

Assessment Report
Industrial Forest Plantation
High Conservation Value
Public Summary

PT. MutiaraSabukKathulistiwa

44.595 Ha

Indragiri HilirRegency, RiauProvince

September – December 2013

This Public Summary is prepared within the framework of APP's Forest Conservation Policy and the information contained is the result of a full HCV assessment

Prepared by : *Imam Sulistyono (Lead Assessor)*



EKOLOGIKA

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1 INTRODUCTION

Time frame of HCV Assessment

The assessment is conducted on September 2013 . September 2014

Reference

| No | Reference |
|----|---|
| 1 | National HCV Toolkit |
| 2 | <i>The High Conservation Value Forest Toolkit, Edition 1, December 2003</i> |

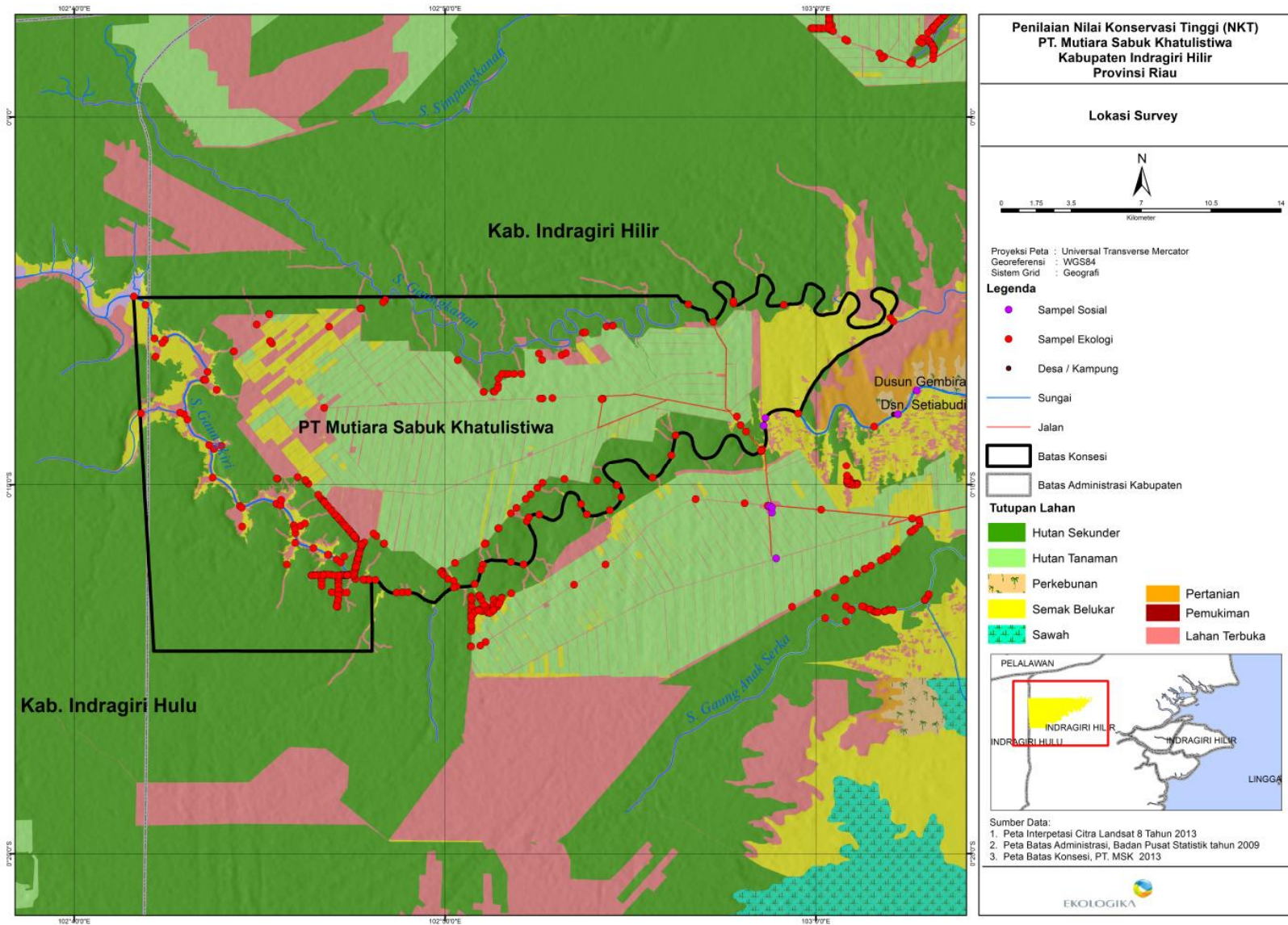
Project Development Status

PT. MutiaraSabukKathulistiwa is one of APP supplier which has been operating since 2009, according to the FCP there will be no natural forest wood cut and clearance by PT. MutiaraSabukKathulistiwa after January 31, 2013.

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|------------------------|--|
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AreaDescription

The Assessment Area is Industrial Forest Plantation of PT. Mutiara Sabuk Kathulistiwa located inGaung Sub-districtIndragiri Hilir RegencyRiau Province. Based on the Decree of the Minister of ForestryNo 109/Kpts-II/2000 dated 29 December 2000, MSK concession is 44.595 ha in the group of forest of Gaung River, Riau Province. MSKhas obtained the Decree of Boundary SK. 59/Menhut-II/2013, dated 23 January 2013for a44.433,66 Ha area.



Map of HCV Assessment location of PT. MSK

2 METHODS

2.1. Primary Data Collection

With the limited social data, socio-economic studies were also conducted on selected village to represent the concession. Personal information and HCV related or participatory research experiences with communities, of each team members are recorded in Appendix 2.

The primary data used are available in separate reports on:

- The vegetation within MSK concession
- Mammals within MSK concession
- Birds within MSK concession
- Reptiles and Amphibians within MSK concession
- Socio-economic and cultural condition within and around MSK concession

Management and monitoring recommendations suggested in this report served as the basis of management and monitoring recommendations used in this assessment.

Field topography verification. To assess the accuracy of topographic conditions described in secondary DEM, general field observations are conducted throughout whole MSK concessions. MSK concessions are generally undulating to sloping with dominantly lowland forest ecosystems.

Vegetation Survey. HCV assessment of vegetation in MSK concession was conducted by using descriptive method; with one km line-transect in areas representing each ecosystem types.

Amphibians and Reptiles. Herpetofauna diversity research was conducted by using active techniques, including Visual Encounter Survey (VES) modified with transect, Surveys at breeding sites and Road Cruising (Hayer et al., 1994; Kusriani, 2009). Morning observations were carried out from 06.00 to 09.00, while afternoon and evening observations were from 15.30 to 21.00. One km line-transects were set up in several habitat types.

