



**ENVIRONMENTAL AND SOCIAL
MANAGEMENT FRAMEWORK
(ESMF)**

**MINISTRY OF ENVIRONMENT AND
FORESTRY**

EAST KALIMANTAN PROVINCE

REPUBLIC OF INDONESIA

AUGUST 2019

TABLE OF CONTENTS

TABLE OF CONTENTS	I
LIST OF TABLES	III
LIST OF FIGURES.....	IV
LIST OF ABBREVIATIONS	V
EXECUTIVE SUMMARY.....	VII
1.0 INTRODUCTION.....	10
1.1 STRATEGIC ENVIRONMENTAL AND SOCIAL ASSESSMENT (SESA)	11
1.2 ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)	11
1.3 LINK WITH THE EXISTING SAFEGUARDS INSTRUMENTS FOR REDD+	15
1.4 APPROACH AND METHODOLOGY.....	16
1.4.1 Data Collection	17
1.4.2 Analysis.....	17
1.5 SCOPE OF THE ESMF	17
1.6 STAKEHOLDER CONSULTATIONS	18
1.7 PUBLIC DISCLOSURE	24
1.8 STRUCTURE OF THE ESMF	24
2.0 PROGRAM DESCRIPTION	26
2.1 PROGRAM COMPONENTS.....	26
3.0 POLICY, LEGAL AND INSTITUTIONAL FRAMEWORKS.....	37
3.1 GOVERNMENT OF INDONESIA REGULATIONS	37
3.2 WORLD BANK SAFEGUARDS POLICIES.....	40
3.2.1 OP 4.01 Environmental Assessment	40
3.2.2 OP 4.04 Natural Habitats.....	41
3.2.3 OP 4.09 Pest Management	41
3.2.4 OP 4.10 Indigenous Peoples	42
3.2.5 OP 4.11 Physical Cultural Resources	44
3.2.6 OP 4.12 Involuntary Resettlement	44
3.2.7 OP 4.36 Forests	45
3.3 INSTITUTIONAL FRAMEWORKS	46
3.4 GAP ANALYSIS.....	47
3.5 OTHER PROJECTS AND PROGRAM SAFEGUARDS	52
4.0 ASSESSMENT OF ENVIRONMENTAL AND SOCIAL RISKS AND MITIGATION MEASURES	54
4.1 MANAGEMENT OF DIRECT RISKS AND IMPACTS.....	54

4.2	MANAGEMENT OF INDIRECT RISKS AND IMPACTS RELATED TO LEAKAGES AND REVERSALS	56
4.3	MANAGEMENT OF RISKS ASSOCIATED WITH POLICY DEVELOPMENT	59
5.0	IMPLEMENTATION AND INSTITUTIONAL ARRANGEMENT	60
5.1	ENVIRONMENTAL AND SOCIAL PROCEDURE	60
5.1.1	Negative List Screening	63
5.1.2	Screening of Environmental and Social Risks	63
5.1.3	Preparation of Environmental and Social Management Plans and Permit	64
5.1.4	Implementation of Safeguards and Verification	64
5.1.5	Monitoring and Reporting	64
5.2	SAFEGUARDS APPLICATION FOR BENEFIT SHARING PLAN (BSP)	65
5.3	ESMF IMPLEMENTATION FOR OTHER INITIATIVES/ PROJECTS	65
5.4	INSTITUTIONAL ARRANGEMENTS	66
5.4.1	Institutional Arrangements at the Program Level	66
5.4.2	Institutional Arrangements at the Activity Level	68
5.5	SAFEGUARDS STAFFING	71
5.6	CAPACITY BUILDING PLAN AND INDICATIVE FINANCIAL REQUIREMENTS	71
5.7	SAFEGUARDS MONITORING AND REPORTING	77
5.7.1	Internal Review and Clearances	77
5.7.2	Safeguards Monitoring and Supervision	77
5.7.3	Safeguards Reporting	78
5.7.4	Safeguards Reporting through SIS REDD+	81
5.8	SAFEGUARDS COMPLIANCE DOCUMENTATION	83
5.9	WORLD BANK OVERSIGHT	76
5.9.1	Development, approval and implementation of the safeguards system	76
5.9.2	Review, approval, and oversight of specific program activities	76
5.9.3	Third-party monitoring	77
5.9.4	Safeguards Due Dilligence for ERs generated prior to ERPA signature	77
5.10	INFORMATION DISCLOSURE	78
5.11	FEEDBACK GRIEVANCE REDRESS MECHANISM	78
	APPENDIX 1 ERP NEGATIVE LIST	79
	APPENDIX 2 SCREENING AGAINST ENVIRONMENTAL AND SOCIAL RISKS	81
	APPENDIX 3 ENVIRONMENTAL CODES OF PRACTICES, OHS GUIDELINES AND EMERGENCY RESPONSE	82
	APPENDIX 4 GUIDANCE NOTE FOR PEST MANAGEMENT	100

APPENDIX 5 BIODIVERSITY MANAGEMENT FRAMEWORK AND GENERAL GUIDELINE FOR HIGH CONSERVATION VALUE ASSESSMENTS	108
APPENDIX 6 EXAMPLE TERMS OF REFERENCE FOR ENVIRONMENTAL ASSESSMENTS, MANAGEMENT AND MONITORING	116
APPENDIX 7 FEEDBACK GRIEVANCE AND REDRESS MECHANISM (FGRM)	120
APPENDIX 8 INDIGENOUS PEOPLES PLANNING FRAMEWORK (IPPF)	120
APPENDIX 9 RESETTLEMENT PLANNING FRAMEWORK (RPF) AND PROCESS FRAMEWORK (PF).....	120
APPENDIX 10 PHYSICAL CULTURAL RESOURCES – CHANCE FIND PROCEDURE (PCR-CFP).....	121
APPENDIX 11 ASSESSMENT OF ENVIRONMENTAL AND SOCIAL RISKS AND MITIGATION MEASURES FOR ERP SUB COMPONENTS.....	123
APPENDIX 12 TERMS OF REFERENCE FOR ENVIRONMENTAL AND SOCIAL SAFEGUARDS TEAM FOR THE ERP IMPLEMENTATION.....	142

LIST OF TABLES

Table 1-1	Summary of stakeholder consultations in East Kalimantan.....	19
Table 3-1	Summary of gap analysis of key considerations.....	48
Table 4-1	Management of Indirect E&S Risks due to Leakages/Displacement.	57
Table 4-2	Management of Indirect E&S Risks due to Reversals.	58
Table 5-1	The Sub-National Agencies and Organizations involved in the Implementation of the East Kalimantan Emission Reduction Program (ERP).	66
Table 5-2	Safeguards framework and responsible institutions.	69
Table 5-3	Indicative Capacity building program plan for ERP Safeguards.....	73
Table 5-4	Target group and participant for training and workshop for ERP Safeguards.....	76
Table 5-5	Indicative financial requirements for capacity building program	76
Table 5-6:	ER Program Boundaries	77
Table 5-7	E&S aspects to monitor/track during over the ERP implementation	79

Table 5-8: Safeguards Compliance Documentation	76
------------------------------------------------------	----

LIST OF FIGURES

Figure 5-1	ESMF implementation flowchart.	62
Figure 5-2	Institutional chart for implementing the safeguards tools of the ESMF.	63
Figure 5-3	Institutional arrangements of ERP at the Provincial Level.....	67
Figure 5-4	Institutional arrangements of ERP at the District/City Level.	68
Figure 5-5	Internal Review and Clearance.....	77

LIST OF ABBREVIATIONS

BMF	Biodiversity Management Framework
CPF	Community Participatory Framework
CSO/CBO	Civil Society Organisation/Community-Based Organisation
CBFMMS	Community-Based Fire Management and Monitoring System
DGCC	Directorate General of Climate Change
DPMPD	District Community Empowerment and Village Government Agency
EIA/AMDAL	Environmental Impact Assessment/ Analisis Mengenai Dampak Lingkungan
ERP	Emission Reduction Program
ESMF	Environmental and Social Management Framework
FIP	Forest Investment Program
FMU	Forest Management Unit / Kesatuan Pengelolaan Hutan, KPH
FPIC	Free, Prior, Informed Consent
GOI	Government of Indonesia
HCV	High Conservation Value
ISPO	The Indonesian Sustainable Palm Oil standard
KLHS	Strategic Environmental Assessments
NEA	National Executing Agency
NGO	Non Governmental Organisation
NSC	National Steering Committee
OPD	Organisasi Perangkat Daerah
Perda	Local regulation
PHPL	Pengelolaan Hutan Produksi Lestari (Sustainable Production Forest Managemnet)
PMU	Programme Management Unit
REDD+	Reducing Emissions from Deforestation and Degradation
RIL	Reduced Impact Logging
RPLS	Rencana Pengelolaan Lingkungan dan SosialEnvironmental and Social Management Plan
RSPO	Roundtable on Sustainable Palm Oil

Sekda	Sekretaris Daerah (Local Government Secretary)
SPPL	Surat Pernyataan Kesanggupan melakukan Pengelolaan dan Pemantauan Lingkungan/ Letter of Commitment to Implement Environmental Management and Monitoring
UKL	Upaya Pengelolaan Lingkungan Hidup/Environmental Management Measures
UPL	Upaya Pemantauan Lingkungan Hidup/Environmental Monitoring Measures
WB	World Bank

EXECUTIVE SUMMARY

The East Kalimantan Emission Reduction Program builds on the substantial commitments of the GoI and the Government of the Province of East Kalimantan to reduce emissions from deforestation and forest degradation. At the readiness stage, technical support provided through the FCPF financing includes support to program design and systems strengthening to build government capacity to access and utilize performance-based incentives for reduced deforestation, degradation and land use change. As such, the program will support analytics, capacity building, design of subprograms to test different incentives models and stakeholder engagement. Key analytical areas include land and resource tenure, understanding of local drivers of deforestation and how best to address them, and legal, institutional and policy analysis and stakeholder assessments.

To support this achievement the Government of Indonesia in collaboration with the World Bank is preparing the ERP. Through this collaboration, Central Government (hereafter “Government”) will support the Local Governments. Funding this project will be a combination of funding support from the World Bank and Government of Indonesia’s own funds.

In line with the World Bank Operational Policy, especially with regards to the requirements for environmental and social management, this ESMF has been prepared as a project operational document that provides guideline for assessing the potential impacts and preparing the environmental and social management plans and required measures to minimize adverse environmental and social impacts under the ER Program in East Kalimantan.

The ER program will support a combination of enabling conditions and promotion of sustainable management practices that will directly address the underlying drivers of emissions resulting from sectoral activities including, timber plantations, estate crops, subsistence agriculture, aquaculture, and unsustainable logging practices. The program design considers the distribution of remaining forests, the threats to those forests, and the key stakeholders involved in the respective areas. This program consists of five components, as follows:

Component 1: Forest and Land Governance

Indonesia is undergoing critical reforms related to spatial planning of forest land and there is an opportunity for supporting on-the-ground practical processes that complement wider policy developments. The ER Program will focus on four key aspects that support improved spatial planning: improvements to the licensing regime, dispute resolution, the recognition of customary land, and village planning. In addition to leading to significant emissions reductions, it is expected that this component will provide important non-carbon benefits to local stakeholders, including concession companies and local and customary communities.

Component 2: Improving forest supervision and administration

The ER Program will address institutional weaknesses to improve forest supervision and administration. Within the State Forest Area, the focus will be on strengthening East Kalimantan’s FMUs, which cover the entire production and protection forest area. To improve the governance of forests outside the State Forest Area, in particular remaining forests within estate crop areas, the Program will strengthen relevant non-forestry institutions.

Component 3: Reducing deforestation and forest degradation within licensed areas

Component 3 aims to protect forests that are located within oil palm estates and within forestry concessions by supporting the finalization and implementation of HCV, and RIL policies. These activities directly engage the concession and estate crops companies, and thereby complement the broader policy improvements related to the licensing regime that are covered under Component 1. To further support the adoption of RIL and HCV policies, the ER Program will develop a mechanism to provide monetary and nonmonetary incentives.

Component 4: Sustainable Alternatives for Communities

Component 4 directly addresses the lack of alternative sustainable livelihoods which was identified as an underlying driver of encroachment. Activities are designed to provide livelihood opportunities within sensitive areas, including peat areas, mangroves, and conservation areas. Also, by promoting social forestry activities within the State Forest Area, the component supports improved access to forested areas for local communities and contributes to improved land governance. In addition to reducing deforestation and degradation linked to encroachment, the activities in this component are expected to lead to significant non-carbon benefits, contribute to more equitable outcomes, and are an important part of the strategy to reduce the risk of reversal.

Component 5: Project Management and Monitoring

Component 5 includes all activities related to program management, including monitoring and evaluation. The potential key environmental risks identified include loss of natural habitats and key biodiversity species at areas designated as non-forest and/or through indirect introduction of invasive species, contamination of soil and water, and health risks associated with the use of pesticides and as result of poor waste management practices, successes in reducing impacts on forests could lead to displacements of these impacts to other areas.

The potential key social risks identified include risks associated with activities conducted in areas under existing and potential conflicts and/or disputes or areas with overlapping boundaries and/or claims, between customary and common/formal laws and processes and in areas with competing claims especially with concessions, livelihoods impacts including displacement due to bans on timber logging, oil palm plantation and artisanal mining activities, impacts on Indigenous Peoples, community and health safety risks for fire prevention and suppression activities, lack of awareness, management capacity and participation of community in managing social forestry, institutional capacity constraints to manage potential environmental and social risks at field level, as well as gender inequalities and social exclusion. Appendix 10 provide further details on the risk assessment and mitigation actions.

Assessment of the potential impacts indicates that Components 1 to 4 have potential environmental and social impacts. The World Bank Operational Policies in environmental and social management that are applicable for the ERP include: (i) Environmental Assessment, 4.01; (ii) Natural Habitats, OP/BP 4.04; (iii) Natural Habitats OP/BP 4.04; iv) Pest Management, OP/BP 4.09; (v) Indigenous Peoples OP/BP 4.10, (vi) Involuntary Resettlement, OP/BP 4.12; (vii) Forests, OP/BP 4.36, and (viii) Physical Cultural Resources, OP/BP 4.11.

Based on the assessment of potential environmental and social impacts, and with reference to the applicable World Bank Operational Policies, this ESMF is developed to provide operational guidance that is to be followed by project stakeholders. The ESMF establishes the modalities and procedures to address and mitigate the potential adverse environmental and social impacts from the implementation

of ERP activities through employing best practices. The ESMF procedures include: (i) ongoing consultations with relevant stakeholder groups; (ii) appropriate capacity building measures; (iii) environmental and social impact screening and assessment; iv) frameworks for formulation of environmental and social management plans associated with environmental codes of practices, environmental permitting, high conservation value studies, grievance mechanism, process framework, indigenous peoples; v) monitoring and reporting on implementation of the framework and safeguards through the existing systems.

This ESMF covers procedures for environmental and social management for the implementation and monitoring of activities of Components 1 to 4 that includes negative list screening, screening of risks and impacts, environmental codes and practices, guideline for pest management, HCV guideline, environmental permits and management and monitoring measures, FGRM, IPPF, RPF and PF, and PCR-CFP.

