Salary adjusted for labor UMP district. Landak, so there is no exploitation of wage labor rencah, and minimize the negative public perception of the company.
- d). Cooperation with the village for announcements and information notices recruitment palm oil company
- e). Cooperation with figures and leaders, and citizens for the dissemination of information as well as in the selection of recruitment companies
- f). Implementation of recruitment selection openly, so as to avoid negative public perception.

3. Changes in Income Communities

- a). Company use community planning activities recruitment, and involve community leaders in determining recruitment.
- b). Not all public lands liberated to masyarakat still have an alternative livelihood.
- c). Salary adjusted for labor UMP West Kalimantan Province or MSE Landak District., so there is no exploitation of wage labor rencah, and minimize the negative public perception of the company.
- d). Cooperation with the village for announcements and information notices recruitment oil palm plantation companies.
- e). Cooperation with figures and leaders, and citizens for the dissemination of

Roundtable on Sustainable Palm Oil - New Planting Procedure

Summary Report of Management and Monitoring Plan

information as well as in the selection of recruitment companies.

- f). Implementation of recruitment selection openly, so as to avoid negative public perception.

4. Changes in Disease Patterns

- a). Provide mosquito nets to communities and plantation workers.
- b). Doing activities such as mosquito nest eradication by reducing standing water in residential.
- c). Introduce and distribute crop seeds such as mosquitoes pengsuir Zodia (*Evodia suaveolens*), Lavender (*Lavandula angustifolia*), Geranium (*Geranium phaeum*) to communities around the project site.
- d). Educating the community about the dangers of malaria and how to break the life cycle of the malaria vector.
- e). Encourage people to use kelambu at bedtime.
- f). Encourage people to keep the environment clean.
- g). The company through petugas routine health examination garden wilayan a potential vector of malaria development.
- h). Train employees on the garden bertuga environmental management for malaria vector terminate life and help provide mosquito nets to the community.

Impact to Natural Capital

1. Water quality changes

One of main causes of water quality degradation associated with oil palm plantation development activities are erosion and sedimentation. Therefore ways erosion and sedimentation control can also be used for water quality management.

- a). Land clearing in stages according to the work plan garden with retaining buffers (buffer zone) that are along the river side rivers 100m radius.
- b). Creating individual ters to reduce surface water runoff and capture sediment drift along the flow of water involved
- c). Making drains to remove excess water, controlling the speed and direction of water flow water Liran. Connected with the drainage pond sediment catcher
- d). Make fishing pond sediment
- e). Immediate planting cover crops (land cover crop) to decimate the amount of erosion.
- f). Land clearing done in line with the slope.
- g). Cultivated land clearing activities are not carried out during the rainy season

2. Increased erosion and sedimentation

- a). immediate planting cover crops (*Leguminosae* cover crop) to reduce the amount of erosion
- b). land clearing done in line with the slope
- c). Cultivated land clearing activities are not carried out during the rainy season
- d). fitted with road construction and road shoulders Sampung channels *leguminocae* cover crop planted at least 50 meters either side of the road.

**Roundtable on Sustainable Palm Oil - New Planting Procedure
Summary Report of Management and Monitoring Plan**

3. Biodiversity decreasing

- a). Conduct an inventory of species at regular intervals to determine the increase or decrease in the number of types
- b). Socializing or to counsel within the boundary of the biodiversity in the area
- c). Protection efforts of persuasion and preventive

Impact to Social Capital Component

- 1). Detail and Comprehensive information about plantation development plans to the local communities
 1. Conducting the process FPIC with local communities
 2. Conducting the CSR program for local communities
 3. Community Development
- 2). Increased of Social Interaction with local firms
 1. Create a communication forum
 2. Conduct communication with local communities
 3. Mutual understanding and respect the rights of indigenous community customs and rules of the company
 4. Settlement of complaints/social conflicts (if any)
 5. Create a community development program through a communication forum

2. Social Impact Management to Social Sustainability of Internal Estate Communities

Impact to Human Capital Components

1). Creation of Safe and healthy working site

1. Identification of the hazard-risk of each type of job
2. Determination of hierarchical control measures (from engineering, administration, until the procurement of APD)
3. Investigation of work accidents
4. Assessments of environmental factors that influence the safety aspect. (e.g. fire during drought).
5. Procurement of emergency response equipment
6. Training and awareness campaign on health and safety matters.
7. Simulation of the emergency response plan
8. Supervision of health and safety implementation in workplace.
9. Evaluation of the effectiveness of health and safety management system
10. Cooperate with related parties to publicize about health care to works and their families.
11. Build clinic and provision of doctor/nurse
12. Create a sanitation improvement program in housing

2). Strengthening the staff cooperation functions for the welfare of the members

1. Fostering the management of cooperatives.
2. Help to Create Access to new businesses opportunity.
3. Providing soft loans to cooperatives.