Birds. Abundance survey of bird types was conducted by using cruising methods with Sorensen-Dice index to analyse the data, to identify the similarity of birds' flocks in each habitat type. Elaboration of the method, the survey area and the results are given in the separated avifauna report.

Mammals. This research applied line-transect and cruising technique. Mammals are observed by slowly cruising along 1 km of transect line in each forest types and recording all of the spotted mammals species. The observations were carried out in the morning (05:30 - 09:00), afternoon (15:00 - 18:00) and evening (19:00 - 22:00).

Social and cultural. The social and cultural scope of High Conservation Value (HCV) assessments falls to the criteria HCV5 (basic needs of local communities) and 6 (cultural identity and local community's bond with the area). Landscape methods were employed in the assessment, thus it was carried in villages within and around the concession area.

Sample determination is based on the following criteria:

1. The village is within the concession area.

2. The villages located around the area in a very close proximity to the concession and potentially, directly or indirectly, affected by the company's operations.
3. The villages located around the concession area based on watershed (DAS).

Selected villages around the area were examined the questions of whether natural resources from the concession and the forest areas are crucial to the fulfillment of basic needs of local communities, irreplaceable, do the community make use of natural resources in the concession area sustainably? And does the loss/damage of some parts or all of the natural resources due to company's operations affect the community livelihood?

Data Mining Method uses data which were collected from Focus Group Discussions (FGD) and semi-structured Interviews. To ensure participation in the process of data mining, representatives and community groups (village authority, religious figures, youth, and marginal group) were involved in the FGD. The purpose is collecting information on resources of each areas (settlement, hamlet, village) garnered from local community's knowledge, which is resourceful for HCV 4 assessment and socio-economic HCV 5, and HCV 6.

Location and delineation of High Conservation Value (HCV) 5 and HCV 6 are identified by observation, while GPS coordinates are input to set High Conservation Value Area (HCVA). The locations are then accurately presented in spatial maps.

2.2. Schedule

| No | Activity | Dates |
|----|--------------------------------|--------------------------|
| 1 | Pre Assessment | 12-16 May 2013 |
| 2 | Reporting | April . August 2013 |
| 3 | Multistakeholders Consultation | 17 October 2013 |
| 4 | Assessment | October . November 2013 |
| 5 | Reporting | November . February 2014 |
| 6 | Public Consultation | 5 . 6 June 2014 |
| 7 | Peer Review | September 2014 |
| 8 | Final Report | December 2014 |

3. ASSESSMENT TEAM

ADVISOR

Neville Kemp MSc (Technical Advisor of Ecology)

- Profession : Director of PT Ekologika Consultants, Natural Resource Management Consultant
- Expertise : Biodiversity survey, Community Development, Forest Ecology and Management. He is an ecologist, forestry expert and ornithologist
- Field Experience : Worked in conservation areas and community development at Indonesia and Vietnam for more than 17 years and known as an expert in the field of Biodiversity Survey, especially identifying avifauna species in Indonesia. Currently he is the Director of PT EKologika Consultants . a consulting company that provides Natural Resource Management Service and survey services in High Conservation Value assessment for companies in timber, palm oil plantation and Industrial Forest sector, including certified companies with FCS standard. He is also a member of High Conservation Value Network Indonesia.

Ninil Riyati Miftahul Jannah (Technical Advisor of Socio-economic and Cultural)

- Profession : Community Development Specialist
- Expertise : More than 10 years of working experience in various fields, including community development, conservation, environmental education and informal education for adults. Recently, her expertise is shifted to disaster risk reduction field and organizing communities to preparedness against disaster using participatory approach.
- Field Experience : Since earthquake disaster hit Yogya in May 27th 2006, Ninil had helped many communities to rebuild and strengthen their source of income through participatory approach. Founded %Berkumpulan Lingkar+ in 2008 and continuously working with communities to implement programs related to natural resources and disaster risk reduction.

ECOLOGY TEAM

Imam Sulisty (Team Leader, and Sociocultural)

- Profession : Social Technical Lead, PT. Ekologika Consultants
- Expertise : Biodiversity Survey, Community development, Stakeholders Engagement.
- Field Experience : Imam started his professional career in community development field and natural resource management since

2001. More than 10 years of experience conducting biology surveys, social studies and community engagement and development. Possess good knowledge in facilitating and building relationship with communities, government, and other stakeholders.

Berry Lira Rafiu, S.Hut (Mammals)

Profession : Biodiversity Specialist
Expertise : Biodiversity Survey, Ecology and Mammals
Field Experience : After graduated from undergraduate program in Forest Resource Conservation and Ecotourism, surveyor had involved in biodiversities field-related activities. Several scientific studies had done, some of them are Population Study on Sambar Deer at South Bukit Barisan National Park at 2009, Chryoptera and Rodentia Varieties study in East Kalimantan at 2010. For the last 2 years, often involved in HCV survey in PT. RAPP Semenanjung Kampar, HCV survey in palm oil plantation in Central Kalimantan, West Kalimantan, East Kalimantan, and Sumatera.

Yoga Travolindra (Mammals)

Profession : Field Surveyor
Expertise : Biodiversity Survey, Stakeholder and Community Engagement, Forest Fire Management.
Field Experience : Since 2004, Yoga had involved with South Sumatra Forest Fire Management Project (SSFFMP) positioned as member of Forest Fire Division Team and Village Facilitator and training communities on dealing forest fire disaster. Yoga also often involved in participatory village mapping activities and giving Environmental Education related to Forest Fire. Yoga joined with Merang REDD Pilot Project (MRPP) as a member of Measurement and Monitoring Forest Carbon Team. Yoga also trained in monitoring Sumatran Tiger using camera trap and involved as member of Field Team in Sumatran Elephant Population Survey Team with WCS

FahrudinSurahmat, S.P. (Avifauna)

Profession : Avifauna Researcher
Expertise : Biodiversity survey, especially birds taxa
Field Experience : Actively participated in biodiversity research in various National Park and Wildlife Preserve since college, such as Mount Halimun-Salak National Park, Mount GedePangrango National Park, Ujung Kulon National Park, Cikepuh Wildlife Reserve, MuaraAngke Wildlife Reserve. Actively involved in monitoring predatory bird migration, avifauna survey for Cikalang Christmas (*Fregataandrewsi*) in Jakarta bay, environmental monitoring and environmental related to Eagle reintroduction and birds marking. He is still an active volunteer of SuakaElang, HarimauKita, and Burung Nusantara. Researcher is also part of Indonesia Bird Banding Scheme; group of avifauna researcher

affiliated with LIPI which is actively marking bird.

Zukfikri, S.Hut (Avifauna)

Profession : Avifauna researcher
Expertise : Biodiversity Survey, especially on avifauna taxon
Field Experience : Involved in HCV survey since 2012 in biodiversity especially avifauna. Since college, he is also involved in several survey activities, such as survey for data baseline and biodiversity needs, since 2008.