1.0 INTRODUCTION

The Forest Carbon Partnership Facility (FCPF) has provided the Government of Indonesia (GoI) with a grant to finance the preparation of REDD+ implementation. The funds, together with other funding sources, have been utilized to improve Indonesia's readiness in implementing REDD+. In January 2017, Indonesia's Readiness Package was submitted and endorsed by the FCPF Participants Committee¹. The ERP will advance the implementation of REDD+ at the national level, and thus contribute to the achievement of nationally and internationally significant emissions reductions. This Program is also expected to assist Indonesia in achieving its climate resilience targets and international commitments.

The East Kalimantan Jurisdictional ERP builds on the substantial commitments of the GoI, whereby the Central Government agreed to supervise the Government of the Province of East Kalimantan to reduce emissions from deforestation and forest degradation.

At the readiness stage, technical support provided through the FCPF financing includes support for program design and systems strengthening to build government capacity to access and utilize performance-based incentives for reduced deforestation, degradation, and land-use change. As such, the program will support analytics, capacity building, design of subprograms to test different incentives models, and stakeholder engagement. Key analytical areas include land and resource tenure, understanding local drivers of deforestation and how best to address them, and legal, institutional and policy analysis, and stakeholder assessments.

There has been a strong focus on developing appropriate safeguards instruments, including the finalization of the SESA and ESMF, the operationalization of safeguards instruments and capacity building, and the development of FGRM, all anchored in a stakeholder consultation process. The FCPF has also provided support for finalization of GHG accounting and benefit sharing mechanisms, including capacity building for national and subnational REDD+ institutions and development/strengthening of appropriate mechanism for multi-sector coordination.

In East Kalimantan, Social and Environmental Standards for REDD+ (SES REDD+) have been developed based on national safeguards-related initiatives such as The Principles, Criteria, and Indicators for REDD+ Safeguards (PRISAI)² and the Safeguards Information System (SIS)³. All of these safeguards initiatives are aligned with the Cancun Principles. Further efforts were made to incorporate the local context of East Kalimantan into the SES REDD+ Kaltim. The ESMF has been developed in conjunction with the relevant safeguards principles, criteria, and indicators (PCIs) addressed in these safeguards initiatives. Linkages with existing safeguards are further discussed in Section 1.3.

Both the SESA and ESMF represent integral parts of the REDD+ readiness components. Consultation processes as well as the analytical components in the SESA have been used to inform the development of the ESMF. Both the SESA and ESMF processes have been reflected in the Emission Reduction Program Document (ERPD) and seek to mainstream environmental and social safeguards and good practices in the design of the ERP for East Kalimantan Province.

¹ The following document shows Indonesia's overall progress toward readiness for REDD+ <https://www.forestcarbonpartnership.org/sites/fcp/files/2017/Sep/FCPF%20Indonesia%20R%20Package%20-%20Final%20revised%20July%2028%20version.pdf>.

² PRISAI, was conducted to further elaborate the Cancun safeguards. PRISAI outlines 10 principles, 27 criteria and 99 indicators, with an expanded focus on finance and fiduciary aspects. PRISAI was initially designed as a framework to filter, monitor, and evaluate REDD+ activities at the project and jurisdiction levels. PRISAI has been tested in several sites in East Kalimantan, Central Kalimantan, and Jambi provinces, and mainstreamed into the SIS-REDD+.

³ SIS-REDD+ has been established as a web-based platform to monitor safeguards performance across program interventions.

1.1 STRATEGIC ENVIRONMENTAL AND SOCIAL ASSESSMENT (SESA)

The SESA is an integral component of this ESMF. The overall SESA process serves as a platform to enable consultations with a broad range of national and sub-national stakeholders, including potentially affected communities to integrate social and environmental concerns into the upstream policy-making process and project-level ER Program design. The SESA represents Gol's efforts to identify potential environmental and social (E&S) risks associated with each of the program activities and mainstream E&S risk mitigation measures and good practices to address potential adverse impacts and leverage positive benefits that may accrue from the proposed activities.

The SESA is the basis for the development of the ESMF, which will guide potential investments in the proposed ER Program towards compliance with the World Bank's safeguards policies. The SESA document is attached as part of the ESMF package. The development of SESA was aligned with the Government Regulation (*Peraturan Pemerintah – PP*) no. 46/2016 on the guideline for Strategic Environmental Assessments.

1.2 ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

The Environmental and Social Management Framework serves as an instrument to assess potential E&S risks and impacts under the ER Program operation. The ESMF sets out the principles, rules, guidelines, and procedures for screening, assessment, and follow-up on the anticipated environmental and social impacts of program activities.

The E&S risks were rated as substantial, mainly due to social risks concerning tenure and natural resource conflicts. Such a risk assessment has been revisited through the SESA finalization process, involving various consultations with a broad-range of stakeholders. As indicated from the SESA findings, key social risks are mostly associated with existing tenurial conflicts between people and private companies (forestry and palm oil concessions), as well as conflicts on natural resource use between forestry and palm oil companies.

The current conflicts represent legacies from the previous government policies, particularly as a result of incomplete forest area gazettment and lack of transparency in resource and land allocation of to private concessions. On-going policies such as the One Map Policy and Social Forestry, which are currently being implemented by the Government of East Kalimantan, represent the Gol's commitments to address existing tenure conflicts. These policies strive towards a single consolidated spatial data for land use and licenses and securing tenure access amongst forest dependent communities, including Adat communities. The Provincial Regulation No.1/2015 provides a guideline for the recognition of Adat communities by the district governments. Recognition processes of these communities in the Province are still currently on-going.

The ATR/BPN (Agraria and Spatial Planning/Land Agency) Ministry has issued a Ministerial Regulation No.3/2011 concerning management, assessment and handling of tenurial conflicts, followed by a Ministerial Regulation No. 6/2018 concerning Systematic and Complete Land Registration (*Pendaftaran Tanah Sistematis Lengkap* or hereafter PTSL) to clarify land tenure and use in non-forest areas (*Area Penggunaan Lain* or hereafter APL). A Presidential Regulation No. 88 of 2017 concerning Land Tenure Settlements within Forest Areas (*Penyelesaian Penguasaan Tanah di dalam Kawasan Hutan* or hereafter PPTKH) was issued with the objective to enable multi-stakeholder collaboration in clarifying

and addressing land tenure rights within forest areas (or *Kawasan Hutan*). Such policy reform provides an enabling environment for confirming land tenure as well as addressing land tenure conflicts involving communities in the ER accounting area. Further institutional capacity strengthening, and coordination will be required amongst sub-national government agencies in implementing these policies and enforcing relevant regulations, particularly with regards to issuance of new concessions in the Province.

As part of the ESMF, the proposed measures to enhance the institutional capacities and to address the Environmental and Social risks and impacts are elaborated further in Sub Section 5.5, 5.11, Appendix 7 (FGRM document) and appendix 10. In addition, the East Kalimantan Environmental Agency and DGCC will review the mitigation safeguards developed by respective implementing agencies and provide necessary technical support to ensure adequate measures are in place to address risks and impacts associated with the ERP implementation.

Under any circumstance, potentially high-risk activities such as tenure conflict settlement will not be carried until certain conditions “readiness criteria” i.e. the legal framework, meditation and institutional capacities, consultation and institutional collaboration are in place.

The ESMF provides an analysis of potential risks and impacts associated with the ER Program activities based on the SESA process. The framework consists of safeguard measures based on the relevant typology of activities and the ER strategic options. The ER Program overall is not envisaged to create significant negative environmental and social impacts and are expected to yield net positive environmental outcomes through reduced carbon emissions. Therefore, the ESMF seeks to mainstream measures and good practices to ensure that the activities will not harm the environment and people, especially vulnerable groups in the ER Program accounting areas.

Based on the nature, scope and scale of the program, the ERP is expected to trigger six WB safeguards policies, which include:

- a. OP/BP 4.01 Environmental Assessment;
- b. OP/BP 4.04 Natural Habitats;
- c. OP/BP 4.09 Pest Management,
- d. OP/BP 4.10 Indigenous Peoples;
- e. OP/BP 4.11 Physical Cultural Resources;
- f. OP/BP 4.12 Involuntary Resettlement; and
- g. OP/BP 4.36 Forests.

The rationale for triggering the above policies is presented in Chapter 3.0 on Policy, Legal and Institutional Framework. The ERP triggered OP/BP 4.12 on Involuntary Resettlement as a precaution measure to address downstream impacts associated with access restrictions and risks of livelihood displacement following implementation of the ER Program activities⁴. The ER Program does not involve land acquisition or anticipates the need for involuntary resettlement to achieve the objectives of the ER Program. A Resettlement Planning Framework (RPF), which includes a Process Framework (PF) to

⁴ ER Program activities where OP 4.12 was assessed to likely apply include: sub-component 1.1.1. Revoking overlapping and non-clean and clear permits and enforcing the licensing moratorium (component 1), sub-component 1.2.1. Settlement of existing land tenure and disputes (component 1), sub-component 2.1.1. Demarcation of FMUs and forest utilization boundaries (component 2).

address access restrictions, has been developed as part of the ESMF (refer **Appendix 9** – presented as a standalone document).

OP/BP 4.10 on indigenous Peoples was triggered to acknowledge the presence of communities that meet the criteria of Indigenous Peoples as defined in the policy in the ER accounting area. An Indigenous Peoples Planning Framework (IPPF) has been developed as part of the ESMF (refer **Appendix 8** – presented as a standalone document). Through implementation of the IPPF, the ERP seeks measures to: a) ensure meaningful consultations and Free, Prior and Informed Consent (FPIC), and b) avoid potentially adverse effects on indigenous Peoples or when avoidance is not feasible, minimize, mitigate or compensate for such effects. The IPPF also seeks to ensure that Indigenous People receive social and economic benefits that are culturally appropriate and gender and inter-generationally inclusive.

The ESMF has been prepared as one of the primary reference documents required by the ERP to manage environmental and social risks resulting from and/or associated with the project and subproject activities.

The scope of the ESMF consists of principles, procedures and measures to manage potential environmental and social risks that may arise from the ERP implementation. The ESMF seeks to mainstream measures to enhance participation and opportunities for Indigenous Peoples and local communities to benefit from sustainable land use and forest management. The framework includes supplementary appendices applicable for relevant components and sub-components under the ERP and shall be used in conjunction with the ESMF to ensure a comprehensive approach towards management of environmental and social aspects. These include:

- **Appendix 1 ERP Negative List.** The negative list outlines activities with potential significant safeguards implications. This list will be used as the basis for the screening of environmental and social risks and inform the inclusion of activities under the ERP. Activities in the negative list will not be included under the Program, both for activities committed by GoI and funded under the Benefit Sharing Plan (BSP);
- **Appendix 2 Screening against Environmental and Social Risks.** Activities will be screened and assessed on the basis of their potential risks and impacts. Such screening will define the required safeguards management and recommendations to address the identified risks and impacts (preventive measures, capacity building, technical assistance and oversight to strengthen risk management);
- **Appendix 3 Environmental Codes of Practices** for key activities identified in the ERPD. Environmental Code of Practice will be needed for activities that can potentially impact the ecosystem (e.g., timber extraction, Agro-Forestry, Home/Small Industry, Farm, Fishery, Tree saplings / vegetation seeds, Community Timber Activities, and ecotourism);
- **Appendix 4 Guidance Note for Pest Management.** The ERP recognizes local wisdoms in managing pests and will support communities to mainstream such local knowledge into the environmental management plan. Such pest management is not a single pest control method, but rather a series of pest management assessments, decisions, and controls;
- **Appendix 5 General Guidelines for High Conservation Value (HCV).** Undertaking HCV assessments represents one of the key safeguards processes for the identification and assessment of environmental and social risks of key forest activities as proposed in the ERPD.

The HCV provides screening information on concentration of significant biodiversity values, significant large landscape-level areas with naturally occurring species, rare-threatened and endangered ecosystems, ecosystem services, areas fundamental for local communities, and areas of traditional cultural identity;

- **Appendix 6 Example TOR for Environmental Assessment, Management and Monitoring.** The TOR outlines the required screening process will identify the degree of impact of each proposed sub-project. The key activities under each ERP component may require environmental permits through the development of UKL-UPL document or issuance of a SPPL (Statement/Commitment Letter for conducting Environmental Management). Potential sub-projects of the ERP sub-components include implementation of land fire prevention and suppression programs, social forestry, sustainable agriculture, sustainable mangrove, alternative fresh-water fish activities, ecotourism and silvofishery initiatives;
- **Appendix 7 Feedback Grievances and Redress Mechanism (FGRM).** FGRM is a tool for early identification, assessment and resolution of complaints or disputes encountered in the activities of the ER Program implementation. The FGRM will ensure that relevant concerns and suggestions received during stakeholder consultations and the ERP implementation are incorporated and addressed at the planning and implementation stages of the activities. The ESMF notes that it is important to strengthen the current FGRM systems that are already in place and managed by various agencies/entities at the national, provincial and district/city levels to better respond and manage complaints, inquiries, and potential disputes and/or conflicts as a result of the ERP implementation;
- **Appendix 8 Indigenous Peoples Planning Framework (IPPF).** The IPPF establishes a screening process, an engagement strategy as well as requirements for FPIC in the event that impacts on Adat communities and other community groups who meet the criteria under OP 4.10 are envisaged. The IPPF provides a framework for the preparation of an Indigenous Peoples Plan (IPP) through meaningful engagement and consultations with affected communities. Such consultations are expected to result in collective consent to support the ERP interventions. Identification of opportunities to enable these communities to equitably access the Program's benefits will also be explored as part of the consultation processes. During the ERP implementation stage, a program-level IPP will be developed, based on the IPPF;
- **Appendix 9 Resettlement Planning Framework (RPF) which includes a Process Framework (PF).** An RPF which covers PF have been developed as a precautionary measure to address downstream risks associated with access restrictions and resettlement risks as a result of the ERP implementation. Risks related to involuntary resettlement are considered remote at this stage and the GoI commits to amicable and consultative solutions to address tenure conflicts both within and outside the forest areas. In the event that involuntary resettlement and access restriction risks are expected to occur during the ERP implementation, the RPF and PF require that each Program-affected person will be consulted, compensated at replacement costs and assisted with restoration measures to help them improve or at least maintain the living conditions and capacity to earn income as before the Program;
- **Appendix 10 Physical Cultural Resources- Chance Find Procedure.** This procedure serves as a pre-cautionary measure in the event of discovery of Physical Cultural Resources (PCRs) or potential risks or impacts of ER activities on PCRs. As part of the overall ERP, the program

seeks to support preservation and fair sharing of benefits from the use of PCRs (i.e. ecotourism activities).

- **Appendix 11. Assessment of Environmental and Social Risks and Mitigation Measures.** This appendix provides a summary of Environmental and Social Risks associated with the ERP and recommended mitigation measures.
- **Appendix 12. TOR for Environmental and Social Team.** This appendix outlines the scope of responsibilities for environmental and social safeguards staff assigned to oversee ERP implementation

1.3 LINK WITH THE EXISTING SAFEGUARDS INSTRUMENTS FOR REDD+

Previous and on-going safeguards preparation processes have been instrumental in bringing together international good practices for adoption in the country's safeguards systems, and particularly, the relevant REDD+ system. Starting from the mandate of COP 16, safeguard mechanisms known as Cancun Safeguards are used as a foundation for developing safeguard mechanism specific for Indonesia. Through Cancun Safeguards, UNFCCC requires that REDD+ implementation worldwide is equipped with strategies for mitigating environmental and social risks consisting of strategic environmental and social assessment (SESA), safeguard mechanism and safeguard information system (SIS) to allow registration and monitoring of safeguard.