Roundtable on Sustainable Palm Oil - New Planting Procedure

Summary Report of Management and Monitoring Plan

4. Monitoring the development of cooperatives and providing assistance as needed

Impact to Natural Capital

1. Participation of company in maintaining the water quality of Sungai Tabir
 - 1). Manage the domestic and schedule waste in a proper manner.
 - 2). Monitor the quality of waste water discharge into water bodies.
 - 3). Hold dialogues with community on waste handling technique.
 - 4). Monitor the changes of natural hue of Sungai Tabir (if any).
 - 5). Work together with local community to co-manage the the riparian areas of Sungai Tabir (in coordination with the village officials)
2. Company does land acquisition through legal means should also received community approval
 - 1). Conduct an inventory of community land ownership (size of land, proof of ownership).
 - 2). Coordination with village officials regarding the agrarian inventory in the village (boundarybetween regions).
 - 3). Survey with the related parties in on definitive delineation of land ownership for the purpose of acquisition.
 - 4). Create a land acquisition agreement with their respective legal owner of the land without any pressure/coercion.
 - 5). The involvement of any related parties (e.g. Government) to solve problematic land acquisitions

Impact to Social Capital Component

1). Provision of tools for workers on freedom to associate

1. Facilitating all workers unite and form unions.
2. Conducting regular meeting with unions
3. Improve in the building capacity of union staff through training
4. In the event the union is not formed, have a bi-partit body to solve problem related to industrial relations.

2). Increase social interaction among workers, and/or between companies and workers

1. Facilitate the establishment of social clubs of committee in each housing location
2. Putting up an information board
3. Putting up suggestion box
4. Organizing event to build togetherness.

4b. Summary of Management and Monitoring Plans (HCV)

1. HCV management Plan

Based on Identification and analysis of HCV in the area of PT. Citra Niaga Perkasa in the area 1,825.60 Ha have been identified of 7 (seven) of HCV i.e. HCV1 (HCV1.2 and HCV1.3), HCV3, HCV4 (HCV4.1 and HCV4.2), HCV5 and HCV6.

- 1). Riverside (SS) 666.25 Ha including: SS Landak (228.44 Ha), SS Mandor (222.39 Ha), SS Layang (172.04 Ha) and SS Staik (43.38 Ha).