BurhanTjaturadi, MSc (Herpet-Ecology Team)

Profession : Natural Resource Management Consultant
Expertise : Biodiversity Survey, especially herpetofauna taxon (Reptilian and Amphibian).
Field Experience : Worked in conservation field in Papua for more than 11 years and known as an expert in biodiversity survey, especially herpetofauna identification in Indonesia. Other than that, he was also active in Turtle Breeding studies in a NGO located at Yogyakarta. Currently he served as Biodiversity Officer in PT. Ekologika Consultants . a consultant company that provides Natural Resource Management Service and surveying services which provides High Conservation Value measurement for timber company, palm oil plantation and Industrial Forest, including several companies which had FSC certification standard.

PurwoSetioIndarto, S.Si (Herpetofauna/Reptilian and Amphibian)

Profession : Herpetologi Specialist
Expertise : Survey Ekologi Herpetofauna (AmfibidanReptil).
Herpetofauna Ecology Survey (Amphibian and Reptilian)
Field Experience : Worked in TessoNilo National Park Institue at Riau, as Flaying Camp coordinator for Wild Elephant Conflict Prevention 2008-2010, six years served in Jogja Center of Wildlife Rescue and also served as Head of Animal Keeper Unit and reptilian maintenance since 2003-2008.

FX Sugiyoprano, S.Si (Herpetofauna/Reptilian and Amphibian)

Profession : Herpetofauna (Amphibian and Reptilian) specialist
Expertise : Herpetofauna variety Survey
Field Experience : hadan experience in Reptile Conservation fieldSince college; worked in herpetofauna field and monitoring reptilian trade with Yayasan SANCA INDONESIA; worked with Animal Taxonomy

Lab, Faculty of Biology, UniversitasGadjahMada in Herpetofauna variety survey in Merapi slope, GumukPasir ecosystem.

Fernando TogarManurung, MP. (Forestry and Plant Ecology)

Profession : Forest Ecology Lecturer, Faculty of Forestry, UniversitasTanjungPura.
Expertise : Biodiversity survey, Forest Ecology / SilvikulturTropika
Field Experience : Worked in conservation field in West Kalimantan for 23 years, especially in Forest Ecology field. Known as Tropical Forest Flora and Peat Expert. Had done several researches and studies in forest flora and silvikultur at several HPH and forest industries. Also known as AMDAL designer on Ecology Assessor field for Ecolabelling and Forestry Technical Expert Instructor certification.

Agusti Randi S.Hut (Plant Ecology Team)

Profession : Konsultan Flora
Expertise : Biodiversity Survey, especially Flora.
Field Experience : Since 2010 had done various biodiversity research with several institute such as FFI and WWF at several conservation and private companies in West Kalimantan for HCV purpose and others.

SOCIAL TEAM

BambangEko Budi Yanto (Socioeconomic and Culture)

Profession : Community Organizer & Community Development Specialist
Expertise : Facilitator, Social Research, Monitoring and Evaluation CO & CD programs in NGO, Donor Institute, Community Organizing companies; Capacity Building.
Field Experience : Had been active for 10 years in Environmental Education NGO, building and maintaining environmental education program for school age 8 - 20, environmental education training for teachers and young professional. Since 1997 hadbeen establishing& strengthening organization of local community of coastal, forest, low income urban and gender. Several conducted activities: Facilitator for Risk Mapping in GunungGede-Pangrango National Park, 1999; Socio-economic Studies of Coastal Communities of Main Hatching Beaches of Green Sea TurtleinPangumbahan, Sukabumi. working with the Ministry of Environment, 1992; Data Analyst & Facilitator for Developing Community Information System at Papua, with LPPMA - Jayapura, 1999; Organizing Coastal Community ofPuloPanjang-Cilegon-Banten, 1999-2000; Welfare Inventory and Designing Welfare Indicator for Fisherman. Department of Maritime Affairs and Fisheries; Organizing Communities in 4 villages, Leupung, Aceh Besar-NAD. Yayasan PUTER. Rehabilitation Stage & Post Disaster Reconstruction (Earthquake and Tsunami), Aceh, 2005; Lhok Studies as Fishery Sector Recovery Program Location - KEHATI Program - JSDF at NAD, 2006; District Manager at Pidie, Catch Fisheries Sector Recovery Program in NAD,

Yayasan KEHATI, JSDF & World Bank, 2006-2008; External Program Evaluator for Yayasan PUTER Indonesia, Increasing Active Role of Community and Scavenger in Plastic-based Waste Sustainable Management Through Central Recycle Model Development. 2012; Monitoring Forest Moratorium Ground Truthing, from REDD+Taskforce (SATGAS) Head of Presidential Taskforce Unit of Development Monitoring and Controlling (UKP4). 2012; Land Clearing (Ground Truthing) Monitoring WRI-PUTER Indonesia in Merauke&Jayapura regencies. 2013; Capacity Building for Community Mobilisation, MitraSum2-USAID - PENABULU, at Semarang and Purwokerto, since 2012-2013.

FadhilNandhila (Socio-Economic and Culture)

Profession : Community Organizer, Community Development, Campaigner Specialist

Expertise : Photography; Community Organizer; Community Development; Campaigner; Facilitator for Environmental Education; Waste Management

Field Experience :

- 2004, NGO Jaringan Pendidikan Pemilih Untuk Rakyat (JPPR), work description; Independent Volunteer for Election;
- 2006, Gramedia Majalah, Surveyor;
- 2006, Voice Of Human Right, Survey & Interviews on basic knowledge on human rights towards society in Jakarta.
- 2008, Environmental Education Facilitator;
- 2008; Program Coordinator for Community Assistance Program;
- 2010, Project Manager;
- 2012, Waste Recycle Consultant.

AchmadFadilah (Socio-Economy and Culture)

Profession : Community Organizer, Community Development, Campaigner Specialist

Expertise : Photography; Community Organizer; Community Development; Campaigner; Facilitator Environmental Education; Waste Management

Field Experience : 2004, NGO Jaringan Pendidikan Pemilih Untuk Rakyat (JPPR), work description; Independent Volunteer for Election; 2006, Gramedia Majalah, Surveyor; 2006, Voice Of Human Right, Survey & Interviews on basic knowledge on human rights towards society in Jakarta. 2008, Environmental Education Facilitator; 2008; Program Coordinator for Community Accompaniment Program; 2010, Project Manager; 2012, Waste Recycle Consultant.