In Indonesia, the processes have been led by the Gol and supported by various development partners, including NGOs and CSOs working in East Kalimantan. Stakeholders' inputs and concerns have been collected in a participatory manner, involving a series of national and sub-national consultative workshops, Focus Group Discussions (FGDs), informal discussions with target communities and document reviews. The SIS-REDD+ consultation process, for example, was intensively carried out in 2011 and 2012, involving multi-stakeholders, including community representatives. The SIS development represents the earlier process for safeguards preparation under REDD+.

The Gol has mainstreamed environmental and social risk mitigation measures into the ER program development through an interlinked process for the development of key safeguards instruments specific to REDD+. These instruments include:

- a. the REDD+ Safeguards Information System (known as SIS-REDD+);
- b. the national safeguards framework (known as PRISAI (*Prinsip Kriteria Indikator Safeguards Indonesia*));
- c. the REDD+ Social and Environmental Standards for East Kalimantan Province (known as SES-REDD+ Kaltim).

The SIS-REDD+ has been established as a web-based platform to monitor safeguards performance across program interventions. The national level PRISAI set the foundation for the provincial level SES-REDD+ Kaltim. The SES-REDD+ Kaltim integrates international mandates of Cancun Safeguards with PRISAI, and integrates East Kalimantan contexts into the safeguards mechanism specific for East Kalimantan Province. SES-REDD+ Kaltim outlines safeguards compliance standards consistent with World Bank safeguards principles and includes safeguards performance indicators that must be

achieved by program entities. Consequently, the criteria, principles and indicators within SES-REDD+ Kaltim were used as basis for establishing the ESMF, as well as other safeguard documents.

The ESMF and FGRM will serve as reference safeguards instruments that will bring together previous safeguards initiatives into a more comprehensive framework. An interactive web portal for SIS-REDD+ (<http://ditjenppi.menlhk.go.id/sisredd/>) administered by DGCC of MoEF was developed to enable accessible and direct reporting of safeguards performance across implementing entities. Stakeholders in East Kalimantan are generally inclined to using SES-REDD+ Kaltim, as it covers specific issues in East Kalimantan Province.

Indonesia is equipped with a strong legal framework for the management of environmental and social impacts of development activities, which are applicable for activities under the ER program. Relevant mechanisms include: mandatory Environmental Impact Assessments (AMDAL, UKL/UPL), Strategic Environmental Assessments (KLHS) for policy development and spatial planning processes, and the PHPL system. In addition, there are a number of existing certification schemes that can be relied upon for specific ER activities, such as the Indonesian Ecolabel Institute (*Lembaga Ekolabel Indonesia/LEI*), the Forest Stewardship Council (FSC), and the Verification System of Timber Legality (SVLK) standards for ensuring sustainable forest management practices. In the oil palm sector, the RSPO and the ISPO set out compliance standards for the management of environmental and social aspects along oil palm value chains. These safeguards instruments contain specific mechanisms for oversight of environmental and social aspects of specific programs, grievance redress mechanisms, and reporting compliance based on self-assessments and independent audits. The ESMF developed under the program will therefore build on the existing country systems and ensure that any gaps against the World Bank's safeguards policies are addressed.

The integration of the existing safeguards instruments and use of country systems are further discussed in Chapter 4.0 (this document) on management of E&S risks and impacts.

1.4 APPROACH AND METHODOLOGY

This ESMF takes into account lessons learned and important insights gleaned from implementing safeguards on other projects in Indonesia and in particular East Kalimantan. These include:

- a. The need to build in-house capacity at each of the implementing agencies to screen, assess, manage and monitor environmental and social safeguards issues;
- b. The importance of timely and systematic consultations with all stakeholders, including appropriate approaches for *Adat* Communities and other groups who can meet the criteria of Indigenous Peoples as per-OP 4.10, respecting social structures, language, cultural norms, and availability;
- c. The need to establish a responsive and accessible Feedback and Grievance Redress Mechanism (FGRM) at the outset of the ERP implementation. The FGRM will also serve as an “early warning system” and provides locally accessible mechanisms for dispute resolution; and
- d. The need to make adequate budgetary and resource provisions to ensure effective and adequate implementation, management and supervision of all safeguard aspects in the ERP.

The key processes for the development of the ESMF are summarized as follows:

1.4.1 Data Collection

Similar to SESA, data collection for ESMF considers secondary data sources consisting of:

- Existing and valid regulations and laws related to forestry, and social and environmental management in Indonesia which were analyzed to establish linkages with World Bank safeguard policies and potential institutional arrangements;
- Capacity for performing environmental and social management, track record and fiscal capacity to ensure adequate resources to implement ESMF and monitoring based on the agreed safeguards principles, criteria and indicators;
- Data and information relevant to the ERPD as well as contextual analysis to inform assessments of potential risks and impacts; and
- Results of research and studies that have been validated by scientific communities and/or consensus among key stakeholders to strengthen the contextual analysis.

Primary data sources were collected from a series of technical discussions and semi-structured interviews with stakeholders' representatives. Additionally, primary data sources include the results of public consultations, which involved community representatives. A series of public consultations for the ESMF has been undertaken, including multi-stakeholder consultations from May 20-23, 2019 at the provincial and district levels. A national level consultation was undertaken on August 7, 2019, involving both government and civil society representatives, including NGOs. A complete record of the consultation can be found in Section 1.6 Table 1 and Appendix A 3 of the SESA.

1.4.2 Analysis

Based on the primary and secondary data collected, a risk and impact analysis for the ESMF takes into considerations the following aspects:

- A predictive analysis of impacts based on risks identified in the SESA. Probability of occurrence and severity of impacts are assessed to determine priorities for the management of risks. The higher probability of occurrences, and the more severe the impacts, will result in a higher priority;
- Identification of environmental and social measures to address the identified potential risks and impacts; and
- Analysis of coherence to identify if the above measures can properly mitigate/avoid the risk and concurrently relates to specific principles in any of the Safeguard instrument (preferably, SES-REDD+ Kaltim)

1.5 SCOPE OF THE ESMF

The ESMF governs the overall management of E&S risks at the program level. The main users of the ESMF include the Directorate General of Climate Change (DGCC) as the National Focal Point of REDD+, East Kalimantan Provincial Secretary (SEKDA), and also all sectoral levels of the local government including the Office of the Governor, as well as the implementing agencies and partners at the district and provincial levels (see Section 5.4.1 on the institutional arrangement). The scope of the ESMF is aligned with the ER Program boundaries and therefore, covers all activities directly

implemented by the implementing agencies to achieve emission reduction targets (refer to Chapter 2.0). The ESMF includes screening and management of all relevant E&S risks and impacts where mitigation measures fall under the purview, capacity and authority of the implementing agencies. At the program level, DGCC and SEKDA will provide technical support for the management of FGRM and monitoring of E&S safeguards (preferably involving the use of SIS REDD+⁵ that links to the Cancun Principles to allow monitoring at the national level, and technical capacity building to implementing agencies to ensure implementation of the E&S provisions in the ESMF.

A framework approach was adopted since specific locations and sub-component activities will be decided during ERP implementation. The ESMF adopted a risk management hierarchy which, first and foremost, avoids adverse impacts whenever feasible. In circumstances where risks and impacts are inevitable and/or foreseen, mobilization of resources for mitigation measures will be commensurate to the risk levels and adapted as they emerge and/or change during implementation.

1.6 STAKEHOLDER CONSULTATIONS

The development of the draft ESMF and its revisions was undertaken through a series of stakeholder consultations at the national and regional levels. The main purpose of the stakeholder consultations is to seek inputs for the ESMF revisions from the relevant stakeholders, including central and sub-national government agencies participating in the Program, private sector, relevant NGOs/CSOs, and other institutions representing communities. Key concerns that emerged during consultations have been taken into account as part of the ERP design and management of key environmental and social risks has been addressed in the ESMF.

The approach for the identification of stakeholders has been mainly through self-selection. At the national level, the Ministry of Environment and Forestry (MoEF) coordinates with relevant ministries and agencies to nominate relevant stakeholders for consultations. At the sub-national level, such a self-selection process has been supported by sub-national government agencies. Adat Communities have been engaged through civil society organizations (CSOs), as well as through their institutions at the village level. Such consultations will remain an iterative process during the implementation phase based on the principles outlined in the IPPF.

An analysis and mapping of stakeholders' influence and impact (both positive and negative) on the ERP is provided in the SESA document separate to the ESMF, which forms the basis for engaging the key stakeholder in the development of the ESMF. In particular, stakeholders who hold relevant information on the ERP were also engaged in the development of the ESMF. These include those who were involved in formulating the ERPD and managing the knowledge/data relevant to the ERP.

The consultation process has been ongoing since 2016. Additional consultations in 2018 and 2019 are summarised in Table 1. A more detailed records of public consultations are documented in SESA Appendix A2. Information and key concerns resulted from this public consultations process have been incorporated into the formulation of this ESMF.

⁵ Assuming that SIS REDD+ is operational and accessible at sub-national level.

Table 1-1 Summary of stakeholder consultations in East Kalimantan.

Topic	What is the Issue	Relevance to REDD+	Recommendations
Stakeholder identification and institution for ERP	<ul style="list-style-type: none"> ▪ Common understanding among stakeholders at national as well as regional levels ▪ Information on core emissions reduction programs of each district and/or KPH. ▪ Types of support needed for research and development 	MRV, Safeguards, Registry System and FGRM	Align with the national mechanism
ER program design	<ul style="list-style-type: none"> ▪ ERP based on the analysis of the development plan ▪ ERP based on SESA analysis 	As national approach sub-national implementation	Development of the program design with inputs from stakeholders
Capacity building	Training on FREL	FREL as part of the MRV in performance-based payment system	The MRV team to calculate reference emission levels in support of emissions reduction programs
Public consultation on ERPIN	Development of ERPIN with inputs from sub-national stakeholders	Historical methods for REL; Target for total emissions reduction per year, which can be reduced by only 7.4 million tons of CO ₂ e per year.	Development of ERPD based on the target for emissions reduction
Socialization of the FCPF Carbon Fund Program	The Carbon Fund (CF) was developed on the basis of the progress achieved from the readiness process facilitated by the FCPF	FCPF-CF contributes to NDC	Develop an incentive scheme. Carbon accounting needs to be robust (strong and accountable).
Meeting for the preparation of ERPD and plans for mainstreaming	MoEF will provide support for the ERPD formulation. DDPI will form a team of stakeholders to support ERPD development.	ERPD is part of readiness process	Facilitate districts to form REDD+ working group: <i>kukar, kutim, ppu, paser, samarinda</i> .
Mainstreaming FCPF Carbon Fund Program at district	Common understanding among stakeholders in the process of reducing emissions and deforestation and degradation needs to be strengthened.	Design for ERP implementation at district level	Formulation of district level strategy in integrating the REDD+ program in the RPJMD

Topic	What is the Issue	Relevance to REDD+	Recommendations
Meeting to Discuss Permanent Sample Plots (PSP) for FCPF Carbon Fund Programs	Establishment of permanent sample plots	Permanent sample plots as the basis to measure results from REDD+ initiatives	<ul style="list-style-type: none"> ▪ Development of PSP's in four selected districts. ▪ Carbon pools estimation of each PSP. ▪ Derive data on carbon stock. ▪ Incorporate into the FCPF database.
Self-assessment of readiness for the implementation of REDD+ Indonesia	<ul style="list-style-type: none"> ▪ Self-assessment of the readiness for the implementation of REDD+ Indonesia activities ▪ Updates on progress of REDD+ readiness in Indonesia ▪ Methodology for measuring the readiness of REDD+ in Indonesia. 	<ul style="list-style-type: none"> ▪ Part of the REDD+ readiness process. ▪ Updates on progress of REDD+ readiness up to 2016. ▪ Options on methodology to gauge relative REDD+ in Indonesia ▪ Draft results of the self-assessment on readiness 	Conduct self-assessment of readiness to implement REDD+ in Indonesia.
MRV meeting with the MoEF	<ul style="list-style-type: none"> ▪ Agreement on the MRV methodology ▪ Identification of drivers of deforestation and degradation 	Part of the ERP	<ul style="list-style-type: none"> ▪ Present the temporary findings of the GIS and MRV teams. ▪ Identification of activities of the four areas of the PCPF proposal. ▪ Presentation of the forest fire program from Dinas Kehutanan. ▪ Agreement on MRV institution and discuss modeling. ▪ Dissemination of Action Plan template to relevant stakeholders. ▪ Updates of the MRV institutional process at the national level
Data management	The organization of data, ownership, ownership for ease and sharing, copyrights and protocol	Part of the ERP that will be linked with SIS REDD+	Addition of classifications of land and recommendations on PSP management within KPHP areas and villages

Topic	What is the Issue	Relevance to REDD+	Recommendations
Evaluation of the readiness of the FCPF Carbon Fund Program in East Kalimantan	<ul style="list-style-type: none"> ▪ Evaluate the readiness of the FCPF Carbon Fund in East Kalimantan, from land conditions, policies, data related to implementation and monitoring. ▪ Maximize the role of investment in plantations, industry, and mining in order to maintain high carbon stock 	Part of REDD+ readiness process	Capacity that needs to be improved: Plantation Business Appraisers (reproduced); Assessment of plantation business, HCVF Monitor, and Mediator
SESA training	Training material for the delivery of REDD+ and safeguards, REDD+ implementation, Provincial REDD + Strategy: Policy, Regulation, and Governance, Development of East Kalimantan REDD + SES and REDD + Experience in Jambi	Part of REDD+ readiness process	Consultative processes to identify relevant environmental and social risks and impacts associated with the ERP.
Development of ERPD	Completing ERPD based on inputs from stakeholders	Part of REDD+ readiness process	Emission reduction activities in each sector that will be included in the ERPD document, where the activities will also be included in the 2018-2023 RPJMD to be financed under the Regional Kalimantan Regional Budget (APBD)
Sustainable Estate Crops in East Kalimantan	Introduction of emission reduction programs within the plantation sector, and the important role of the plantation sector as part of the overall ER program.	Component 3 of the ERP	Commitments agreed by the District Government to protect high carbon stocks on land allocated for plantation development in East Kalimantan
Writing workshop for SESA, ESMF and FGRM	Preparation of draft documents of the SESA and the ESMF	Part of REDD+ readiness process	Formulate SESA and ESMF
ERPD public consultations	Emissions calculations, benefit sharing mechanisms, and MRV	Part of REDD+ readiness process	For an indirect emission reduction scheme, enabler conditions still need to be included in ERPD documents
Workshop on sustainable plantations	Identification of drivers of deforestation and forest degradation, emissions reduction targets, initial identification of program locations and emission reduction	Part of general description of ERPD	Area allotment of plantations in each Regency that has carbon stocks