Roundtable on Sustainable Palm Oil - New Planting Procedure

Summary Report of Management and Monitoring Plan

- 2). Hill with slope $\geq 40\%$ (816 Ha) and rock hill (97 Ha) and total for hill area is 913 Ha.
- 3). Peatland > 3 m (829.23 Ha) with details peatland in Tanjung Sosor sub-village (295.66 Ha) and peatland in Sungai Layang and Rantau Panjang sub-village is 533.57 Ha.
- 4). Cemetery area width total is 4.64 Ha, three of the cemetery include in hill with slope (slope $\geq 40\%$) i.e. Cemetery Batu Tabar (Sub-village Sebangki), Cemetery Penyugu Gantekng (Sub-village Sebangki) and Cemetery Penyugu Ranyam (Sub-village Mr. Liung). The other cemetery in out of the hills are Public cemetery RT 4 Tanjung Sosor Sub-village (0.25 Ha), Public cemetery of Tanjung Sosor Sub-village (a) luas 0.25 Ha, Public cemetery Tanjung Sosor Sub-village (b) luas 0.04 Ha, Public cemetery Tanjung Sosor Sub-village (c) luas 0.06 Ha, Public cemetery Retok Majau Sub-village 0.25, Cemetery Sayyid (Retok Majau Sub-village) 0.06 Ha, Public cemetery of Sungai Segak 1 sub-village (0.06 Ha), Public cemetery of Sungai Segak sub-village 2 (0.13 Ha), Public cemetery Sub-village Sungai Segak 3 (0.06 Ha), Sacred tomb of KH. Abdul Djalil (0.5 Ha), Sacred tomb of KH. Abdul Azis (0.25 Ha), Public cemetery Sungai Layang 2 sub-village (0.25 Ha), family tomb of Mr. Selamat (0.25 Ha), Public cemetery RT 3 (a) Sungai Layang 1 Sub-village (0.05 Ha), Public cemetery RT 3 (b) Sungai Layang 1 Sub-village (0.04 Ha), Public cemetery RT 2 Sungai Layang Sub-village 1 (0.25 Ha), Public cemetery RT 4 (a) Sungai Layang 1 Sub-village (0.06 Ha), Public cemetery RT 4 (b) Sungai Layang 1 Sub-village (0.06 Ha), Public cemetery Katholik (RT 1 S.Layang 1 Sub-village) 0.25 Ha, Public cemetery RT 10 Sungai Pogok Sub-village (0.06 Ha), Public cemetery RT 12 Sungai Pogok Sub-village (0.13 Ha), Public cemetery RT11 (a) Sungai Pogok Sub-village (0.05 Ha), Public cemetery RT11 (b) Sungai Pogok Sub-village (0.25 Ha), Public cemetery Nurul Hidayah (0.13 Ha), Public cemetery Stoket (0.13 Ha), Public cemetery Sambeh Dalam, Ibul 2 Sub-village (0.25 Ha), Sacred of Empago Papang (0.25 Ha), Sacred Penyugu Palu, Sub-village Setaik 0.25, Sacred of Batu Bongkesan (0.01 Ha) and Sacred of Batu Cina (0.01 Ha).
- 5). The other of HCV area is water pool include in hill with slope $\geq 40\%$. Concerning to the maintenance and increasing of HCV identified in the area, management of PT. Citra Niaga Perkasa implementation the management and monitoring of HCV area.

Objective

HCVA Management Planning PT. Citra Niaga Perkasa :

1. Formulate various policies and efforts to maintain and / or enhance HCVs contained in the PT. Citra Niaga Perkasa.
2. Formulate the parties involved in the implementation, coordination and supervision HCVA area management activities in order to maintain and / or enhance HCVs contained in the PT. Citra Niaga Perkasa.

Purpose

HCVA Management Plan in the PT. Citra Niaga Perkasa:

1. **For companies:** used as guidance in the implementation of management programs of HCV area, so the concession area of operational activities undertaken based on the principles of sustainable production and environmental and social sustainability in a balanced way, including HCV Area.
2. **For Society:** used as a source of information to be able to know and understand about

Roundtable on Sustainable Palm Oil - New Planting Procedure

Summary Report of Management and Monitoring Plan

the exploitation activities and environmental areas of the outcome of HCV that have been studied, which is expected to avoid any misunderstanding, which in turn can manifest mutually beneficial cooperation between the manager of the PT. Citra Niaga Perkasa with the communities in and around the working area.

Target

Achieved object is preservation of the High Conservation Value Areas in particular and other areas in general in the long term, so as to support increased productivity and welfare of farm commodities. The shape and broad HCVA to be managed and a management plan that will be done.

HCVA Monitoring

Objective

Preparation of monitoring plan HCVA in the PT. Citra Niaga Perkasa aims to:

- Arrange monitoring efforts HCVA contained in the PT. Citra Niaga Perkasa.
- Arrange programs, methods and time HCVA monitoring to be carried out in the PT. Citra Niaga Perkasa.

Purpose

Usability Monitoring HCVA in the PT. Citra Niaga Perkasa is:

1). For Company

- a. Through monitoring HCVA do test the effectiveness of management activities.
- b. With intensive monitoring HCVA be known early about changing values HCV unwanted, so that steps can be implemented immediately to handle effectively.

2). For the Society

As a basic social controls and guidelines to participate in monitoring activities HCVA, mainly to changes in the PT HCV. Citra Niaga Perkasa and its surroundings in Sebangki District, West Kalimantan.