Saifuddin (Socio-economy and culture)

Profession : Community Organizer, Community Development, Social researcher

Expertise : Community Organizer; Community Development; Facilitator for Environmental Education; Waste Management

Field Experience : Facilitator at PEKA ALAM Ujung Kulon&MeruBetiri, Klub Indonesia Hijau,
Facilitator for Outdoor Education, Klub Indonesia Hijau
Facilitator for Nature Monitoring Expedition, Klub Indonesia Hijau.Socio-Economic Studies for Shoreline Community on Main Tracking Pangumbahan Green Turtle, Sukabumi-partnership with Ministry State Office for Living Environmental, 1992.Facilitator for Living Environment Education, Bakti Social Surya Baskara Jaya operation, Armabar TNI AL, 1995. Intrepeter Training for Biodiversity purpose at GunungGedePangrango National Park, 1995. Flores Expedition, bird ecology survey in Flores-Nusa Tenggara Islands. Conservation Project University of East Anglia, England. 1997.

4 RESULT

4.1. HCV Result

| HCV | Definition | Present | Potential | Absent |
|-----|--|------------------------|-----------|--------|
| 1 | Concentrations of biological diversity including endemic species, and rare, threatened or endangered species, that are significant at global, regional or national levels. | HCV 1.1, 1.2, 1.3, 1.4 | | |
| 2 | Large landscape-level ecosystems and ecosystem mosaics that are significant at global, regional or national levels, and that contain viable populations of the great majority of the naturally occurring species in natural patterns of distribution and abundance. | 2.1, 2.2, 2.3 | | |
| 3 | Rare, threatened, or endangered ecosystems, habitats or refugia. | 3 | | |
| 4 | Basic ecosystem services in critical situations, including protection of water catchments and control of erosion of vulnerable soils and slopes. | 4.1, 4.3 | | 4.2 |
| 5 | Sites and resources fundamental for satisfying the basic necessities of local communities or indigenous peoples (for livelihoods, health, nutrition, water, etc.), identified through engagement with these communities or indigenous peoples. | 5 | | |
| 6 | Sites, resources, habitats and landscapes of global or national cultural, archaeological or historical significance, and/or of critical cultural, ecological, economic or religious/sacred importance for the traditional cultures of local communities or indigenous peoples, identified through engagement with these local communities or indigenous peoples. | 6 | | |

| HCV | Sub-Item | Definition | Present |
|-----|----------|---|--|
| 1. | 1.1 | Areas/sites that have or give Biodiversity Supporting Function for Protected and/or Conservation Areas. | Company's protected areas, riverbanks |
| | 1.2 | Endangered species. | <i>Shorea platycarpa</i> , and <i>Shorea macrantha</i> and <i>Panthera tigris sumatrae</i> |
| | 1.3 | Areas that contain habitat for viable population of endangered restricted range or protected species | 11 vegetation species, 16 mammals species, 38 avian species, and 9 species of amphibian and reptilian taxa |
| | 1.4. | Areas that contain habitat of temporary use by species or congregation of species | Fresh water swamp and gaung riverbank as the habitat of migratory birds |
| 2 | 2.1 | Large Natural Landscapes with capacity to maintain natural ecological processes and dynamics | No natural forest with >20.000ha core area and 3km buffer zone |
| | 2.2 | Areas that contain two or more contiguous ecosystems | Transition of fresh water swamp to peat swamp ecosystem. |

| | | | |
|---|-----|--|---|
| | 2.3 | Areas that contain representative populations of most naturally occurring species | Wildlife biodiversity, especially mammals are found in all peat forest, lowland forest and shrubland with several groups of felidae and accipiter species |
| 3 | | Areas with endangered or nearly extinct ecosystem. | Peat swamp and fresh water swamp ecosystem |
| 4 | 4.1 | Important areas or ecosystem that function as water supply and flood control for community that resides in downstream areas. | Riparian and peat swamp forest |
| | 4.3 | Areas that function as natural barriers to prevent forest or field fire. | 100m Forest buffer zone, Industrial Forest Plantation (HTI) |
| 5 | | Areas with Important Functions to fulfill Local community's basic needs. | (1) protein intake, (2) river water as clean water supply and sanitation, (3) source of income(fish). |
| 6 | | Areas with Important Functions as Traditional Cultural Identity of Local Communities. | Noyang Site |

4.2. Public Consultation Result

Implementation:

| | |
|--------------|-------------------------------|
| Date | 5 – 6 June 2014 |
| Venue | Hotel Grand Tjokro, Pekanbaru |

Attendance Lists :

Villages Representative

| NO | NAME | POSITION | EMAIL | CONTACT NO |
|----|-------------|--------------------|-------|---------------|
| 1 | Ahmad Saidi | Datuk Panghulu | | 085278767844 |
| 2 | Herri Sp | Toma Labuan Papan | | 082385489013 |
| 3 | Syahril | Toma Labuan Papan | | 08533203163 |
| 4 | Rudihartono | Mesah | | 081371685724 |
| 5 | Zaini | Mesah | | 085307640091 |
| 6 | Abet.Sh | Kades Penyengat | | 081275505575 |
| 7 | Arianto | Kades Tj Simpang | | |
| 8 | Zulkifli | Sekdes Sp Kateman | | 085363712648 |
| 9 | Edi Indra | Bpd Tj Simpang | | 082169506467 |
| 10 | Suyono | Lurah Sungai Empat | | 0813787395511 |
| 11 | Suhardi | Ldm Sungai Empat | | 08127666803 |
| 12 | Ahmad Yani | Ldm Sungai Empat | | 08527217426 |
| 13 | M Saleh | Lrah Tj Pinang | | 085363879989 |
| 14 | Efendi | Bpd Rambaian | | 082388868529 |
| 15 | Sudirman | Desa Rambaian | | 082173274888 |

| | | | | |
|----|---------------------|--------------------------|--|--------------|
| 16 | H.Syarif | Kades K Gaung | | 081268450062 |
| 17 | Sholihin | Bpd K Gaung | | 081365365897 |
| 18 | Samat | Bpd K Gaung | | |
| 19 | Agus Hidayat | Pemuka Masyarakat | | 085363979807 |
| 20 | Junedi | Pemuka Masyarakat | | 085212063931 |
| 21 | M Haris | Toma | | 081371202240 |
| 22 | Sadeli | Kades B Lestari | | |
| 23 | Sarno | T Masyarakat | | |
| 24 | Nurudin | Kades Indra Pura | | |
| 25 | Anto B | Tokoh Adat Tuas | | 08126820618 |
| 26 | Ali Arifin | Toma T Indrapura | | 085265506005 |
| 27 | Fahrudi | Kades Sp. Kateman | | |
| 28 | H.Ardi | Kades Rambanan | | |
| 29 | Agustinus | Perangkat Desa Penyengat | | 085307640090 |
| 30 | Ketong | Penyengat | | |
| 31 | Harlina | Kades Jerambang | | |
| 32 | Rahman | Sekdes Jerambang | | |
| 33 | Amir | Bpd Jerambang | | |
| 34 | H Masbah Saen | Sekdes Belantaraya | | |
| 35 | Zainal | Staf Belantaraya | | |
| 36 | Ilham | Bpd Belntaraya | | |
| 37 | H.Imran Awang | Kades Pungkat | | |
| 38 | Musa Ahmad | Sekdes Lahangb Baru | | |
| 39 | Sunardi | Bpd Pungkat | | |
| 40 | M.Yamin | Masyarakat | | |
| 41 | Sudirman | Kades H Kabung | | |
| 42 | Fachrudin | Kades Gembira | | |
| 43 | Bunyamin | Kades Gembira | | |
| 44 | Ison | | | |
| 45 | Hr.Abdulah | | | |
| 46 | H Ridwan | | | |
| 47 | Julian | | | |
| 48 | Bambang Irawan | | | |
| 49 | R. Ramli | | | |
| 50 | Sufyan | | | |
| 51 | Pendi | | | |
| 52 | Aramaini | | | |
| 53 | Bandi | | | |
| 54 | Lahuri | | | |
| 55 | Alitiar | Kadus | | |
| 56 | Edi Susianto | Toma | | |
| 57 | Hasan Basri | Penghulu Pulau Huda | | |
| 58 | Beni Erwwin | Pemuda Teluk Pulau Hulu | | |
| 59 | Karmudin Hasan | Masyarakt Jumrah | | |
| 60 | Jefri Buckhori,Spdi | Masyarakat T Pulau Hulu | | |