Topic	What is the Issue	Relevance to REDD+	Recommendations
Introduction of the SESA to DDPI – East Kalimantan	Introducing team and planned SESA process for East Kalimantan	Part of coordination for REDD+ readiness (SESA and ESMF)	Conduct public consultation to disseminate results of SESA and ESMF
Biodiversity Management Framework with UNMUL	Safeguards on biodiversity has not been explicitly addressed	REDD+ seeks to prevent further forest degradation, which includes threats to natural habitats and endangered species	Implementation of HCV to address requirements for biodiversity conservation
Indigenous Peoples discussion with BIOMA	Definition of Indigenous Peoples, and existing regulations to support Indigenous Peoples (PERDA No. 1/2015)	All REDD+ safeguards need to address risks and impacts on Indigenous Peoples	Reference to PERDA No. 1/205 for the development of the IPPF. Consensus on benefit sharing mechanism for Indigenous Peoples
NGO support for REDD+	Collaboration between NGOs/CSOs, community representatives and local government agencies in developing the ERP	The ERP is an initiative under REDD+	Continue collaboration and ensure knowledge sharing/transfer of technology from NGOs to provincial and district governments
Discussion of FGRM with Provincial Secretariat	FGRM strengthening. FGRM mechanism is addressed separately according to the sectors (e.g., plantation, forestry)	The ERP requires accessible FGRM	The need to establish a centralised/one-roof FGRM administration to support the ERP
Public consultations on SESA, ESMF, FGRM, and IPPF (29 September 2018)	Regulatory frameworks to designate SES REDD <i>Kaltim</i> as the safeguard reference for East Kalimantan	The ERP requires a clear and adequately resourced safeguards mechanism	Establish/strengthen regulatory framework for safeguards and Benefit Sharing Mechanism. Establish plan for district-level consultations under coordination from the DDPI.
Public consultations on Safeguards documents (2, 4 and 5 March 2019)	<ul style="list-style-type: none"> ▪ Input /risks in the ERP. 	Part of coordination for REDD+ readiness (SESA and ESMF)	Finalization of SESA and ESMF, including additional consultations required, including engagement with village stakeholders.
Regional Public Consultation (Samarinda – 21 May 2019; Balikpapan – 23 May 2019)	<ul style="list-style-type: none"> ▪ Inputs related to safeguards for FCPF-CF ▪ Other strategic issues related to safeguards in East Kalimantan to inform the SESA, ESMF, FGRM and IPPF (Indigenous Peoples Planning Framework) in East Kalimantan. 	Input and feedback mechanisms for Safeguards	Document improvement

Topic	What is the Issue	Relevance to REDD+	Recommendations
	<ul style="list-style-type: none"> ▪ Identify the perceptions and expectations of the parties to mitigate social and environmental impacts related to safeguards for FCPF-CF ▪ Other strategic issues related to safeguards for the purpose of strengthening the SESA, ESMF, FGRM and IPPF (Indigenous Peoples Planning Framework) 		
National Public consultations on Safeguards documents (7 August 2019)	<ul style="list-style-type: none"> ▪ Input related to safeguards FCPF-CF ▪ Other strategic issues related to safeguards for the purpose of strengthening the SESA, ESMF, FGRM and IPPF (Indigenous Peoples Planning Framework) 	Input and feedback mechanism for Safeguards	Document Improvement
<p>Public consultation in district level</p> <ul style="list-style-type: none"> ▪ Kutai Kartanegara and Kutai Timur. <i>Tenggarong</i>, 18 July 2019 ▪ Kutai Barat and Mahakam Ulu, <i>Sendawar</i>, 21 August 2019 ▪ Berau. <i>Tanjung Redeb</i>, 27 August 2019 ▪ Balikpapan, Penajam Paser Utara, <i>Paser. Tanah Grogot</i>, 30 August 2019 	<ul style="list-style-type: none"> ▪ Consultation on ERP, Safeguards, Benefit Sharing Plan ▪ Village government already have some activities that protect the forest and will contribute to ERP ▪ Need to ensure IPs will involved in ERP ▪ Need more clearly on reporting from village level 	Input and feedback for Safeguards, FGRM, MMR and BSM	<ul style="list-style-type: none"> ▪ FPIC will do in village level ▪ Improving safeguards, MMR and BSM document

1.7 PUBLIC DISCLOSURE

The draft ESMF has been disclosed on the following <http://ditjenppi.menlhk.go.id/peraturan-perundangan.html> prior to the consultations. Final disclosure of the document in both Bahasa Indonesia and English will be made following the World Bank review and clearance. All instruments required under the ESMF, such as IPPs, ESMP, Plan of Action to address impacts of access restrictions, and sub-manuals will be disclosed through the national and sub-national website platforms (<http://ditjenppi.menlhk.go.id>).

1.8 STRUCTURE OF THE ESMF

This ESMF is structured in a manner that provides clear guidance to implementing agencies. It provides an overall framework that applies when specific Operational Policies are triggered. In such cases, the ESMF framework will provide a specific action plan (ESMP) to address issues triggered by ERP implementation. The structure of the ESMF will also be linked to institutional arrangement to ensure that relevant agencies are designated and mobilised according to the ESMP.

A review of the country policy, legal and institutional frameworks, and the World Bank Safeguards that govern the environmental and social aspects of the ERP is provided in the ESMF. The program description lists the ERP components, and together with the review of the legislations and safeguards, forms the basis of the gap analysis. Where gaps and/or risks were identified, specific safeguard instruments have been developed to address the gaps the risks. The safeguard instruments include the screening of activities, applying codes of practices and guidance notes, developing High Conservation Value studies and environmental impact assessments, obtaining environmental permit, applying mechanism for grievance redress, frameworks for Adat communities and other groups who meet the criteria of Indigenous Peoples as per OP 4.10, mitigation planning to address access restriction risks, and guidance for chance find of potential cultural sites and/or objects. These instruments are appended in the ESMF Appendix sections.

This ESMF document is structured into the following chapters:

- **Executive Summary:** provides a summary of the purpose and content of the ESMF.
- **Chapter 1. Introduction:** provides information on the background and scope of the ESMF in conjunction with the SESA, the approach and methodology.
- **Chapter 2. Program Description:** describes the purpose and objectives of the Emissions Reduction Program including the program components and sub-components, and their expected outcomes.
- **Chapter 3. Policy, Legal and Institutional Frameworks:** describes applicable Government of Indonesia regulations and World Bank Safeguard Policies triggered by the Emission Reduction Program.
- **Chapter 4. Addressing Potential Risks and Impacts:** describes the assessment and management of the anticipated environmental and social gaps and risks, ESMF implementation and safeguard instruments, institutional arrangements, procedures for review and clearance of component activities, safeguards monitoring and reporting, information disclosures and Feedback Grievance Redress Mechanism.

- **Chapter 5. ESMF Implementation and Institutional Arrangements:** describes how the environmental and social measures can be implemented in accordance with the ESMF and address the Government of Indonesia's environmental and social requirements. The preparation of social and environmental instruments and their implementation will be the responsibilities of the implementing agencies at the national, provincial and district levels. The implementing agencies may be assisted by third party consultants/experts for the preparation of the safeguards plans and provide capacity building.

Relevant toolkits and instruments are appended in the following appendices:

- **Appendices:**
 - **Appendix 1 ERP Negative List.**
 - **Appendix 2 Screening against Environmental and Social Risks.**
 - **Appendix 3 Environmental Codes of Practices.**
 - **Appendix 4 Guidance Note for Pest Management.**
 - **Appendix 5 General Guidelines for High Conservation Value (HCV).**
 - **Appendix 6 TOR for Environmental Assessments, Management and Monitoring**
 - **Appendix 7 Feedback Grievances and Redress Mechanism (FGRM).**
 - **Appendix 8 Indigenous Peoples Planning Framework (IPPF).**
 - **Appendix 9 Resettlement Planning Framework (RPF) and Process Framework (PF) to address access restrictions.**
 - **Appendix 10 Physical Cultural Resources – Chance Finds Procedures**
 - **Appendix 11 Assessment of Environmental and Social Risks and Mitigation Measures.**
 - **Appendix 12 TOR for Environmental and Social Management Team for ERP Implementation**

2.0 PROGRAM DESCRIPTION

The ERP will support a combination of enabling conditions and promotion of sustainable management practices that will directly address the drivers of emissions resulting from sectorial activities including, timber plantations, estate crops, subsistence agriculture, aquaculture, natural and human-induced fires, and unsustainable logging practices. Program design considers the distribution of remaining forests (12.7 million ha), the threats to those forests, and the key stakeholders involved in the respective areas. The ERP is expected to lead to (gross) emission reductions of 86,3 million tCO_{2e} over the five-year ERPA period (2020-2024).

The ER program consists of five components with the design considering protection of remaining forests, the threats to those forests, and the key stakeholders involved in the respective areas.

2.1 PROGRAM COMPONENTS

Component 1: Forest and Land Governance

Indonesia is undergoing critical reforms related to spatial planning of forest land and there is an opportunity for supporting on-the-ground practical processes that complement wider policy developments. The ER Program will focus on four key aspects that support improvements to the licensing regime, dispute resolution, the recognition of customary land, and village planning. In addition to leading to significant emissions reductions, it is expected that this component will provide important non-carbon benefits to local stakeholders, including concession companies and local and customary communities.

1.1 Strengthening the licensing regime

The licensing moratorium, which was recently confirmed through Governor Regulation 1 of 2018 *jo* Governor Regulation 50 of 2018, provides a window of opportunity for advancing reforms related to licensing processes. With 53% of remaining forests located within areas that are licensed to forestry or estate crop or mining companies, the activities under this component are expected to have significant impacts on deforestation rates. The component will monitor the enforcement of the moratorium, will strengthen transparency in licensing, and will support the review and revocation of existing licenses. Further, the ER Program will support the acceleration of areas allocated for social forestry. Additional interventions related to the licensing regime will take place under Component 3, which engages forestry and estate crop companies, and which includes the rollout of policies for the protection of remaining forests within licensed areas.

The ER Program will monitor the on licensing (Governor Regulation 1/2018) to ensure that it continues to be enforced. This will protect forests that are potentially at risk of conversion. The regulation covers the governance of licensing and non-licensing of mining, forest, and oil palm plantations in East Kalimantan.

The Provincial Investment and Licensing Integrated Agency (Dinas Penanaman Modal dan Pelayanan Terpadu Satu Pintu - DPMPSTP) will lead the development of a policy to strengthen information management and documentation related to land-use licensing process. The policy development will be conducted through consultation with the mining, estate crop, agriculture and forestry sectors. Agencies involved in licensing processes will be empowered to manage and provide information on land-use licenses and licensing processes. All spatial data will be linked to the “one map” data being developed by the central government (Act No.4/2011 on Geospatial Information).

Permits for forestry, mining, and estate crops will be reviewed and revoked where applicable, leading to clearer land-use boundaries. The Provincial Mining and Energy Agency will revoke mining permits that are not “clean-and-clear”, based on Minister of Energy and Mineral Resources Regulation No. 43 of 2015 concerning procedures for evaluating the issuance of coal and mineral mining licenses and Minister of Energy and Mineral Resources Regulation No. 26 of 2018 concerning the implementation of good mining principles and supervision of mineral and coal mining. In mid 2019, there are 519 of 1.404 IUPs that are “clear-and-clean”. The ER program is expected to accelerate and enforce the process of revocation. The review of estate crop permits will be led by the Provincial Estate Crop Agency. There are licenses for estate crops, some of which overlap with other existing licenses or are found inside areas that are off-limits due to the moratorium. Concessions found inside these areas will be reviewed and boundaries will possibly be amended by the Provincial Estate Crop Agency. The results of reviews will be published.

The acceleration of issuing social forestry licenses has been facilitated by MoEF through the Directorate General for Social Forestry. There are currently six forms of social forestry: Village forests (*Hutan Desa*), community forests (*Hutan Kemasyarakatan*), community-based timber plantations (*Hutan Tanaman Rakyat*), customary forests (*hutan adat*), community forests (*hutan rakyat*), and forest partnerships (*kemitraan*). The target of the social forestry program in East Kalimantan is 399,298 hectares delivered by 2024. The targeted area for social forestry is based on indicative maps for social forestry programs developed by MoEF (PIAPS). The facilitation will be supported by the Provincial Forestry Agency through the working group of social forestry, and by the FMUs.

1.2 Dispute Settlement

The sub-component will accelerate the settlement of land tenure disputes regarding community occupation of Forest Areas. This process, which is an integral part of the national Agrarian Reform Program (TORA), will be facilitated and mediated by the provincial-level Forestry Agency with the guidance of relevant Ministries.

As part of program preparation, a participatory assessment, involving *adat* communities, will be conducted. This will map existing and potential conflicts, identify existing mechanisms for settling land disputes between the government and *adat* communities, and assess indigenous traditions and knowledge for conflict handling and dispute resolution. The assessment will feed into the development of community-based conflict handling and resolution mechanism guidelines, produced in close consultation and with the consent from *adat* communities, and the Provincial and District Governments.

The Provincial Forestry Agency is in charge of mediating land tenure disputes and will conduct focus group discussions and consultations with relevant stakeholders, advancing and resolving disputes where possible.

To address overlaps of community activities with concessions that are near forest conservation areas, the ER Program will support forest conservation partnerships. These are regulated under Ministry Decree No P.83/2016 on Social Forestry, which aims to reduce conflict areas between communities and concession owners. Under the regulation, communities are allowed to partner with national parks and other conservation areas. This activity will be led by Provincial Forestry Agency which conduct conflict mediation followed by livelihood development activities (described in Component 4).

The social forestry programs, introduced in 1.1.1, will be designed to reduce tenure conflicts in existing concession areas. By providing regulated access rights and livelihood opportunities, social forestry

licenses are expected to reduce conflict. The Forestry Agency will organize consultations with academics and other experts to develop the social forestry program as an option for dispute resolution.

To address any overlapping areas between forestry and mining or estate crops, the program will seek regulations by the Governor to settle disputes. A governor regulation is being drafted and now being discussed by all sectors and stakeholders. The Economic Bureau of the Governor's Office will lead the policy development and facilitate the process until the regulation is signed by the Governor by the end of 2018.

Conflicts will be further addressed through a number of mitigation actions, such as:

- the development of joint decrees
- supporting and refining existing local conflict handling protocols
- developing the FGRM which will include a mediation mechanism
- identification of tenurial conflicts by FMUs
- identification and assessment of existing conflict resolution mechanisms
- enhancement of communication between community/customary leaders with company representatives related to the management of HCV areas
- capacity building of stakeholders including training for paralegals for community-based conflict handling mechanisms

1.3 Support for the recognition of Adat land

The ER Program will support the implementation of recent regulations concerning the recognition of Adat communities and their territories. Specifically, the East Kalimantan Provincial Government will accelerate the recognition of customary rights and occupation of land inside forest areas, in accordance with the mechanism stipulated in East Kalimantan Regional Regulation No. 1/2015.

District and City Governments will establish Adat Law Community Committees, which form an important step in the adat recognition process. The Provincial Government, along with District and City Governments will implement Article 14 of East Kalimantan Regional Regulation No. 1/2015, which deals with reducing the number of conflicts between adat communities and the state, or companies.

The East Kalimantan Provincial Government, up to KPHs, and Regency / municipal governments, up to the Camat level, will be encouraged to actively identify adat territories through participatory mapping. The ER Program will facilitate participatory mapping for 200 villages. Forest Management Units will support this process by assessing and recording Adat claims within the State Forest Area, as part of the process of carrying out social inventories within their boundaries.

1.4 Strengthening village spatial planning

The ER Program will develop guidelines and regulations for integrating REDD+ activities into village spatial planning and will support the integration of emission reduction activities into village development plans. The activity will be carried out by the DPMPD, which will support communities in integrating REDD+ activities into village spatial and development plans. Facilitation will include community training to develop guidelines for village development plans and village spatial planning. The budget will be

derived from district and provincial government budgets. The facilitation will be supported by development partners.