Targets

Monitoring HCV area in question here is the monitoring of HCV that is a result of management activities HCVA. In the area of HCV, the area is protected and not used as a production area, so that its function can be maintained and guaranteed. To ensure the integrity of the area HCVA, it is necessary to periodically monitor as an input in the improvement of management techniques.

Here are mitigation and management plans for each of HCV in the PT. Citra Niaga Perkasa:

2. Management and Mitigation Plan for HCV1.2

- 1). Determining the borders of HCV1.2 areas and constructing of border.
- 2). Setting up information board (HCV1.2 name boards and prohibition boards on hunting animals and damaging protected flora).
- 3). Disseminating and conducting extension for the local communities and employees of PT. Citra Niaga Perkasa regarding the understanding of HCV1.2 so that the knowledge and

Roundtable on Sustainable Palm Oil - New Planting Procedure

Summary Report of Management and Monitoring Plan

implementation HCV1.2 preservation can be improved and maintained. Socialization and extension activities can be accompanied with the distribution/putting up of posters and leaflets on types of protected wildlife species and flora.

- 4). Monitoring of HCV1.2 areas and giving sanctions for any individual destroying and disrupting these areas
- 5). Monitoring protected wildlife included in the criteria of HCV1.2 in collaboration with local communities and relevant institutions around the areas of PT. Citra Niaga Perkasa

3. Management and Mitigation Plan for HCV1.3

Protecting habitats for endangered species populations, for species with limited distribution or for protected species that are able survive.

2. Conducting extension for the communities regarding the importance of habitat preservation for endangered species populations, for species with limited distribution or for protected species that are able survive.
3. Training employees to improve the quality of human resources.
4. Formulating SOP for the management of habitats of endangered species populations, for species with limited distribution or for protected species that are able survive, including cultivation and/or enrichment of plants for wildlife feeds.
5. Monitoring the habitat for endangered species populations, for species with limited distribution or for protected species that are able survive.
6. Monitoring species diversity and abundance of wildlife populations especially types of protected / rare wildlife

4. Management and Mitigation Plan for HCV3

Mitigation and management to HCV3 directed at management of the water management PT. Citra Niaga Perkasa is:

Development of wetlands (peat) need to implement conservation approach in order to obtain a development area to provide sustainable benefits. In the management of a reclaimed swamp, water management is factor to success of the utilization and development of the swamp.

Peatlands reclamation for agriculture begins with manufacture of drainage and land clearing (*land clearing*), followed by land preparation for planting. Drainage is prerequisite for the reclamation and drainage were two main functions should be fulfilled. The first is to remove excess water and rain in a timely and efficient, and the second to control the water table in order to achieve optimum conditions for plant growth. Because reclaimed peat drying and washing involves land, land clearing, and compromise of land it will certainly have an impact on the physical properties and chemical properties. Therefore, the regulation and management of the drainage system and drainage control are aspects that are very important to consider in the reclamation of peatlands for agriculture (Rajagukguk, 1999 in Barchia, 2006).

Total water must be removed from the land based on crop needs for optimum growth and production. The amount of water that must be drained for crops (annual) greater than rice and pulses as annual plants require aeration is better than rice and crops. Size drains very important consideration that peat is not experiencing drought, subsidence, oxidation of pyrite (acid

Roundtable on Sustainable Palm Oil - New Planting Procedure

Summary Report of Management and Monitoring Plan

sulfate), and erosion (from the edge of the channel).

Micro channels system in the huge tract effect on changes in the nature and characteristics of peat soil. In the short term, a more tightly channels more appropriate in accelerating amelioration wetlands and peat lands for more intensive leaching of organic acids. But in peat land management to do long-term management of system modifications include extending the distance between the channel and the evaluation agroharah, because the distance between the channels more tightly causing groundwater levels deeper and evenly so as to speed up the process of decomposition of peat.

Soil moisture very determine to stability of peat. Peat has the highly susceptible to external interference, especially the influence of drought and excessive drainage. The fragile nature of the causes behind the irreversible drying (*irreversible drying*). Good drainage for agricultural land drainage peat is retaining critical watershed peat but not to the detriment of the plant resulting in a decrease in yield (Chotimah, 2002 in Barchia, 2006).