SUB-DISTRICT OFFICIALS

| NO | NAME | POSITION | EMAIL | CONTACT NO |
|----|--------------|------------------------------|-------|--------------|
| 1 | Errie YS | Camat Tanah Putih | | 08536548 |
| 2 | T. Mukhtasar | Kec. Sungai Mandau | | 081276177199 |
| 3 | H. Syahbudi | Camat Gaung | | 08126857005 |
| 4 | Abdul pani | Camat pelangiran | | 081365698305 |
| 5 | Afrizal | Camat Siak kecil | | 081378467897 |
| 6 | Ibasri | Sekcam Sungai Sembilan | | 08127636870 |
| 7 | Syamzani | Plt. Sek Cam Rimba Melintang | | 081378561040 |
| 8 | Nurdin | Camat GAS INHIL | | 081371982281 |

REGENCY OFFICIALS

| NO | NAME | POSITION | EMAIL | CONTACT NO |
|----|----------------|----------------------|-------|----------------|
| 1 | MUSTIKA JUFRI | BPN.Kab 3rokan Hilir | | 082386778457 |
| 2 | YUGO TRIANTONO | Disbun Rohil | | 081371252701 |
| 3 | Sandra w | disbun hut | | 08127689574 |
| 4 | tajul windaris | BAPEDA BENGKALIS | | 081365698305 |
| 5 | Agung Priono | DISHUT INHIL | | 0852689810025 |
| 6 | agus winarno | Dishut Dumai | | 081276290610 |
| 7 | ridwan | BLH INHIL | | 081378243265 |
| 8 | Guntur Benny | DISHUT | | |
| 9 | Karyono | BPN KAB SIAK | | 081362180922 |
| 10 | Adheriawan | LIPT Kehutanan Gaung | | 08536434841295 |

CENTRAL AND PROVINCIAL INSTITUTION

| NO | NAME | POSITION | EMAIL | CONTACT NO |
|----|-------------------|---------------|-------|--------------|
| 1 | Ir. PURNOMO | Bp2hp | | 08127622521 |
| 2 | ISBANU | BBKSDA | | 055279048686 |
| 3 | ALBAHRI | BP2HP | | 08137103363 |
| 4 | SAVITRI HANDAYANI | BAPEDA | | |
| 5 | RATNA JUWITA | BAPEDA | | |
| 6 | WANLINDA | BAPEDA | | |
| 7 | MS ABDUL HARIS | MANGGALA AGNI | | |
| 8 | YUSHAN | BDK | | 082172456211 |
| 9 | ZAWILHIJRI | BKSDA RIAU | | 085271716970 |

NEIGHBOURING COMPANIES REPRESENTATIVE

| NO | NAME | ORGANIZATION/INSTITUTION | EMAIL | CONTACT NO |
|----|---------|--------------------------|-------|--------------|
| 1 | MUCHTAR | MUSIMAS | | 082386547859 |

NGO

| NO | NAME | ORGANIZATION/INSTITUTION | EMAIL | CONTACT NO |
|----|---------------|--------------------------|--|------------|
| 1 | FatraBudiato | Rumahpohon | fatra.budianto@rumahpohon.org | 082174846 |
| 2 | Donny | SiakCerdas | dofiendra@gmail.com | 0812708069 |
| 3 | RahmaidiAzami | JIKALAHARI | lordcom-et@gmail.com | 0813718229 |
| 4 | DedeKunaifi | Rumahpohon | kunaifi.96@gmail.com | 0811751914 |
| 5 | Afdal. M | WWF | afdalmy@yahoo.com | 0813897682 |
| 6 | Teddy. H | Kabut Riau | teddykabut@yahoo.co.id | 0812760274 |
| 7 | Lismar | Riau Pos | hendry-lismar@yahoo.com | 0813719099 |
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The Result of Public Consultation

| Result Matrix HCV 1.1. | |
|----------------------------------|---|
| Stakeholders Input | |
| HCV | Riverbanks of PulauTumbang and SimpangKiri |
| HCVA | Unclear spatial plan by government resulted in vague land and area allocation |
| Threats TowardHCV | <p>Slash and burn practice of land clearing, even with the condition that most of the areas are peat land, which is prone to forest fire and could spread to the protected areas.</p> <p>Illegal logging activities existed in areas around HCV</p> <p>Riparian areas are accessible by community to take benefits from it, but tree-cutting activities are forbidden.</p> <p>Allocation of area for livelihood tree plantation i.e. rubber and acacia, from the company, to prevent community from accessing and damaging protected areas.</p> |
| HCVMA | Making special area that is accessible for community that function as source of income and livelihood to prevent further damage to the protected areas. |
| Management Recommendation | Government and private companies have to establish clear boundary marking and sign board for the protected areas |

| Result Matrix HCV 1.1. | |
|----------------------------------|--|
| Stakeholders Input | |
| HCV | Riverbanks of PulauTumbang and SimpangKiri |
| | Establishing natural barriers to prevent or counter measuring forest fire on the boundary of protected area. |
| | Disseminating the result of research and study to local community around HCV area to gain support (Socialization) |
| | Developing habitat and source of feeding for animal population in HCV area |
| | Developing eco-tourism in HCV area, managed by community based on local wisdom as a source of income |
| | It is necessary for private companies or government to give clear information regarding field/area that can be cultivated or not. |
| | Forest management unit (UMH) is obligated to give information to community about area rights and which field/area that can be managed by community regarding HCVMA (socialization) |
| | Prioritizing local plants to be developed as main vegetation in HCV areas. |
| | Planning for developing HCV areas, not only protecting existing areas. |
| | Making protected forest as eco-tourism object and support community to manage it as well. |
| | It is necessary to make continuity inventory to correct whether HCV are declining or increasing in order to measure existing management. |
| | Company with cooperation with government and local community undertake monitoring activity at least annually or twice a year |
| Monitoring Recommendation | Streamlining existing institution to do monitoring, especially by government. |
| | Monitoring can be done by local community, and supported by UMH |
| | UMH, assisted by NGO, undertakes HCV monitoring or inventory study and the result are disseminated to the media, especially internet. |