The ER Program will build the capacity and skills of village institutions to integrate low emissions development planning into village development plans. At the village level, ER program activities will be integrated into village development plans. The establishment of Green Villages, or *Kampung Iklim* aims to reduce emissions based on village development plan. The activity will target 170 priority villages throughout the province. Specific ER activities that could be integrated into village plans include supervision of forested areas, community-based fire management, and other ER activities.

The East Kalimantan DPMPD will lead the preparation of village spatial and village development plans. The activity will include trainings, consultations, and community meetings. Training will cover the development of village spatial land use plans. This includes development of village policies on land use. The plans will be designed in a participatory way with communities. The agreed plans will be submitted to the district governments for approval. Local academics and NGO representatives will be invited as resource persons and facilitators. The village plans will aim to reduce deforestation and forest degradation at the village level.

Expected Outcomes of Component 1

- Strengthened and more transparent Information Management and Documentation related to land-use licensing process
- Permits for forestry, mining, and estate crops are reviewed and revoked where applicable, leading to clearer land-use boundaries
- Land use boundaries are clarified as the forest area demarcation process is completed
- The moratorium on licensing procedures (Governor Regulation 1/2018) continues to be enforced, protecting forested areas potentially at risk of conversion.
- Strengthened conflict resolution mechanisms contribute to improved land governance
- Clear guidelines and regulations are in place for integrating REDD+ activities into village spatial planning
- Customary forest and lands are identified through participatory mappings
- Adat law communities and their territories are recognized
- Key villages implement Forest Fire Management Plans leading to a reduction of fires
- Villages incorporate ER activities into their spatial and village development plans (target 150 villages in 7 districts).

Component 2: Improving forest supervision and administration

The ER Program will address institutional weaknesses to improve forest supervision and administration. Within the State Forest Area, the focus will be on strengthening East Kalimantan's FMUs, which cover the entire production and protection forest area. To improve the governance of forests outside the State Forest Area, in particular remaining forests within estate crop areas, the Program will strengthen relevant non-forestry institutions.

2.1 Strengthening management capacity within the State Forest Area: FMU development

The ER Program will strengthen the capacity of FMUs to manage forest areas and to supervise concession companies. Activities will include the development of planning documents, knowledge exchange, and business development.

An early part of this activity will focus on supporting FMUs in developing sustainable approaches to forest management through the development of planning documents. Development of long-term management plans known as RPHJP for FMUs will be supported by the MoEF. This includes the collection of social and environmental field data. The program will also support FMUs in the development of short-term development plans (*RPHJPendek*) and strategic business plans.

The East Kalimantan Forest Agency will work with 20 FMUs to identify business opportunities, develop business plans, and strengthen their capacity to become partially self-financing. The focus will be on business activities linked to SFM and social forestry that will directly support the reduction of deforestation and forest degradation. There will be at least five business plans completed by 2020 and 20 business plans completed by 2022.

The East Kalimantan Forest Agency will also support selected FMUs with the development of guidelines and approaches for monitoring and supporting concessions in the implementation of HCV and RIL policies. The capacity of FMUs to support and implement Social Forestry programs will also be strengthened. Further capacity building of FMUs will focus on supervising, facilitating, and monitoring the implementation of Fire Prevention and Control activities carried out by concessions and local communities.

Determination of FMU boundaries and Forest Utilization Blocks will be conducted by the FMUs. This activity will be supervised by the Provincial Forestry Agency of East Kalimantan. Determination of boundaries will ensure that the concession area inside FMUs does not overlap with other permits or community lands. The boundary marking will be conducted through mapping and ground checking in the field. Consultations with MoEF, the Provincial Government, and District Governments will be conducted in order to ensure overlaps are minimized and settled.

To decrease the incidence of fires, FMUs will work with forestry concession companies and with communities surrounding forest areas to support fire prevention and control.

The ER Program will support coordination activities and learning across FMUs by supporting the FMU Centre, which was established in early 2017. The Centre aims to enrich and improve the capacity of FMUs to achieve their objectives and goals. The Centre will facilitate exchange of information and knowledge among FMUs in East Kalimantan.

2.2 Strengthening provincial and district governments to supervise and monitor the implementation of sustainable Estate Crops

The ER Program will build on the recent draft declaration to restore 640,000 ha of natural forests and 50,000 ha of peat land inside estate crop concessions by 2030. This draft has been circulated to district governments and is waiting for district approval. The ER program will facilitate and accelerate the signing and approval of the declaration by district governments. The facilitation will be hosted by the Provincial Government (Governor) and includes dissemination of the declaration to a wide variety of stakeholders.

The East Kalimantan Estate Crops Agency will lead a consultation process with district governments and with private companies, aiming toward a commitment to implement sustainable estate crops plantations, including the protection of remaining HCV forest areas. The Program will offer technical assistance to the government agencies for the implementation of these commitments. MoEF's Forestry Education and Training Center (Pusdiklat) will provide training on HCV management for government officials of the Forestry Agency and Estate Crop Agency from province and district governments. There will be seven districts targeted for the trainings. In addition, the ER program will facilitate government supervision on the implementation of HCV management by plantation companies. The target for supervision will be 150 estate crop companies by 2024.

Expected Outcomes of Component 2

- FMUs are strengthened by being partially self-financed through sustainable forest-related businesses
- FMUs supervise district-level forest concessions and timber plantations for compliance with RIL and HCV policies
- The declaration on sustainable estate crops is signed by seven districts and by key companies.
- Local government agencies have the capacity to oversee and implement the commitment, leading to protection of HCV forests within estate crop areas.

Component 3: Reducing deforestation and forest degradation within licensed areas

Component 3 aims to protect forests that are located within oil palm estates and within forestry concessions by supporting the finalization and implementation of HCV, and SFM policies. These activities directly engage the concession and estate crops companies, and thereby complement the broader policy improvements related to the licensing regime that are covered under Component 1. To further support the adoption of SFM and HCV policies, the ER Program will develop a mechanism to provide monetary and nonmonetary incentives.

3.1. Implementation of HCV policies for Oil Palm Estates

Component 3.1 will target the 3.2 million hectares that are allocated to estate crops across East Kalimantan. In 2016 this area had 677,137 ha of natural forest remaining and much of these forests are at risk of being cleared for oil palm plantations. Activities under this component will be led mainly by the East Kalimantan Estate Crops Agency and will involve government agencies at the district level and up to 100 estate crop license holders.

The Estate Crops Agency will work with the relevant government agencies at the district level and with plantation companies toward a declaration of commitment to sustainable estate crops, including the protection of remaining HCV forest areas. The declaration will be facilitated through consultations involving the government agencies and the private sector. The Program will offer technical assistance to the companies and to the government agencies for the implementation of these commitments. On sustainable estate crop implementation of the commitments done by private sectors. As a further incentive, the Program will provide technical assistance to companies to improve plantation productivity and for fire prevention.

Estate crop companies will receive capacity building for conducting inventories of HCV forests and other natural remaining forests within their concession boundaries. Training on inventories and HCV

management, including field guidance, will be provided by the Provincial Forestry Agency with coordination with the Provincial Estate Crop Agency. Capacity building will be supported by academics from local universities and by specialists from NGOs. Forest protection systems for developing and managing estate crop areas will be developed and implemented by the companies. The Provincial Estate Crop Agency will manage HCV inventory data and will monitor progress.

3.2 Support for smallholders and Community Based Fire Management and Monitoring Systems (CBFMMS)

Partnerships between large estate crop companies and local communities in controlling forest and land fires will be facilitated. Companies will identify communities in areas that are vulnerable to fires and will facilitate the development of community groups for fire prevention. Capacity building for the groups will be provided. Training will focus on CBFMMS which will cover fire management, response, monitoring, and prevention of fires. The company, together with guidance from district estate crop Agency, will develop standard operation procedures (SOP) for CBFMMS. The company and district service will monitor and evaluate the implementation of CBFMMS. The training module can be replicated in other districts or villages within the province. It is expected that 150 estate crop companies will develop and implement this initiative model partnership with 180 local farmer groups in controlling forest and land fires.

The East Kalimantan Estate Crop Agency will provide technical assistance and training for fire prevention and control by smallholders and will provide relevant equipment for smallholders. Improved capacity of smallholders to prevent and control fires leads to fewer and less severe forest fires.

3.3 Implementation of HCV and SFM policies for Forestry Concessions

This subcomponent seeks to protect the remaining natural forests within timber plantation and natural forest management concessions by respectively supporting the implementation of HCV and SFM policies. The ER Program will support concessions in the implementation of SFM and HCV policies (see Appendix 4.3.) and will strengthen monitoring.

The Directorate General of Sustainable Production Forest Management (DG PHPL) will lead the improvement of SFM policies through policy review, gap analysis, focus group discussions and public consultations to provide improved incentives for SFM practices implemented by forest concessions. Under the ER Program, the DG PHPL will invite the East Kalimantan Provincial Government and forest concessionaires (of East Kalimantan) to further discuss the commitment of the companies to implement SFM, with a focus on the implementation of RIL.

Training on RIL, SFM, and HCV management will be provided to concessionaires. DG PHPL together with DGCC, the Forestry Training Center, and partners will collaborate to develop the official RIL/SFM training module. The Forestry Training Center will conduct a series of trainings on RIL/SFM practices and monitoring to forest managers of logging concessions and to FMU field officers. The workshop and training will be conducted at the national level or in East Kalimantan. There will be 26 trainings provided by the Forestry Training Center by 2024. Training on HCV management will be provided to FMUs and to timber plantation companies. 26 trainings on HCV management will be provided by 2024.

The RIL/SFM implementation on the ground will be monitored by DG PHPL and its partners, to make sure all the processes on the ground are in line with the RIL/SFM module. Currently 19 IUPHHK-HA East Kalimantan have SFM certificates. Monitoring and evaluation on SFM Implementation in such certified concessions needs to be conducted. In the initial phase, monitoring on RIL/SFM in certified 11

logging concessions would be implemented. By 2024, 19 IUPHHK-HA will be monitored in their SFM implementation. The capacity of FMUs to monitor the implementation of RIL/SFM in logging concessions will be enhanced. FMUs will conduct field measurements and will share field data and estimates of emission reductions with the MRV task force.

The Provincial Forestry Service and FMUs will monitor and facilitate the implementation of HCV protection by timber plantation companies. Under the ER program, by 2024, 20 timber plantation companies (IUPHHK-HT) will identify and manage HCV forests inside their concessions.

Expected Outcomes of Component 3

- A substantial increase in the number of estate crop companies implementing sustainable plantation policies (including ISPO, RSPO, and HCV) leads to improved protection of remaining forests within areas allocated to estate crops.
- Estate crop companies commit to and implement more sustainable practices
- Reduced deforestation through improved management and protection of remaining forests within areas allocated for estate crops
- Improved management practices by smallholder oil palm farmers leads to reduced deforestation in and around smallholder plantations.
- Improved capacity of smallholders to prevent and control fires leads to fewer and less severe forest fires
- The area of sustainably managed forest is increased
- Forest concessionaires adopt Sustainable Forest Management practices and the area of sustainably managed forest is increased
- Forest management concessions carry out improved forest management practices (Reduced Impact Logging)
- Timber plantations implement policies to protect remaining High Conservation Value (HCV) Forests within their concessions

Component 4: Sustainable Alternatives for Communities

Component 4 directly addresses the lack of alternative sustainable livelihoods which was identified as an underlying driver of encroachment. Activities are designed to provide livelihood opportunities within sensitive areas, including peat areas, mangroves, and conservation areas. Also, by promoting social forestry activities within the State Forest Area, the component supports improved access to forested areas for local communities and contributes to improved land governance. In addition to reducing deforestation and degradation linked to encroachment, the activities in this component are expected to lead to significant non-carbon benefits, contribute to more equitable outcomes, and are an important part of the strategy to reduce the risk of reversal.

4.1 Sustainable livelihoods

Activities in this sub-component support sustainable swidden agriculture, paludiculture, mangrove management, smallholder oil palm cultivation, and other sustainable livelihoods. The activities will be integrated into village development planning and, depending on their location, will be supported by the

East Kalimantan Estate Crops Agency, the East Kalimantan Coastal and Fisheries Agency, the DPMPD, or the provincial forestry Agency.

The ER Program will support sustainable swidden agriculture that does not use fire for land clearing and sustainable riparian rice farming as an alternative to converting forests to paddy fields. Under the lead of the Village and Community Empowerment Agency, training, workshops, and demonstration plots will be provided to farmers in 10 villages in 2 districts.

Sustainable mangrove practices will be supported through capacity building. The Provincial and District Fishery and Marine Agency will provide trainings, seminars, and workshops for communities in coastal areas (Kutai Kartanegara, Berau, Paser, and Penajam Paser Utara Districts). The FMUs in Berau Pantai and the Delta Mahakam areas will play a key role in targeting communities living within the State Forest Area in coastal areas. Activities will include raising awareness of the ecological and social impacts of mangrove conversion; and capacity building for sustainable livelihood options, such as ecotourism, eco-friendly pond management, and nipah sugar production. Farmers will also be introduced to financing options, including microfinancing and small-grants schemes.

The East Kalimantan Estate Crop Agency will provide technical assistance to oil palm smallholders to improve their capacity for complying with sustainability principles. The program will help smallholders meet the principles of the ISPO standard. Module capacity building on sustainable estate crop development (particularly for sustainable palm oil) for smallholder estate crops will be developed by district services through focus group discussions and consultations. Training and field facilitation to smallholders will be provided, with academics and NGO representatives as resource persons and facilitators. The district estate crop agency will monitor and evaluate the implementation of ISPO by smallholders.

4.2 Conservation partnerships

The ER Program will facilitate conservation partnership in or near conservation areas, which will include support for sustainable livelihoods. MoEF's DG of Forest Conservation will support training of communities in four conservation areas. Training will focus on forest protection and on the sustainable utilization of areas surrounding conservation areas.

Potential sustainable business opportunities will be identified, and the provincial forestry service will provide capacity building. The program will target six conservation areas (Kutai National Park, Muarakaman/Sedulang Natural Reserve, Teluk Adang Natural Reserve, Teluk Apar Natural Reserve, Padang Luway Natural Reserve, Tahura Soeharto) and will provide training for 18 village communities on alternative livelihoods.

4.3 Social forestry

It is expected that by 2024 there will be 341 licenses issued by MoEF on social forestry for East Kalimantan Province. The ER program will target 50 villages. This will include empowerment of village institutions (village forest management agencies) and capacity building of community businesses. The target is 70 business plans developed by 2024. This also includes formulation and facilitation of the community and village program. The facilitation will be supported by the Provincial Forestry Agency through the working group of social forestry, and by the FMUs. Training will be conducted in 50 villages and will focus on the development of social forestry work plans (RKU), business plan development and forestry management. The implementation of Social Forestry schemes will be further supported through

training and technical support. This will include coaching and mentoring programs, and will focus on the implementation of work plans and business plans.