Overlay drainage is beyond the critical limit do not dry behind the cause peat transformed into hydrophobic properties. The greater drying effect, the greater the water-repellent properties of peat soil and more difficult melebabkan back. Hydrophobicity caused peat drained peatlands vulnerable to fire, while hydrophobicity with peat compaction due to subsidence caused the peat soil vulnerable to erosion.

Drained peat will suffer subsidence, the subsidence of peat has been reclaimed result of exchange peat anaerobic conditions to aerobic conditions especially due to the drainage. The rate of subsidence is strongly influenced by the depth and maturity of peat drainage, the drainage of the higher rate of subsidence, the raw peat faster rate of subsidence.

Drainage Network Systems on Peatland

Drainage network system in peatland different with drainage network system in mineral soil, this is due to the different structure of the mineral soil and peat lands. The drainage channel types by function and size in peatlands are:

1. **Pheriphare Drain (Pheriphare Drain)** like a boundary line and serves to regulate the ground water and also the main channel. Channel has a width of over ± 4 (four) meters on the depth 2 (two) to 3 (three) meters or depending situasi and land conditions.
2. **Primary ditch/Main Drain (Main Drain)** has a function moat reservoir of secondary ditches and running it into a groove/outlet. Primary is the main trench which lies parallel to the main road. Making trench in the ground opening of a new primary must be done prior to planting or fixing that not many subjects per ha reduced by making a new ditch, except when considered forced. This is to ensure the smooth flow of water from the primary to the outlet ditch. The size of the primary trench size depends on the amount of water that needs to be accommodated. Size 4 m x 4 m on the basis of 2-3 m. Soil excavation results thrown from side to side for the manufacture bentengan trenches and roads with a width of 2-3 meters or more depending on the area interest. Pada tides and sluice built fort.
3. **Medium Drain (Medium Drain)/Collection Drain/Collection Drain** is a direct rainwater from the surface field, especially the parts are low and running it into a ditch primary,

Roundtable on Sustainable Palm Oil - New Planting Procedure

Summary Report of Management and Monitoring Plan

secondary trench was made parallel to the road collection. Making Secondary ditch after erection. Secondary trench should be parallel to each other. Excavation of the ditch begins with the same basic primer to the primer toward the ditch upstream arranged so that the water is always pillar. Size 2 m x 2 m with the base 1.5 -2 m. The distance between the secondary channel 400 (four hundred) meters to 500 (five hundred) feet in length according to the state of the channel.

4. **Small Drain (Small Drain)/Sub Drain/Drainage Area** is the secondary branch to ditches designed to help drain the water at low soil / peat into secondary ditches. Small drain made in the sub-blocks of land and parallel to the rows of oil palm plantations. At the tertiary peat trench made by comparison of 8 rows of oil palm plantations 1 tertiary trenches, to the next if needed can be made 1:4 onwards with a maximum interval of one tertiary trenches every 2 rows. Size 1 meter wide moat. The trench is made in the lower area and conducted after the erection of the plant.

The water management of macro-scale, distance between of primary channel and other primary channels, or the secondary and tertiary channels with secondary channels and other tertiary channels is determined by the situation and condition of the land. **According to Minister of Agriculture Decree No. Attachment. 14/2009 on Guidelines for Use of Peatlands for palm oil cultivation** there are guidelines on the size of the drain that can be applied are as follows:

Type Channels	Width (m)		Depth (m)
	Up	Down	
Primer	3,0 – 6,0	1,2 – 1,8	1,8 – 2,5
Sekunder	1,8 – 2,5	0,6 – 0,9	1,2 -1,8
Tersier	1,0 -1,2	0,5 -0,6	0,9 -1,0

Some places like a meeting primary channel/channel boundary with the river, secondary primary meeting channels need to be water gate (*water gate*) to automatically or manually open (unlocked) when the water level in the planting area is higher, and vice versa will be closed when the the water level in the lower planting area, and manufacturing *Stop bunch*. *Stop bunch* made in tertiary channels and is usually made at the end of the discharge to the functioning secondary trench to hold water in the sub-blocks. Water drainage arrangements tailored to the depth of the water table in the field that is maintained at a depth of 60 (sixty) feet to 80 (eighty) inches, to maintain the availability of water and avoid land flammable.