| Result Matrix 1.2. | |
|--|---|
| Stakeholders Inputs | |
| High Conservation Value (HCV) | |
| High Conservation Value Area (HCVA) | |
| Threats towardHCV | High rate of habitat conversion and illegal loggingtinggi, while poaching low. |
| High Conservation Value Management Area (HCVMA) | |
| Management Recommendations | Human-tiger conflicts are well responded National level information of mammalꝯ death Study to maintain the balance of foodchain. |
| Monitoring Recommendations | HCV area restoration; encouraging the establishment of conservation area; installing and updating HCV wildlife information board; studying the canal constructions towardsHCV |

Result Matrix 1.3.

| Stakeholders Inputs | |
|-----------------------------------|--|
| HCV | Crocodile |
| HCV | Straw headed bulbul (CucakRowo), white-rumpedshama (MuraiBatu); Silver Arowana; Punak (<i>Tetrameristaglabra</i>) |
| HCVA | |
| Threats towards HCV | Big mammals population loss less than 30 individual; illegal logging; tiger poaching; land clearing; community ignorance on HCV plants and animals |
| HCVMA | Crocodile: Gaung River. Kateman. Bear: within forest; Straw headed bulbul: in the shrubs, Arowana, tasik; white-winged duck: all year swamp area |
| Management Recommendations | Better response of human-tiger conflicts National level information of mammal death Study to maintain the balance of foodchain HCV area restoration Installing and updating HCV plants and wildlife information board Studying the canal constructions towardsHCV |
| Monitoring Recommendations | Regular monitoring towards HCV Area Joint monitoring between government, company and community Regular evaluation towards the development ofHCV Supporting the establishment of forum involving multi stakeholders in landscape based HCVmanagement |

| Result Matrix HCV 1.4. | |
|-----------------------------------|---|
| Stakeholders Inputs | |
| HCV | Starling, Greater green leafbird (MuraiDaun), white-rumpedshama, tiger, crocodile, lizard, Pangolin, porcupine, Musang, Bear, Slow Loris, Hornbill, Perkutut, spotted dove, glossy swiftlet, bar-winged Prinia, grouse (Belibis), quail (Puyuh), Crested Serpent Eagle, ufous-headed woodpecker(BurungPelatuk), BurungEmbut-Embut, green junglefowl (AyamHutan) Pakis Merah,Ramin, Pakis Haji, |
| HCVA | All area |
| Threats towards HCV | Less decisive punishment encourages the environmental offender to repeat their offense Utilizing fish, birds, and other wildlife as source of livelihood in unsustainable manners (over harvest, using poison) Less information and socialization lead to ignorance of community on protected species and how to utilize |
| HCVMA | No tree-cutting activities on riverbanks, only for non-timber forest product and other regulated utilization |
| Management Recommendations | Middle buyer of endangered species should be reported to law enforcement officials to prevent the illegal trade as well as supply from community Allocating a community management area to be accessible for source of livelihood and income to prevent damage over endangered species |
| Monitoring Recommendations | UMH, assisted by NGO, undertakes HCV monitoring or inventory study and the result are disseminated to the media, especially internet. Regular inventory study to measure changes and determine the response |

| Result Matrix 2.1. | |
|-----------------------------------|--|
| Stakeholders Inputs | |
| HCV | Correspond with assessment |
| HCVA | Correspond with assessment |
| Threats towards HCV | Illegal Logging, encroachment |
| HCVMA | Including concession area in HCV 2.1 |
| Management Recommendations | Participatory boundary marking, socialization and monitored evaluation involving community and stakeholders of the protected areas Encouraging village involvement in monitoring by formulating village regulation (perdes) on boundary Closing the access (road, canal and illegal logging) Clear and decisive law enforcement towards illegal logging |
| Monitoring Recommendations | Correspond with assessment |

| Result Matrix 2.2 | |
|-----------------------------------|--|
| Stakeholders Inputs | |
| HCV | |
| HCVA | Gaung River flood land area |
| Threats towards HCV | Environmental and ecosystem change due to canalization and land conversion on the assessment area, encroachment and illegal logging on the buffer zone |
| HCVMA | The management area is not only HCV, but also including Buffer zone |
| Management Recommendations | Similar to assessment result, further research in buffer zone and ecosystem uniqueness is needed to support preservation |
| Monitoring Recommendations | Correspond with assessment |

| Result Matrix 2.3 | |
|-----------------------------------|---|
| Stakeholders Inputs | |
| HCV | Correspond with assessment |
| HCVA | HCV 2.1 area and riverbank |
| Threats towards HCV | Poaching and habitat loss due to encroachment and forest fire |
| HCVMA | HCV 2.1 area and riverbank except in PT BKM which is in riverbanks and secondary forest |
| Management Recommendations | Correspond with assessment |
| Monitoring Recommendations | Socialization, wildlife and vegetation monitoring, law enforcement regarding forest fire and poaching |

| Result Matrix 3 | |
|----------------------------|--|
| Stakeholders Inputs | |
| HCV | Correspond with assessment |
| HCVA | Correspond with assessment |
| Threats towards HCV | External; 1. Forest conversion in secondary natural forest 2. Forest fire and land occupation. Internally, threats occur due to lack of monitoring |
| HCVMA | HCV 2.1 area |

| Result Matrix 3 | |
|-----------------------------------|---|
| Stakeholders Inputs | |
| Management Recommendations | Law enforcement towards land conversion, forest fire and land occupation, regular monitoring towards contractor and ensuring the SOP is not threatening HCV 3 and monitoring from company |
| Monitoring Recommendations | Correspond with assessment |

| Result Matrix 4.1 | |
|-----------------------------------|--|
| Stakeholders Inputs | |
| HCV | <p>Source of water is still exist, drinking water quality is lower, flood -->river cleansing deepening, canal to anticipate flood</p> <p>The River need to be cleaned(from common water hyacinth/encenggondok)</p> <p>Flood and drought are long, the surrounding water quality is not decent, river water is not consumable, canalization within natural forest, pest plague to community oil palm plantation</p> <p>Irrigation for ricefield should be secured, lack of water</p> |
| HCVA | <p>Along gaung river, left junction of the river right junction of the river,</p> <p>Along gaung river, left junction of the river, right junction of the river,</p> <p>Left junction of the river</p> <p>Sekusut river, rokan river,</p> <p>Irrigation canal of tasikpesimsim/ tasikrawahitam to bungaraya village</p> |
| Threats towards HCV | <p>Too close a range of acacia plantation, chemical fertilizer and pesticide</p> <p>Water scarcity due to canal dam in tasik air hitam</p> <p>Tasik air hitam and surrounding area</p> |
| Management Recommendations | <p>Water volume management in canal towards its flow to big river, builds a borewell to provide drinking water for the community</p> <p>Cooperates with surrounding companies to maintain/manage community's source of water</p> |
| Monitoring Recommendations | <p>Water quality monitoring, accessible information to the result</p> <p>Participatory planning with community</p> |