Expected Outcomes of Component 4

- Reduced conflict in and around conservation forest areas
- Improved community capacity to respond to forest fires and reduced fire incidence in conservation forest areas
- Villages implement community-focused investments that lead to emissions reductions and sustainable land use
- Sustainable mangrove practices declared and adopted by coastal and peatland stakeholders
- Increased establishment of social forestry groups (RKU) leading to sustainable livelihood options and reduced deforestation from encroachment in forested areas.
- An increase in social forestry licenses promotes sustainable forestry and provides alternative livelihoods to local communities

Component 5: Project Management and Monitoring

Subcomponents	Key Activities	Scale of Intervention
5.1 Project coordination and management	5.1.1. Management and coordination of ER program implementation across levels: Strengthening institutions for ER project management and coordination across sectors Develop coordination mechanism	National and Provincial
	5.1.2. Provision of operating costs for ER program implementation: Develop financial management system for ER program Training on Financial management	National and Provincial
5.2 Monitoring and evaluation	5.2.1. Implementation of monitoring and evaluation for ER program implementation: Training on SESA and ESMF Monitoring and evaluation of SESA and ESMF implementation Training on monitoring (incl. safeguards) FGRM Monitoring and evaluation of ER Program implementation Development and implementation of HCV monitoring system	National and Provincial

Subcomponents	Key Activities	Scale of Intervention
	5.2.2. Measurement and Reporting: Improving activity data through ground truthing Improving emission factor data through Permanent Sampling Plots Developing capacity on ER Measurement Updating satellite imagery on ER Accounting Area Developing and implementing the sub-national MMR System (including SIS)	Provincial
5.3 Program communication	5.3.1 Knowledge management: Knowledge management database development and maintenance Developing information, education and communication materials for shared learning	National and Provincial
	5.3.2 Information dissemination: Establishing and maintaining ER program website Dissemination of information, education and communication materials	National and Provincial

3.0 POLICY, LEGAL AND INSTITUTIONAL FRAMEWORKS

3.1 GOVERNMENT OF INDONESIA REGULATIONS

Activities under the ERP should adopt sustainable development principles, including environmental, social, cultural, and economic considerations, consistent with applicable national and regional regulations. This ESMF document adopts the Government of Indonesia's (GoI) laws and regulations to the extent that they are in compliance with the World Bank Policies on Environmental Assessment (OP 4.01), Natural Habitats (OP 4.04), Pest Management (OP.09), Indigenous Peoples (OP 4.10), Involuntary Resettlement (OP 4.12), Physical Cultural Resources (op 4.11) and Forest (OP 4.36). Specific provisions are described in the ESMF to address any aspect of the Bank policies that are not fully addressed through GoI laws and regulations. Applicable National and Regional regulations for the ERP related to environmental and social aspects are outlined as follows:

- Law No. 6 of 2014 on Villages. This law has enormous implications for the forestry sector by expanding the authority of villages to manage their own assets and natural resources, revenue and administration. It specifically reallocates a specific portion of the state budget to village administrations, providing all of Indonesia's villages with annual discretionary funding for making local improvements that support poverty alleviation, health, education and infrastructure development;
- Law No. 23 of 2014 on Regional Governance. This law effectively weakens Indonesia's system of regional autonomy by withdrawing authority over natural resource management (including forestry) from district and city governments and shifts it to provincial and national-level governments;
- Law No. 18 of 2013 on the Prevention and Eradication of Forest Degradation. This law strengthens law enforcement by providing additional legal certainty and defining the penalties for those engaged in forest destruction. It clearly defines which activities are banned, on the part of individuals and organized groups who perform logging activities, as well as organizations involved in the illegal timber trade and officials engaged in the falsification of permits;
- Law No. 32/2009 concerning Environmental Management and Protection. For the government executing agency (National and Regional level), this Law provides has the mandate for the Province and District to develop a Strategic Environmental Assessment, that will guide regional spatial planning for development. This Law also requires has obligated any development program by private sector to implement proper environmental and social considerations including environmental assessment, management planning and monitoring;
- Law No. 26/2007 concerning Spatial Planning. It amends Law No. 24/1992 (Spatial Planning Act) in the context of decentralization, urbanization, and other factors. It grants authority over spatial planning to provincial governments (*pemerintah provinsi*) and district governments (*pemerintah kabupaten* and *pemerintah Kota*). Provision of this authority is not stipulated within previous spatial planning laws. It also provides some new ways for enhancing development control including zoning, planning permits, implementation of incentives and disincentives, including administration and criminal sanction. Law No. 26/2007 also acknowledges the importance of public participation in spatial planning;

- Law No. 41/1999 concerning Forestry. This law provides the mandate for the MoEF to regulate forestry matters and allocate forests as Forest Areas, including state forests and titled forest. The 1999 law includes some conservation oriented policies. It divides forests into three categories, including: Conservation Forests, Protection Forests and Production Forests. It also provides the scope and conditions for the recognition of community owned customary forests (*hutan adat*).
- Government Regulation (PP) No. 24 Year 2018 concerning Electronic Integrated Permitting Services (OSS);
- Ministry of Agrarian and Spatial Plan/Head of National Land Agency No. 6/2018 concerning a Complete and Systematic Land Registration (PTSL);
- Presidential Regulation No. 88/2017 concerning Resolution of Land Conflict within Forest Area (PPTKH);
- Government Regulation (PP) No. 46 Year 2016 concerning Guidelines on Implementing Strategic Environmental Assessment;
- Ministry of Environment and Forestry Regulation No. 83/MENLHK/SETJEN/KUM.1/10/2016 concerning Social Forestry;
- Ministry of Environment and Forestry Regulation No. P.84/Menlhk-Setjen/2015 concerning Tenurial Conflict Management within Forest Area (PPTKH). This regulation was enacted to support settlements of land occupancies, including conflicts within forest areas, by way of a joint taskforce involving ATR/BPN, MoEF, and MoHA under coordination of the Coordinating Ministry of Economic Affairs (CMEA);
- Government Regulation (PP) No. 27/2012 concerning Environmental Permit, Regulation of the Minister of Environment No. 16/2012 concerning Guidelines for Preparing Environmental Documents (AMDAL, UKL/UPL, and SPPL);
- Other applicable environmental standards such as water quality, air quality, and erosion control.

The ERP activities will potentially involve and impact indigenous peoples and should provide benefits to and manage impacts on indigenous peoples. Government of Indonesia's policy on indigenous peoples includes:

- UUD 1945 (Amendment) Article 18, clause #2 and Chapter 281 clause # 3. Article 18B (2) (second amendment) states that 'The state recognizes and respects indigenous peoples and their traditional rights providing these still exist and are in accordance with the development of the people and the principles of the Unitary State of the Republic of Indonesia, which shall be regulated by law'. Article 28I (3) (second amendment) states that 'The cultural identities and rights of traditional communities shall be respected in accordance with the development of the times and civilization';
- Law 6/2014 on Villages. Gives local communities the opportunity to propose becoming an indigenous village (*desa Adat*), with substantial opportunities to self-govern based on traditional laws and customs. Article 76 makes specific reference to communal land (*tanah ulayat*) as a village asset if a village has been legally recognized as an *Adat* village by district or provincial legislation;

- Law 39/2014 on Plantation Development, Article 12(1) states that, 'in the case of land require for plantation businesses, companies must consult indigenous land rights holders to obtain agreement on the delivery of land and compensation'. Article 17(1) states that 'The relevant authorities are prohibited from issuing plantation permits over the land of indigenous communities'. Article 55(b) states that '[Individuals are prohibited from] working, using, occupying and /or controlling public land or the land of indigenous peoples for the purpose of conducting a plantation business. Article 103 states that 'Any officer who issues a plantation permit over land with indigenous rights holders [...] shall be punished with imprisonment of five years or a fine of IDR 5 billion';
- Law No. 41 on Forestry amended through the Constitutional Court Decision No. 35/PUU-X/2012. The Constitutional Court ruled that Adat forests are not part of the state forest (Hutan Negara). This Court decision modified the sub-classification of what was known as forest areas as: Titled Forests (Hutan Hak), and State Forests (including concessions, village forest programs as Hutan Desa, and Hutan Hak – those areas held by Adat communities). This decision further implied that Adat forests, wherever legally recognized, would be assumed to be collectively owned forests of indigenous peoples and Adat communities (i.e. part of the Titled Forests category);
- Law 5/1960 on Basic Agrarian Principles (BAL). Recognizes Adat law as the the guiding basis of Indonesian land law. However, the BAL restricts the application of adat law and recognition of Adat law communities by subordinating these to the national interest;
- Presidential Decree (Keppres) No. 111/1999 concerning Development of Isolated Indigenous Community (KAT) which provides a broad definition of indigenous peoples and the need for government assistance;
- Regulation of the Minister of Land Agency and Spatial Development No. 9/2015 on the Procedures to Establish the Land Communal rights on the MHA Land and Community Living in the Special Area (non-forest estates);
- Provincial Regulation no. 1/2015 on the recognition of customary communities (*Masyarakat Hukum Adat*);
- MOHA Regulation No. 52/2014 on the Guidelines on the Recognition and Protection of MHA (*Masyarakat Hukum Adat*);
- Ministry of Environment and Forestry Regulation No. 21/2019 on Adat Forest and Titled Forest. This regulation sets out the procedures for communities to apply for recognition of customary forests.
- In addition, there are two draft bills that are yet to be legislated, including draft bill on the recognition and protection of the rights of Customary Law Communities (*Masyarakat Hukum Adat*) and Land Law.

The ERP activities concern on gender issue and disability groups which potentially involved and impacted by the programme. The ERP should provide benefits to and manage impacts on those issue. Government of Indonesia's policy on gender and disability includes:

- MoEF Regulation No P.31/2017 concerning Guidelines for Gender Implementation in Environmental and Forestry sectors.

- East Kalimantan Regulation No. 2/2016 concerning Gender Mainstreaming in local development plans.
- Law No 8/2016 concerning on people with disabilities which provides the definition of disabled people rights and the obligations of state to ensure the disabled people fully obtain their rights.

The above regulations will support the ERP, and no contradictions are foreseen in the regulatory framework. Implementation on Presidential Regulation No. 88/2017 must be carefully planned and implemented, so the approach involving modification of forest areas (e.g. into other use areas) and Agrarian Reform policy (*Tanah Obyek Reforma Agrarian – TORA*) will not cause deforestation or land degradation. Additionally, Constitutional Court Rule (*Putusan Mahkamah Konstitusi – MK*) No. 35/2012 should be interpreted responsibly, so it does not provoke massive land claims within forest areas. These challenges are discussed further in Chapter 4.0 (this document).

3.2 WORLD BANK SAFEGUARDS POLICIES

The operational Policies (OP) for safeguards that are relevant to the ERP are summarized as follow.

3.2.1 OP 4.01 Environmental Assessment

The World Bank requires environmental assessment (EA) of projects proposed for Bank financing to help ensure they are environmentally sound and sustainable and that potentially affected people have been properly consulted. The policy describes the objectives and recommended procedures and instruments for its implementation. This policy is considered to be the umbrella policy for the Bank's environmental safeguards.

The ERP is expected to generate mainly positive environmental and social outcomes, as it is designed to improve land governance, increase capacity and seek to reduce emission level from plantation and forestry sectors. This program also provides sustainable and low carbon emission livelihood. However, potential adverse environmental and social impacts are expected for all components. Consequently, proposed activities under these components will have to go through negative and screening to identify potential impacts and safeguards requirements. The screening process consists of:

- Screening against the Negative List (Appendix 1). This list was established as the first screening process to ensure that the activities do not contribute to escalating the drivers for deforestation and forest degradation. Additionally, any activities not aligned with GOI regulations and, those with potential adverse impacts will not be supported;
- Screening against the Environmental and Social Risks (Appendix 2) to assess potential risks of eligible activities and local capacity to manage such risks;
- Preparation of an Environmental and Social Management Plan as one of the safeguard instruments that provides key measures needed to manage environmental and social aspects of the program; and
- Compliance with an Environmental Code of Practices (ECOPs) that has been prepared to guide implementing units on how to prevent and/or minimize impacts/risks to the environment and community (Appendix 3). The ECOPs will be used as basic standards for the development of risk mitigation action plans (e.g. ESMPs, environmental permit [UKL/UPL], SPPLs) as needed and contains provisions for a range of sectors relevant for the ERP, including agroforestry,

home-based industry, farming, fisheries, seedling and community timber/social forestry activities, and ecotourism.

This ESMF is in itself the main instrument for addressing this policy. Depending on the project component and investments, additional instruments will be required for the assessment and management of eventual social and environmental impacts, for example ECOP (Environmental Code of Practice) or UKL-UPL in Indonesia.

3.2.2 OP 4.04 Natural Habitats

The Bank promotes and supports natural habitat⁶ conservation and improved land use by financing projects designed to integrate conservation of natural habitats and maintenance of ecological functions into national and regional development. Furthermore, the Bank promotes the rehabilitation of degraded natural habitats. The Bank does not support projects that, in the Bank's opinion, involve the significant conversion or degradation of critical natural habitats. Wherever feasible, Bank-financed projects are sited on lands already converted (excluding any lands that in the Bank's opinion were converted in anticipation of the project).

The Natural Habitat Policy is triggered because some of activities in components 1, 2 and 4 may have impacts on natural habitats such as agroforestry/social forestry, land use management, Non-Timber Forest Product (NTFP) harvesting, timber sub-projects, etc. The projects will not support initiatives that would potentially lead to conversion and/or degradation of critical or non-critical natural habitats and conversion of habitat of the endangered species. The ESMF includes measures to promote sound management of natural resources, natural habitats as well as conservation of endangered species. Project activities will strive to promote good practices in forest management, including innovative ideas to protect environmentally sensitive habitats and enhance the project's positive impacts on the environment. Efforts for the identification of natural habitats will be done through existing safeguard mechanism such as High Conservation Value (HCV) studies that are commonly carried out for natural resource management programs.

The ERP will not support sub-projects that involve the significant conversion or degradation of critical natural habitats⁷.

3.2.3 OP 4.09 Pest Management

Bank financed-projects have to avoid using harmful pesticides. A preferred solution is to use Pest Management (IPM) techniques and encourage their use in sectors concerned. If pesticides have to be used the Bank-funded project should include a Pest Management Plan (PMP), either as a stand-alone

⁶ Natural habitats are land and water areas where (i) the ecosystems' bio-logical communities are formed largely by native plant and animal species, and (ii) human activity has not essentially modified the area's primary ecological functions. All natural habitats have important biological, social, economic, and existence value. Important natural habitats may occur in tropical humid, dry, and cloud forests; temperate and boreal forests; mediterranean-type shrub lands; natural arid and semi-arid lands; mangrove swamps, coastal marshes, and other wetlands; estuaries; sea grass beds; coral reefs; freshwater lakes and rivers; alpine and sub alpine environments, including herb fields, grasslands, and paramos; and tropical and temperate grasslands.

⁷ Critical Natural Habitats are (i) existing protected areas and areas officially proposed by governments as protected areas (e.g., reserves that meet the criteria of the World Conservation Union [IUCN] classifications²), areas initially recognized as protected by traditional local communities (e.g., sacred groves), and sites that maintain conditions vital for the viability of these protected areas (as determined by the environmental assessment process³); or (ii) sites identified on supplementary lists prepared by the Bank or an authoritative source determined by the Regional environment sector unit (RESU). Such sites may include areas recognized by traditional local communities (e.g., sacred groves); areas with known high suitability for biodiversity conservation; and sites that are critical for rare, vulnerable, migratory, or endangered species.⁴ Listings are based on systematic evaluations of such factors as species richness; the degree of endemism, rarity, and vulnerability of component species; representativeness; and integrity of ecosystem processes.

document or as part of an Environmental Assessment. With respect to the classification of pesticides and their specific formulations, the Bank refers to the World Health Organization's Recommended Classification of Pesticides. The Bank does not finance formulated products that fall in WHO classes IA and IB, or formulations of products in Class II, if (a) the country lacks restrictions on their distribution and use; or (b) they are likely to be used by, or be accessible to, lay personnel, farmers, or others without training, equipment, and facilities to handle, store, and apply these products properly.