Layout (Layout) Waterways/Ditches/Water Gate in the field is determined after survey covering hydrology and drainage patterns of the existing river conditions and observations of tidal river water so it can be determined the potential highest and lowest tide possible, and surveys mikrotopografi (elevation) of the peat dome so it can be determined the position of peat (peat dome) and the direction of movement of water from peatland. Based on the data collected and then made Image Design Water Management Plan in the area of peatlands. **Image Design Water Management Plan (Watermanagement) at PT. CNP Landak** presented in **Figure -1**.

**Roundtable on Sustainable Palm Oil - New Planting Procedure
Summary Report of Management and Monitoring Plan**

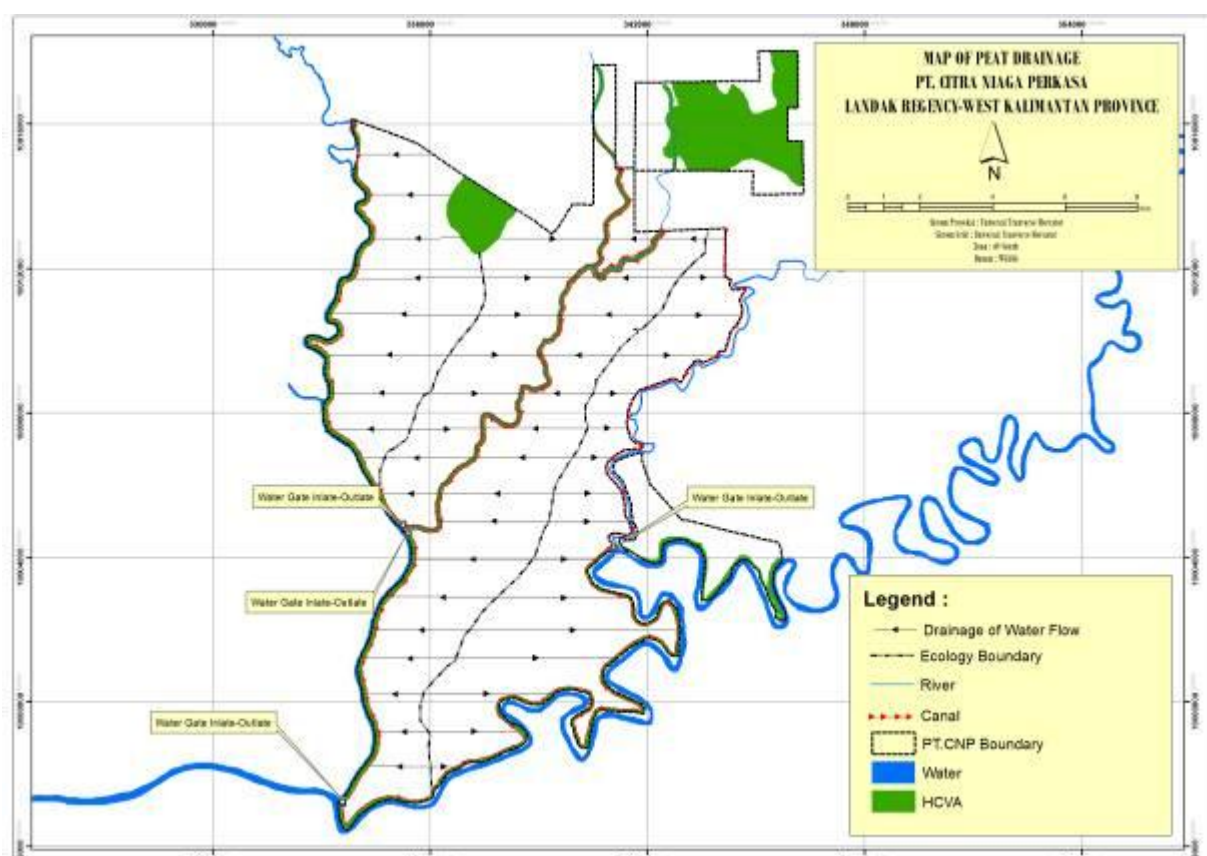


Figure -1. Design Management Plan for Water Management in the Area PT. Citra Niaga Perkasa