| Result Matrix 4.3 | |
|----------------------------|---|
| Stakeholders Input | |
| HCV | <p>LimauHantu river, Mundung river, Pipit river, Kayuara river are locations of source of income from fresh water fisheries sector</p> <p>BaganKera river, Terentang river, Pompong river,Ikan river, Perupuk river, PahatHulu river, PahatHilir river, AnakTelok river, Nau river, Rombia river, Noyang river, Tapatan river,Labuhan river, BuluKasap river,Padu river,Pagar air river,Kapet river,Terupéh river, Panti river, Kemudi 1 river, kemudi 2 river, are locations of communities freshwater fishermen</p> |
| HCVA | Correspond with assessment |
| Threats towards HCV | Loss of water catchment trees/plants |
| HCVMA | Big river area should be secured : Noyang river, Terentang river, Labuhan river,pante river,Kemudi river |

Result Matrix 4.3

| Stakeholders Input | |
|-----------------------------------|---|
| | Big river area should be secured : Noyang river, Terentang river, Labuhan river,pante river,Kemudi river Management areas are in community forest as well as company |
| Management Recommendations | Riverbanks ricefield, secured natural forest on the riverbanks, reforestation of riverbanks, company fire management, reforestation of cleared land as one of conflict solution. |
| Monitoring Recommendations | Cooperation between government, company and community in forest fire, Company establish and empower community group to secure forest area from fire Decisiveness and seriousness of law enforcement officials towards the main actor of forest fire. |

MATRIX HCV 5 : PT. MSK

STAKEHOLDERS INPUT

| | |
|---------------------------|---|
| HCV | <ul style="list-style-type: none"> • Kokol, selimpat, dauntenggeburuk (Source of vitamin/vegetables) • Fish: juwara,haruan, lompong, selais,biawan, keli, shrimp (source of protein and cash income) • Woods: kempas,sungkai, pulai, nimbang (ria), rangon, bitangur, batanglinau rattan dahanan, honey, rattan sege, rattan semampu, lelau/roots, rasau leaf (materials for working tools/equipment and for building boat) • Honey, rasau leaf, tropical pitcher plan, seletup root, kenduduk leaf, pengaga, resah sap,resak wood skin (traditional medicine) • Rain water and bottled water (drinking water) • River water (source of clean water for sanitation) |
| HCVA | Yes |
| Threats towards HCV | <ul style="list-style-type: none"> • Mindset shifting of community to disagree could be threat • Expansion of company management area, reducing HCV area and loss of the source of HCV 5 • Fire • Human activities in the riverbank will decrease HCV 5 |
| HCVMA | <ul style="list-style-type: none"> • Yes |
| Management Recommendation | <ul style="list-style-type: none"> • Company and government supporting community need of woods supply for housing and ship industry • Company CD/CSR program should be innovated to fulfil livelihood, reducing the destructive dependence towards HCV 5 • Company provides new source of clean water from drilled well • water treatment of river water to be appropriate for consumption • forest management unit participation towards community land condition attacked by pest • conflict management by forest management unit should engage community, not only in elite level • providing alternative of livelihood trees species, according to the need of community (other than acacia) |
| Monitoring Recommendation | <ul style="list-style-type: none"> • Monitoring should be conducted 3 times a year • Annual monitoring towards community development program • Need biodiversity assessment • Type/pattern of plant |

MATRIX HCV6 : PT. MSK

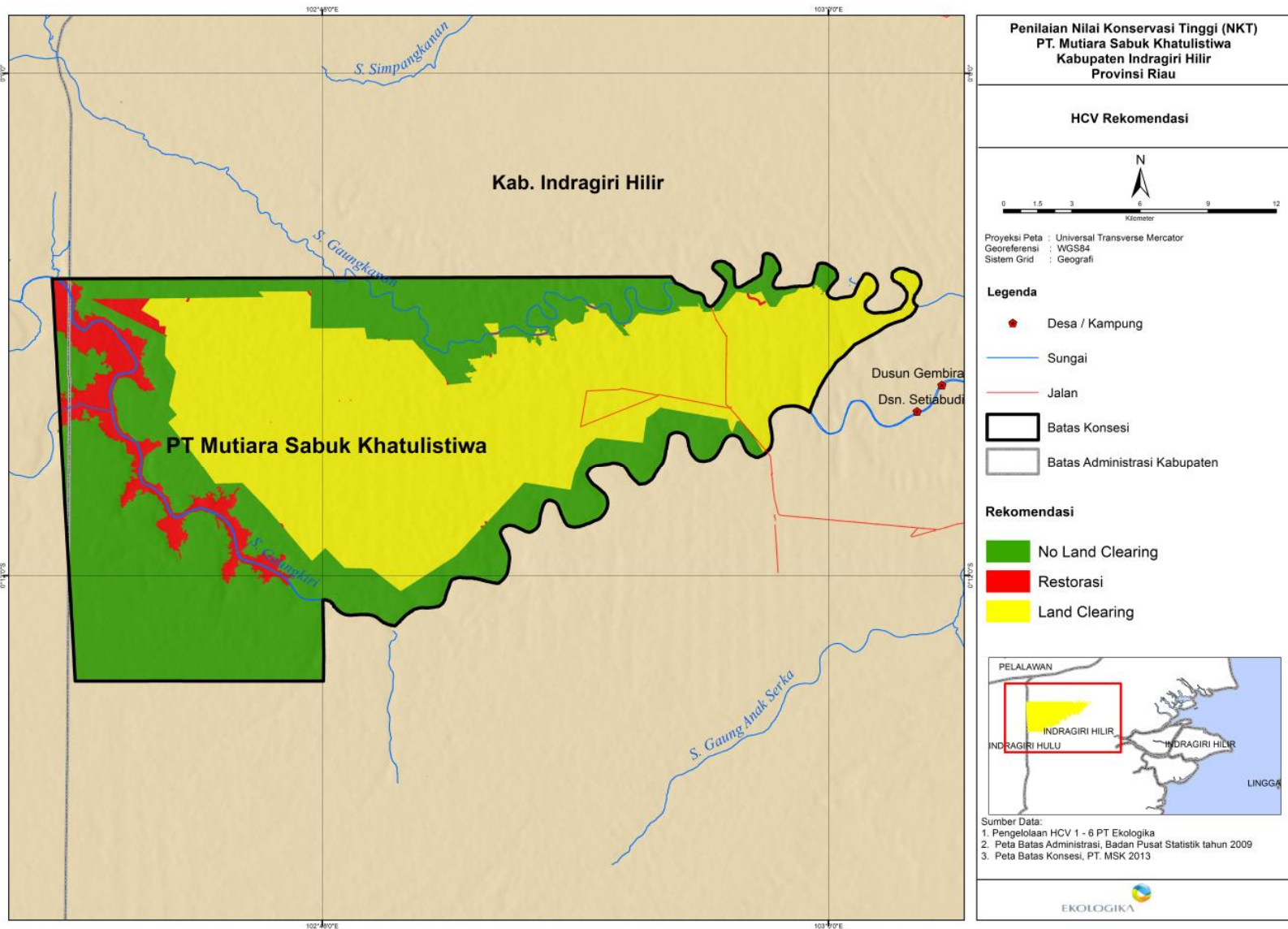
| |
|--|
| FINDINGS |
| Noyang |
| |
| INPUTS |
| Sacred grave, 5 m long in SimpangGaung village |