The Pest Management policy is triggered as proposed activities (components 1 and 4) may lead to acquisition, use and disposal of small quantities of pesticides (for short term use). The project will not procure or use pesticides and chemical fertilizers that are classified as IA or IB by WHO and GOI's regulations. Emission Reduction Program will encourage use of organic fertilizers for activities related to agriculture and agroforestry. However, since small quantities of eligible pesticides may be procured and used, the project will screen at the project level and when justified, assess the subsequent potential environmental and social impacts.

The project will not finance any pesticide without clear guidance and monitoring of safeguard specialists nor without targeted training on use, storage and disposal or without the right equipment and installations necessary for the products to be used safely and appropriately. The ESMF has incorporated an IPM guidance note (Appendix 4) and Environmental Code of Practice (Appendix 3) that every activity involving uses of pesticides or pest management is required to adopt.

3.2.4 OP 4.10 Indigenous Peoples

The policy on indigenous peoples underscores the requirement to identify indigenous peoples, consult with them, ensure that they participate in, and benefit from the Program in a culturally appropriate way – and, that adverse impacts on them are avoided, or where not feasible, minimized or mitigated. For purposes of this policy, the term “indigenous peoples” is used in a generic sense to refer to a distinct, vulnerable, social and cultural group possessing the following characteristics in varying degrees:

OP 4.10 is triggered since the activities under the ERP will be implemented in areas claimed by communities who can be categorized as indigenous peoples as per-OP 4.10⁸ and therefore, may have impact on their claims and access to land and natural resources. Furthermore, indigenous peoples, including *Adat* communities will be beneficiaries of the ERP and therefore it is important to establish a robust community engagement strategy as well as fair benefit sharing processes to maintain stakeholders' traction and buy-in to the Program activities. Program benefits as well as opportunities for participation amongst these communities must be identified in a culturally and socially appropriate manner. Accordingly, key activities that receive funding shall be based on free, prior and informed consultations. The ERP communication and community engagement strategy must also ensure that target communities have a full and complete understanding of the initiatives proposed. Potential access restriction due to ER Program and their potential E&S risks and impacts.

⁸ Such criteria include: a) self-identification as members of a distinct indigenous cultural group and recognition of this identity by others; b) collective attachment to geographically distinct habitats or ancestral territories in the project area and to the natural resources in these habitats and territories; c) customary cultural, economic, social, or political institutions that are separate from those of the dominant society and culture; and d) an indigenous language, often different from the official language of the country or region.

The ESMF applies to all communities with indigenous peoples characteristics⁹ regardless of the presence of legal recognition and therefore, the provisions of the OP 4.10 apply to address potential risks and protect the rights of these groups in the ERP implementation. The ESMF encompasses two inter-related processes to address OP 4.10 policy requirements:

- a. First, at the participation level, the application of the ESMF will not be conditional upon *Adat* rights recognition and therefore, will allow broader groups affected by or participating in the ER program, including other communities who possess characteristics as per-OP 4.10. Requirements for screening and free, prior and informed consultations to obtain broad community support will be applicable prior to implementation of ER activities where indigenous peoples' claims exist.
- b. Second, at the benefit sharing level, eligibility requirements will be defined based on the types of ER activities and whether or not such activities are tied to land and resource claims. *Adat* communities shall not need district level recognition but village-level recognition shall suffice for such communities to receive benefits. In addressing tenure settlements for *Adat* communities and other forest dependent people, the Gol's regulatory frameworks, particularly the Presidential Regulation No 88/2017 on Land Tenure Settlements in Forest Areas (PPTKH), will prevail. Further detailed mechanisms to address benefits for indigenous peoples and *Adat* communities will be addressed in this OP under the Benefit Sharing Plan (BSP), which is currently under development.

Under Component 4, the ERP seeks to accelerate social forestry licenses, which include Village forests (*Hutan Desa*), community forests (*Hutan Kemasyarakatan*), community-based timber plantations (*Hutan Tanaman Rakyat*), customary forests (*hutan adat*), private forests (*hutan rakyat*), and forest partnerships (*kemitraan*). Promoting tenure recognition is expected to enable greater participation and benefits for forest dependent communities, including indigenous peoples and *Adat* communities. Facilitation will be provided by the Provincial Forestry Agency through a Working Group on Social Forestry as well as KPHs. For those cases where key activities involve indigenous communities who may not be officially recognized as such in the country, it is the PMU's responsibility to determine if these groups meet the criteria of OP 4.10 for defining indigenous peoples. Since ERP is intended to focus on both IPs and LCs, they will be fully involved and have equal access to information and opportunities to ERP benefits.

Since the beneficiaries will consist of IPs and local communities, a standalone indigenous peoples Planning Framework (IPPF) is included as part of the ESMF (Appendix 8). Additionally, procedures of free, prior and informed consultations are also included. Relevant measures for complaint handling s included in the Feedback Grievance and Redress Mechanism (Appendix 7).

Recognizing possible constraints that *Adat* communities may face in participating in the ERP, facilitation and engagement with *Adat* communities will need to be tailored to enable these communities to benefit from the program.

⁹ In conjunction with OP 4.10, the term indigenous peoples in this document is used in a generic sense to refer to a distinct, vulnerable, social and cultural groups with the following characteristics in varying degrees: a) self-identification as members of a distinct indigenous cultural group and recognition of this identity by others; b) collective attachment to geographically distinct habitats or ancestral territories in the project area(s) and to the natural resources in these habitats and territories; c) customary, cultural, economic, social or political institutions that are separate from those of the dominant society and culture; and d) an indigenous language, often different from the official language of the country or region.

In the circumstances where ERP activities may result in restricting the access of Adat Communities and Indigenous Peoples to forest and non-forest estates, a Process Framework (PF) is provided by the ESMF to address such risk. The purpose of the PF is to establish a process by which communities potentially affected by restrictions to access land and natural resources for conservation and protection purposes can engage in informed and meaningful consultations and negotiations to identify and implement means to mitigate impacts of access restrictions. The PF will be strongly tied to the ongoing GoI's program on Social Forestry and the broader Agrarian Reform Program, which are expected to benefit landless poor communities within and/or surrounded by forest areas.

The PF is also linked to the Indigenous Peoples Planning Framework (IPPF - Appendix 8 of ESMF document), to address access risks that may affect indigenous peoples and enable their participation in the development of mitigation measures through free, prior, and informed consultation processes. In addition, relevant provisions of benefit sharing arrangements should be made through the ERP's Benefit Sharing Mechanism to compensate for such potential access restriction impacts.

The basic premise of the PF is to ensure that any risks which may lead to access restrictions with potential impacts on livelihoods displacement against forest-dependent communities, including indigenous peoples in the ERP accounting areas can be identified as early as possible to enable risk and impact avoidance and, if not feasible, minimization and compensation measures as set out in this document.

In order to avoid resettlement and minimize access restriction risks, the ERP will seek to facilitate social forestry initiatives (under sub-component 4.1.3) through a participatory process with forest dependent communities. Social forestry is expected to provide sustainable access to land and natural resources.

3.2.5 OP 4.11 Physical Cultural Resources

Physical cultural resources include movable and immovable objects, sites, buildings, and a group of buildings, natural facilities and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic significance, or other cultural properties. The objective this policy is to avoid, or mitigate, adverse impacts on cultural resources from development projects that the World Bank finances.

This policy is triggered in the event that ER activities may have impacts on PCRs or sites and objects with potential cultural significance. PCRs include movable and imovable objects, sites, natural objects and landscape which have archaeological, paleontological, historical, architectural, religious, aesthetic significance or other cultural properties. Due to the rich history and culture of East Kalimantan, implementation of ER activities in areas with potential cultural significance or discovery of such sites and objects is anticipated. Such activities may involve HCV conservation and/or eco-tourism. In addition, forest conservation may restrict access to sacred forest sites

Ethnic minority (EM) people often have close connection with forest areas, including spiritual connections, it is possible that in isolated cases REDD+ activities could interfere with villager defined sacred forest sites. The ESMF will include 'chance find' procedures and guidance on development and implementation of a Physical Cultural Resources Management Plan.

3.2.6 OP 4.12 Involuntary Resettlement

ERP is not envisaged to result in involuntary resettlement. RPF has been prepared as a precautionary measure in the event of unintended impacts of tenure conflict resolution. There are risks where the ER

program may exacerbate and affect existing disputes over land rights if no sufficient community participation and dispute mediation is in place during the program implementation. The ER Program will seek to establish participatory approaches in forest boundary demarcation and tenure settlements. Under Component 4, the GoI is committed to providing support through FMUs to create alternative livelihoods such as social forestry schemes and forest-partnership (Kemitraan) with forest-dependent communities within and surrounding FMU areas.

Increased land and forest tenurial conflicts have been and will continue to be a major concern for the success of the ERP. Such conflicts often involve Adat communities who claim to have rights to land before Forest Areas (Kawasan Hutan) were established and forest concessions were issued. Since 2012, Indonesia has mobilized significant efforts to identify existing tenurial conflict and other land-use and forestry related conflicts, as well as develop relevant policies and regulatory frameworks. The ERP will take into account an indicative tenurial conflict map that the GoI has developed, with an inventory of 201 conflicts, mostly in Sumatra (60.7%) and Kalimantan (16.4%). Such identification is currently ongoing to further identify tenurial conflicts in forest areas through a joint assessment between the Government and communities, including Adat communities and identify ways forward to settle conflicts through consensus.

The ESMF developed under the ERP has incorporated a Resettlement Policy Framework (RPF) and Process Framework (PF) to mitigate potential resettlement and access restriction risks resulting from forest tenure settlements and boundary demarcation supported by the ERP. These RPF and PF have been developed in conjunction with the current GoI's frameworks on forest tenure settlements,¹⁰ and will seek to address any gaps, particularly with regards to free, prior, and informed consultations with affected parties, compensation and livelihoods restoration. The RPF which includes a PF are appended as a separate Appendix (Appendix 9) to the ESMF.

3.2.7 OP 4.36 Forests

The Bank's current forests policy aims to reduce deforestation, enhance the environmental contribution of forested areas, promote afforestation, reduce poverty, and encourage economic development. This policy applies to the following types of Bank-financed investment projects:

- Projects that have or may have impacts on the health and quality of forests;
- Projects that affect the rights and welfare of people and their level of dependence upon or interaction with forests; and
- Projects that aim to bring about changes in the management, protection, or utilization of natural forests or plantations, whether they are publicly, privately, or communally owned.

Key activities may bring about changes in the management; protection and/or utilization of natural forests (e.g. support for NTFP and timber sub-projects). ERP is expected to bring positive impacts on forest ecosystems through promotion of forest conservation, sustainable livelihoods, restoration of degraded lands, and protection and enhancement of ecosystem services and biodiversity. Conversion

¹⁰ The refinement of community based conflict handling mechanisms will be conducted with adherence to relevant regulatory frameworks for addressing tenurial conflict are, among others, Law no 7/2012 on social conflict management, MoEF Ministerial Regulation No P.32/Menhut-Setjen/2015 on Forestry Rights, MoEF Ministerial Regulation No 84/Menlhk-Setjen/2015 on Forestry Tenurial Conflict Handling, MoEF Ministerial Regulation No 83/Menlhk-Setjen/2016 on Social Forestry, MoEF Ministerial Regulation No 34/Menlhk-Setjen/2017 on the protection of local wisdom in natural resources and environmental management. MoEF Ministerial Regulation No 83/Menlhk-Setjen/2016 on Social Forestry.

of primary forests is included in the negative list, and is therefore, strictly prohibited. The ESMP will outline key strategies to promote sustainable use of forest and mitigation of impacts and risks if the project activities are implemented and/or affect forest areas such as, but not limited to, forest restoration, plantations, non-timber forest products collection/processing and agro-forestry activities. The ESMF includes code of practice for community timber activities. The ERP may support harvesting operations conducted by small-scale landholders and/or by local communities under a community forest scheme if such operations have achieved an acceptable standard of forest management developed with meaningful participation of locally affected communities, consistent with the principles and criteria of responsible forest management as outlined in the ESMF.

The ER Program will not finance projects that contravene applicable international environmental agreements. The Program may finance commercial harvesting operations that are certified under an independent forest certification system, but only when the Bank has determined, on the basis of the applicable environmental assessment or other relevant information, that the areas affected by the harvesting are not critical forests or related critical natural habitats. The Program may finance harvesting operations conducted by small-scale landholders, by local communities under community forest management, or by such entities under joint forest management arrangements, if these operations:

- Have achieved a standard of forest management developed with the meaningful participation of locally affected communities, consistent with the principles and criteria of responsible forest management; or
- Adhere to a time-bound phased action plan to achieve such a standard. The action plan must be developed with the meaningful participation of locally-affected communities and be acceptable to the Bank.

DGCC with coordination and technical support from Provincial and District Environmental Services and Provincial Safeguards Team will monitor all such operations with the meaningful participation of locally-affected communities.

3.3 INSTITUTIONAL FRAMEWORKS

Implementation of ESMF in the ERP will be assigned to the following levels of governance:

- National level policies (forest and protected areas): Policies mainly fall under the jurisdiction of MoEF. Policies are related to forest area designation, issuance of licenses, moratorium on licenses (PIPPIB), moratorium on peatlands, agrarian reform (TORA), social forestry, and environmental partnership mechanisms. The policy of the Ministry of Home Affairs is relevant to national policy on recognition of customary community (MHA);
- National level policies (other use areas/APL): Policies related to land allocation validation falls under the jurisdiction of the Ministry of Agrarian and Spatial Planning (ATR/BPN). Authorities for this ministry are mandated to offices at the provincial level (*Kantor Wilayah* - Kanwil) and at the district level (*Kantor Pertanahan*);
- Provincial level policies: BAPPEDA plays an important role in ensuring synergy between sectors. Policies on forest management fall under the jurisdiction of the Forestry Agency, while grass root implementation is administered through the FMUs (KPH). Environmental Agency and Information and Communication Agency can potentially serve as a support system and oversight for provincial level policies, especially on the FGRM implementation. While the

Regional Council on Climate Change (DDPI]) is not a regulatory institution/body, its role is essential in supporting the BAPPEDA and other agencies to convene and coordinate key stakeholders. Capacity gaps include the lack of capacity for FGRM implementation and oversight, conflict resolution, and FREL, MRV, and HCV assessment and management; and

- District level policies: The District Agency of DPMPD plays an important role in the recognizing customary (*Adat*) communities and in ensuring proper implementation of ER at the grass root level. DPMPD also essential in ensuring policies for channelling funds to the villages under the village fund (*Dana Desa – DD*) and village fund allocation (*Alokasi Dana Desa – ADD*) from provincial and national government authorities. These institutions have the capacity to support provincial policies on FGRM, conflict resolution, and HCV assessment and management.

Recent changes in forestry regulations (e.g., social forestry, Indigenous People access, environmental partnerships) and in ERP requirements, such as FPIC, FREL and MRV, mean that a new approach at national and sub-national levels is required.