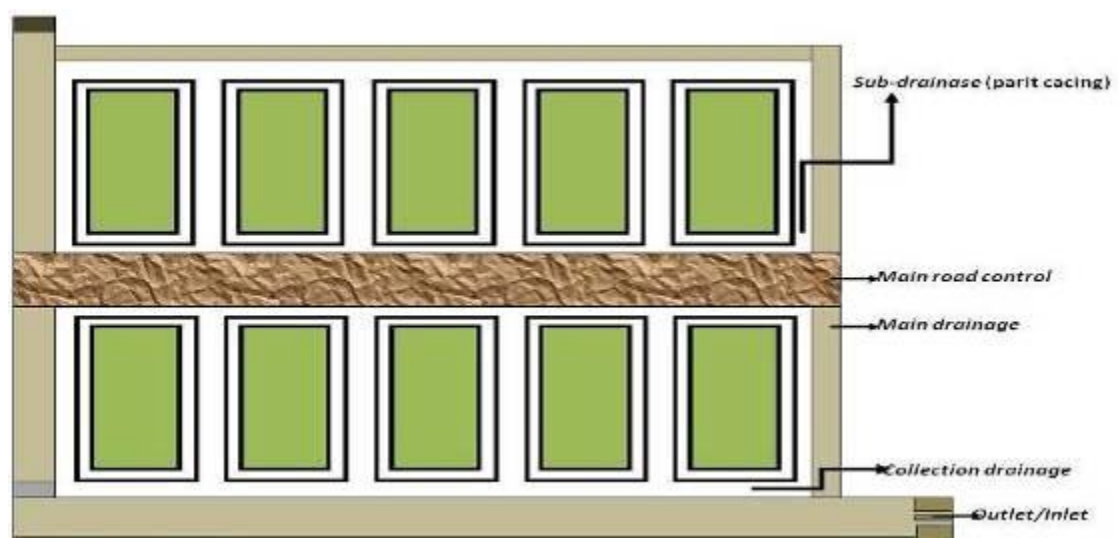


Figure -2. Water Management Plan in PT. CNP Landak

**Roundtable on Sustainable Palm Oil - New Planting Procedure
Summary Report of Management and Monitoring Plan**



1



2



2

**Roundtable on Sustainable Palm Oil - New Planting Procedure
Summary Report of Management and Monitoring Plan**



3



4

Figure -3. Peat Water Management Plan in the Area PT. CNP Landak 1). Inlet / Outlet, 2). Main Drainage, 3). Drainage collection and 4). Sub-drainage

High Surface Water Monitoring Soil and Peat subsidence rate

Monitoring activities of the ground water level and the rate of subsidence of peat should be performed to determine how well and effective water management (*water management*) has been in the area of peat land owned by company. So it can be known advantages and disadvantages of water management methods are applied both principle (principle) and the things that are minor. Monitoring is mainly done on two key parameters, namely the ground water level and peat reduction. Monitoring can be daily, weekly or monthly depending on the circumstances. At the beginning of better monitoring done more frequently as monitoring the daily, weekly or monthly in order to obtain more and accurate data to make improvements to water management weaknesses were applied (if any), then the activity can be done with time intervals rather rare such as weekly and monthly.

**Roundtable on Sustainable Palm Oil - New Planting Procedure
Summary Report of Management and Monitoring Plan**

Peat Land Subsidence Monitoring Tools



Measure scale in above and under of soil surface



Figure-4. Measurement Surface and Groundwater Peat Subsidence

Drainage Maintenance Activities Channel

Maintenance drainage channels the peat is very necessary because the trenches are often buried by landslides. Treatment can be done by washing the trench. Leaching trench based on the need; if the trench has been much buried by the landslide leaching trenches need to be done immediately. Primary and secondary leaching trenches using excavators, while the tertiary ditch manual.

Washing/deepening trench must start from the outlet ditch bordering the exhaust flow out of the garden and into a ditch on the plantation. The right time to do the washing/deepening the trench is in the summer/dry. Ditch maintenance is done by pengorekan dirt and mud up on the basis of hard ground. Soil and mud must be removed out of the left and right along the trench. The grass on the cliff sides of the trench must be maintained for the prevention of erosion.