5. RECOMMENDATION

| HCV | Sub Item | Definition | Management | Monitoring |
|-----|----------|---|--|---|
| 1. | 1.1 | Areas that contain or provide biodiversity support function to protection or conservation areas | HCVA Boundary marking | monitoring the condition of the protected area after HCVA boundary marking |
| | | | Controls illegal logging in forest areas | Joint patrols between forest ranger and community |
| | | | Increase the understanding of employees, contractors and local community about wildlife. | Measure the amount of occurred poaching |
| | | | Making the riverbank into conservation area. | Taking measurements directly in the field |
| | | | The involvement of local community in the process of determining land-use agreement | Monitoring land use by using satellite images |
| | 1.2 | Endangered species | Controls illegal logging in forest areas | Joint patrols between forest ranger and community |
| | | | Mapping CR individual species | recording and tagging of CR stands |
| | | | Saving Shorea platycarpa, Shorea cf balangeran seedlings | Recording of seedling development with biodiversity surveys and vegetation research |
| | | | Hunting ban and increasing employees and local community awareness about wildlife. | Patrol system and enforcement reporting system for monitoring, installation of camera traps in known crossing locations |
| | | | Mapping vulnerable/potentially caused fire areas. | Hotspots observation with Community based fire management |
| | 1.3 | Viable populations of endangered, restricted range or protected species | Hunting ban | Patrol system and enforcement reporting system for monitoring, installation of camera traps in known crossing locations |
| | | | Increasing employees, contractors and local community awareness about wildlife. | Regular wildlife monitoring of industrial plantation blocks by forest management unit (UMH) Staff. Monthly reports of HCV species monitoring has included existence/non-existence HCV species stands, condition and possible threats. |

| HCV | Sub Item | Definition | Management | Monitoring |
|--|----------|--|--|---|
| | | | Controlling illegal logging in forest area | Intensive monitoring and patrol (once a month) to ensure that no illegal logging in the concession area by staff, forest ranger and community |
| | | | Natural succession | Biodiversity and invasive species survey in concession area |
| | 1.4 | Areas that contain habitat of temporary use by species or congregations of species | Inventory survey of migratory birds | Survey in the area bordered by mangroves and other wetland ecosystems |
| | | | Increasing awareness on migratory bird species | Questionnaires for staff and the community |
| 2 | 2.1 | Large Natural Landscapes with capacity to maintain natural ecological processes and dynamics | Landscape management collaboration | Stakeholders activity report |
| | | | Controlling illegal logging in forest area, law enforcement and designating protected area in natural forest | Intensive monitoring and patrol (once a month) to ensure that no illegal logging in the concession area by staff, forest ranger and community |
| | 2.2 | Areas that contain two or more contiguous ecosystems | No Land Clearing in riverbank area designated as HCVA 2.2 | Direct on the field monitoring on visitable area |
| | | | Controlling illegal logging in forest area | Intensive monitoring and patrol (once a month) to ensure that no illegal logging in the concession area, staff, forest ranger and community |
| | 2.3 | Areas that contain representative populations of most naturally occurring species | Law Enforcement and establishment of Protected Areas in natural forest | Periodic patrol |
| | | | Habitat enrichment | Checking the condition per semester |
| | | | Development of Pre-Harvest Monitoring Mechanism | Land verification to check activity status. Monitor endangered species condition |
| | | | Emphasis Planning general working plan (RKU) and annual working plan (RKT) | Evaluating forest management SOP |
| | | | Cooperative landscape management | Reporting stakeholders activities |
| | 3 | Rare or endangered ecosystems | Cooperative landscape management | Reporting stakeholders activities |
| Law Enforcement and Establishment of Protected Areas in natural forest | | | Periodic patrol | |

| HCV | Sub Item | Definition | Management | Monitoring |
|-----|--|---|--|---|
| 4 | 4.1 | Areas or Ecosystems Important for the Provision of Water and Prevention of Floods for Downstream communities | Law Enforcement and Establishment of Protected Areas in natural forest | Periodic patrol |
| | | | Maintain water level on peat forest/swamp | Measuring ground water level in peat areas, installing subsidence indicator and measuring the level |
| | | | Collaborative landscape management | Reporting the activities of each party. Vegetation monitoring in border region |
| | 4.3 | Areas that Function as Natural Barriers to the Spread of Forest or Ground Fire | Law Enforcement and Establishment of Protected Areas in natural forest | Spot-check survey and buffer zone forest patrol by production and logging team and forest fire unit |
| | | | Community awareness on the danger of slash and burn | Reporting system concerning the activities and how to open a forest area |
| | | | Optimizing community based fire management | Doing a "spot-check" survey on the results of the Production Team and logging and forest fire unit |
| | | | Enrichment with local species | Conducting a survey in the area of biodiversity conservation |
| 5 | Basic Needs of Local People | Collaborative management of sub-watershed Gaung with companies and communities around the area of Gaung River | Regular meetings involving companies that exist in the region and involving government and society | |
| | | Community awareness on the importance of forest | reports for activities and the attendance of participants | |
| | | No land conversion on HCV 5 around the villages by companies as well as community | Field verification by conducting interviews with local community and field visits | |
| | | Establishing honey bee habitat area | Field verification by conducting interviews with local community and field visits | |
| | | Developing sustainable community development | Participatory evaluation methods of community development | |
| | | Participatory mapping to finalize HCVA 5 | Reporting for mapping community meetings | |
| 6 | Cultural Identity of Local Communities | Further identification and delineation of HCV | Questionnaire and interview with a sample of local members and the existence of document mapping. | |
| | | Reactivate local tradition | Field visits | |



Map summarizes no Land Clearing HCV management area of MSK

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