**Roundtable on Sustainable Palm Oil - New Planting Procedure
Summary Report of Management and Monitoring Plan**

5. Management and Mitigation plan for HCV4.1

- a). Disruption Intensity the area that has HCV4.1, including the fire danger
- b). Conditions diversity and density of plant species that were around the area that has HCV4.1.
- c). Conditions of species diversity and abundance of wildlife.
- d). Actual implementation activities and the percent land cover in rehabilitation, also monitoring and safety measure HCV4.1 area.
- e). Change width the river

6. Management and Mitigation plan for HCV4.2

1. Maintenance tagging and marking
2. Inventory conduct and identification land cover conditions in the containing HCV4.2 areas.
3. Protecting the area.
4. Conduct outreach to the community regarding the importance of conservation areas with slopes > 25%.
5. Training employees to improve the quality of human resources.
6. Make SOP Management of Protected Areas aims to establish protected areas. Where the scope of this SOP include establishing protected areas, inventory, installation of signage and warning and reporting.
7. Habitat restoration in areas that have a slope of > 25% that have been damaged in order to maintain the ecological functions and simultaneously create habitat for wildlife.
8. Monitoring the area containing HCV4.2 the parameters: intensity HCV area disruption to the area, including the threat of logging and clearing of land without regard to the aspect of conservation.

7. Management and Mitigation plan for HCV5

1. Boundary area and installation deleniasi signpost/HCV 5 nameplate area.
2. Socializing and good education to public community and employees PT. Citra Niaga Perkasa on importance of preserving HCV 5 area
3. Protecting the area, either passive or active.
4. Make Determination SOP, Management and Monitoring HCV 5
5. Rehabilitation and/or restoration vegetation, HCV 5 area the open land cover.
6. Training employees to improve the quality of human resources, especially in relation to the management and monitoring of HCV 5

8. Management and Mitigation plan for HCV6

1. Boundaries, deleniasi and signage installation location HCV6 area
2. Maintain and communication enhance and coordination with relevant stakeholders, particularly prior to land clearing.
3. Perform regular maintenance.
4. Conduct outreach to the community and the employees of PT. Citra Niaga Perkasa, about the importance sustainable of HCV6.

**Roundtable on Sustainable Palm Oil - New Planting Procedure
Summary Report of Management and Monitoring Plan**

5). Plan for HCV Monitoring and Regular Review Data

Monitoring activities focused on several things such as: 1). Monitoring the condition area (border areas, biodiversity and HCV area object, change width of river), 2). Disturbances Intensity (fires, pests, water pollution, habitat destruction, wildlife poaching and toxic materials use and stun to catch fish), 3). Land Cover percentage, 4). Percentage level of awareness and knowledge of the participants understanding of counseling and training, 5). Monitoring land subsidence and high water level in the palm peat area.

In general, the method comprises monitoring tools and methods used in monitoring. As for tools and used them working map, GPS, camera, compass, tally sheet, tape, plastic mines, and stationery. While the methods used is the analysis of Landsat imagery for some form of monitoring of land cover as well as the percentage of direct observation in the field for each condition HCVA in the area. Once the monitoring data collected, methods of inference performed if the value of the indicators obtained from the monitoring including medium and bad, the management activities in the region that had HCV have done needs to be maintained and improved.

For the interference intensity is 6 months, while other monitoring indicators conducted once a year and will begin in RKAP 2013.

Formal Signing Off by Assessors and Company

This document is the summary of SEIA (Social and Environmental Impact Assessment); HCV (High Conservation Value); and SFS (Social Feasibility Study) in PT. Citra Niaga Perkasa and has been approved by the Management of PT. Citra Niaga Perkasa

Bogor Agricultural University,



Dr. Ir. Nyoto Santoso, MS
Team Leader of HCV Assessment
26 December 2012

Management of PT. Citra Niaga Perkasa



Mohamed Affandi Mohamed Yusof
Senior General Manager

Statement of acceptance of responsibility for assessments

Assessment result document on High Conservation Value (HCV); SEIA (Social Environmental Impact Assessment) and Social Feasibility Study (SFS) of PT. Citra Niaga Perkasa by Faculty of Forestry - Bogor Agricultural University, Environmental Research Center (PPLH) Tanjungpura University and Lingkar Komunitas Sawit (LINKS) will be applied as one of the guidelines in managing palm oil plantation in PT. Citra Niaga Perkasa

Management of PT. Citra Niaga Perkasa



Mohamed Affandi Mohamed Yusof
Senior General Manager

26 December 2012