3.4 GAP ANALYSIS

Overall there are no significant gaps between Indonesian safeguards and the World Bank safeguards policies. The identified gaps were used to provide guidance on the development of ESMF. Environmental and Social Management Framework (ESMF) highlights the need to strengthen the existing safeguards related to indigenous peoples, grievance mechanism, access to forest resources, and environmental and social management and monitoring program. Among the environmental and social risks, indigenous peoples and Involuntary Resettlement are the most important aspect that needs to be emphasized in the ER program design. Development of Indigenous Peoples Planning Framework (IPPF) and Process Framework (PF) and ensuring inclusion into other management plan is crucial to ensure that the ER program complies with the World Bank safeguard policies.

The following table describes the gaps analysis exercise of the key consideration issues of the ER activities and how mitigation measures are built into the ESMF. In addition to the table the following sections 3.3.1 and 3.3.2 describes in more detail the gap analysis with regards to indigenous peoples and land tenure, and involuntary resettlement.

Table 3-1 Summary of gap analysis of key considerations.

Aspect	World Bank Policy	Indonesian Regulation	Gap	ESMF Role
OP 4.01 Environmental Assessment				
Environmental Assessment	OP 4.01 Paragraph 1 specifies that projects funded by the World Bank require an environmental assessment.	Environmental and social assessments are conducted through the Strategic Environmental Assessment in accordance with the MoEF Regulation No. P.69 of 2019 to ensure that the principle of Sustainable Development has become the basis and integrated in the development of a region and/or Policy, Plan and/or Program. EK Bappeda and EK Environmental Agency has developed a Strategic Environmental Assessment (SEA) for the Regional Spatial Planning for 2016-2036 and the Medium-Term Development Plan for 2018-2023.	Need capacity building on monitoring	Environmental assessment refers to the Indonesian Regulations and the ESMF that require the development of environmental documents according to the results of screening. UKL-UPL assessments are expected to be required for the nature and scale of the ERP activities. Enhance the capacity development and training for conducting environmental assessment and implementation of environmental and social management plans.
Environmental Screening	OP 4.01 Paragraph 8 states that a screening process is required to determine the scale/scope of the project and the type of environmental assessment required.	Based on articles 7-8 MoEF Regulation No. P.69 of 2019, that screening is carried out in preparing SEA, including on the issue of climate change.	More detailed assessment is needed at the site level, to ensure that all those identified in the SEA are handled at the field level.	Screening process against negative list for ER activities in the ESMF that include identification of potential impact towards involuntary resettlement/access restriction, indigenous peoples.
Management of environmental and social impacts	OP 4.01 Environmental Assessment	Environmental and social assessments are conducted through the SEA and AMDAL process in accordance with MoEF Regulation No. P.69 of 2019 and the Ministry of Environment Regulation No. 5 Year	The management and monitoring plan developed through the AMDAL process generally meets the Bank requirements. The scope may vary depending on the assessments and scale of the proposed activities	The ESMF strengthens the SEA and Environmental permits by providing specific Environmental Codes of Practices (ECOPs) for ER activities such as agroforestry, aquaculture and ecotourism (Appendix 3) and a template for ESMP (Table 13).

Aspect	World Bank Policy	Indonesian Regulation	Gap	ESMF Role
		<p>2012 on business activities mandatory to have AMDAL.</p> <p>The assessment is also regulated by Government Regulation No. 27 Year 2012 concerning Environmental Permit, where each business and/or activity (project) plan mandates an Environmental Permit if an AMDAL or UKL-UPL assessment is required</p>		
Grievance mechanism	<p>OP 4.01 Environmental Assessment</p> <p>OP 4.10 Indigenous Peoples</p>	<p>Ministry of Environment and Forestry No. P.84 of 2018 regarding handling tenure conflicts in state forests</p> <p>Ministry of Environment and Forestry No. P.22 Year 2017 regarding Management of Grievances related to Indications of Pollution and/or Environmental Damage and/or Harm to Forests.</p>	<p>There is no specific and integrated mechanism for managing and resolving grievances related to ER activities. The governor regulation on FGRM has been developed. See appendix 7.</p>	<p>The ESMF provides a Feedback and Redress Grievance Mechanism (FGRM) for managing and resolving grievances related to implementation of ER activities (Appendix 7).</p>
OP 4.09 Pest Management and OP 4.36 Forest				
Possible contamination to soil and water as result of pest management practices	<p>OP 4.09 avoidance of using harmful pesticides. A preferred solution is to use Pest Management (IPM) techniques</p> <p>OP 4.36 aims to reduce deforestation, enhance the environmental contribution of forested areas, promote afforestation, reduce poverty, and encourage economic development</p>	<p>There are several regulations about fertilizer and pesticide¹¹</p>	<p>Capacity building is still needed in implementing this</p>	<p>The ESMF provides guideline on establishing a pest management plan for the ER activity base on best international practices (Appendix 4).</p> <p>Enhance the capacity of the authorities for enforcing the compliance to the regulations. Refer to Section 5.5 Capacity Building Plan.</p>

¹¹ More detailed on <http://psp.pertanian.go.id/index.php/page/publikasi/72>

Aspect	World Bank Policy	Indonesian Regulation	Gap	ESMF Role
OP 4.04 Natural Habitats				
Possible loss of natural habitats and biodiversity	OP 4.04 promotes and supports natural habitat conservation and improved land use by conservation of natural habitats and the maintenance of ecological functions.	Laws and regulations are in place on protection of forest, threatened and endangered species at the national and provincial levels.	Capacity building is still needed in implementing biodiversity protection and conservation measures	The ESMF provides a guideline for the development of a management framework for biodiversity through HCV studies developed by FSC (Appendix 5) to identify and manage natural habitats and key biodiversity areas. Capacity building in assessing impacts on biodiversity, particularly for natural habitat and critical habitat. Refer to Section 5.5 Capacity Building Plan.
OP 4.10 Indigenous Peoples				
<i>Potential impacts on indigenous peoples</i>	The policy on indigenous peoples underscores the requirement to identify indigenous peoples, consult with them, ensure that they participate in, and benefit from Bank-funded projects in a culturally appropriate way – and, that adverse impacts on them are avoided, or where not feasible, minimized or mitigated	<i>Masyarakat Hukum Adat</i> is recognized by the constitution (article 18B) The procedures for the recognition of Adat land rights are stipulated in Forestry Law No. 41/1999 and Ministry of Home Affairs No. 54/2014. East Kalimantan Government has issued a Provincial Regulation on the Guidelines for the Recognition of <i>Masyarakat Hukum Adat</i> in East Kalimantan (Provincial Regulation No. 1/2015)	The main gap is that the OP 4.10 principle of self-determination is not recognized in Indonesian law. Instead, regional governments are authorized to recognize indigenous peoples. An analysis provided in the SESA document identified overlapping areas between <i>Adat</i> lands and state forest and plantation concessions (Palm Oil), which suggests potential risks (e.g., tenurial conflicts and access restrictions following improved forest management).	The ESMF provides a risk-based framework for addressing the potential ERP impacts on indigenous peoples, particularly Adat Land rights (Appendix 8).

Aspect	World Bank Policy	Indonesian Regulation	Gap	ESMF Role
OP 4.11 Physical Cultural Resources				
Impacts on physical cultural resources	OP 4.11 Physical Cultural Resources. Identify and mitigate potential impact towards physical cultural resources for each sub-project.	Law No. 11/2010 on Cultural Heritage states that cultural heritage needs to be preserved and protected. These sites are recognized by the government through issuance of a decree.	The law is in accordance with OP 4.11. However, this applies to cultural sites that have been recognized and registered by the government. Other PCRs with cultural values are not covered.	The ESMF provides a chance-finds procedure for unexpected discovery of PCRs in the accounting areas (Appendix 10)
OP 4.12 Involuntary Resettlement and Access Restriction				
<i>ERP potentially causing involuntary resettlement and/or restriction of access</i>	Involuntary Resettlement is triggered in situations involving involuntary taking of land and involuntary restrictions of access to legally designated parks and protected areas. The policy aims to avoid involuntary resettlement to the extent feasible, or to minimize and mitigate its adverse social and economic impacts.	Framework for handling tenure settlements in Forest Areas (PPTKH) is set out in the Presidential Regulation No. 88/2017. Several measures to address forest occupation and/or encroachments depending on the functions of the forest estates concerned (i.e. conservation, protection and production). Agrarian Reform Program, the Gol is committed to protecting the rights of the poor, including informal occupants within the forest estates (<i>Kawasan Hutan</i>).	Social forestry is considered as the Gol's Process Framework to provide forest dependent communities access to land and natural resources for livelihoods in state forest areas. However, there is a lack of clearly and formally recognized rights to customary forest areas and this has led to the overlap of commercial land use licenses with customary lands, often resulting in conflicts or dispossession, or both.	The ESMF provides process framework (PF) as part of the RPF to clearly define the requirements, approach and guideline for addressing potential access restrictions and involuntary resettlement (Appendix 9).

3.5 OTHER PROJECTS AND PROGRAM SAFEGUARDS

There are three World Bank financed projects currently being implemented in East Kalimantan Forest Areas in the pipeline. These include:

- FIP 2, *Promoting Sustainable Community Based Natural Resource Management and Institutional Development*. The project is currently being implemented in KPH Kendilo. The project is designed to support and strengthen the national effort to achieve REDD+ objectives by decentralizing forest management through the operationalization of Forest Management Units (or KPH) to manage forest areas. The Project aims to create the enabling conditions and capacity for management practices that are aligned to local conditions to effectively reverse the trend of deforestation and forest degradation. The Project has been classified as Category B by the WB, with seven WB safeguards policies triggered: OP 4.01 on Environmental Assessment, OP 4.04 on Natural Habitats, OP 4.36 on Forests, OP 4.10 on Indigenous Peoples, OP 4.12 on Involuntary Resettlement, and OP 4.09 on Pest Management. An ESMF was developed and approved by the World Bank during project preparation and is currently under implementation.
- Dedicated Grant Mechanism Indonesia (DGM). The project is currently being implemented in relation to one of the Adat communities of Kutai Barat district, namely Jumetn Tuwayatn. The project aims to improve participation of indigenous people and local communities' (IPLCs) capacity to improve tenure security and support livelihood opportunities from sustainable management of forest and land. DGMI provides small grants to CBOs/CSOs to build the capacity of participating IPLCs to pursue: (i) clarity and security over their rights to land (including forest land) in rural areas, and (ii) improved livelihoods. The project is a Category B under the World Bank OP 4.01 and is not anticipated to create adverse E&S impacts. The project triggered five World Bank safeguards policies including OP 4.01 Environmental assessment, OP 4.04 Natural habitats, OP 4.36 Forests, OP 4.10 Indigenous Peoples, and OP 4.09 Pest management. Similar to the FIP 2, an ESMF was developed and approved by the World Bank during project preparation and is currently under implementation.
- *Program to Accelerate the Agrarian Reform/One Map*: The objective of the project would be to establish clarity on actual land use and land rights at the village level in the target areas through the accelerated implementation of Agrarian Reform and One Map Policy. This would enhance sustainable landscape management, land governance, social stability, access to land for investments, inclusive growth, conflict resolution and environmental protection and conservation. This would also include positive benefits to climate change adaptation and mitigation. The project would target programs in the provinces of Sumatra (Riau, Jambi and South Sumatra) and Kalimantan (East, Central, West and South). The project triggered the following World Bank Safeguards Policies, including Environmental Assessment (OP/BP 4.01), Forests (OP/BP 4.36), Pest Management (OP/BP 4.09) and Indigenous Peoples (OP/BP 4.10).

Since the ESMFs for the projects above have been approved by the World Bank and aligned with the required E&S measures under the ESMF for the ERP in East Kalimantan, safeguards compliance for the other World Bank's projects in East Kalimantan will therefore remain under the purview of respective project implementing agencies. The World Bank, as financier and/or administrator of these activities, will be responsible for reviewing and clearing the safeguard instruments under each of the above operations, for ensuring that those instruments are consistent

with the ESMF for the ER Program, and for ensuring the compliance of the respective activities with the project safeguard instruments through periodic supervision. Necessary coordination and collaboration will be made with relevant implementing agencies under leadership and coordination from the DGCC and East Kalimantan SEKDA during the ERP implementation.

4.0 ASSESSMENT OF ENVIRONMENTAL AND SOCIAL RISKS AND MITIGATION MEASURES

A list of sub-components and activities with potential environmental and social risks that are expected to be implemented within ERP is provided in **Appendix 10**. These areas are responsive to the priority areas of support identified during several public consultation sessions with indigenous peoples, local communities and other relevant stakeholders undertaken during the SESA process. The assessment matrix in Appendix 10 also provides the proposed mitigation measures for the identified risks and proposed responsible agencies.

4.1 MANAGEMENT OF DIRECT RISKS AND IMPACTS

Direct risks and impacts are those caused by the ERP implementation and occur contemporaneously in the location of the project (see **Appendix 11**). A summary of the direct risks is provided below.

Potential environmental impacts are generally positive due to improved land and resource management and improved institutional capacity and awareness for oversight and regulatory enforcement. Risks are considered as residual as these are most likely related to lack of enforcement capacities and shifting in incentives due to changing trends in global commodity prices and political economy.

Such risks include loss of natural habitats and key biodiversity species at areas designated as non-forest, contamination of soil and water, and health risks associated with the use of pesticides and as result of poor waste management practices, successes in reducing impacts on forests could lead to displacements of these impacts to other areas.

The ERP activities have potential for Occupational, Health and Safety (OHS) and Community Health and Safety risks, specifically in the implementation of community-based social forestry, and fire management, and fire suppression activities. Mitigation measures includes the adoption and implementation of OHS general guidelines and establishing systems for emergency preparedness and response into sub-project activities (refer Appendix 3).

Potential social risks include risks associated with activities conducted in areas under existing and potential conflicts and/or disputes or areas with overlapping boundaries and/or claims, between customary and common/formal laws and processes and in areas with competing claims especially with concessions, livelihoods impacts including displacement due to bans on timber logging, oil palm plantation and artisanal mining activities, impacts on Adat communities as well as other forest dependent communities, loss and/or damage, lack of awareness, management capacity and participation of community in managing social forestry, institutional capacity constraints to manage potential environmental and social risks at field level, as well as gender inequalities and social exclusion.

Particular attention needs to be given to the social risks associated with improving land governance conducted in areas under existing and potential conflicts and/or disputes or areas with overlapping boundaries and/or claims, between customary and common/formal laws and processes, and in areas with competing claims especially with concession areas. The baseline of East Kalimantan shows that there are overlaps amongst palm oil concessions, between palm oil concessions and HPH areas, and between HPH and HTI areas. Furthermore, in 2017 there were 16 plantation land tenure conflicts between the private sector and communities (ranked 4th out of 28 provinces in Indonesia). Potential disputes with the government will stem from private companies operating the concession areas, from the local communities, including from Adat communities who own rights and claims over Adat territories

(Ulayat). The issue is aggravated by the lack of dedicated grievance mechanism available to stakeholders to submit complaints. With consideration of the existing grievance mechanisms at the regional and national levels, and recognition of Adat Forests by local and national legislation, the ESMF aims to complement the existing systems by providing a framework for managing grievances related to competing claims and tenurial conflicts (refer Appendix 7), and a framework for engaging and consulting the affected Adat communities and other groups who meet the criteria of Indigenous Peoples as per-OP 4.10 (refer Appendix 8).

Another notable issue that needs specific attention is that improvement of land governance may potentially cause access restrictions due to policies that allow license holders to limit the access of Adat communities and other forest dependent communities from a parcel of land. This may impact the livelihood patterns of these communities. With consideration of the ERP implementing social forestry activities to address issues of access restriction and involuntary resettlement, the ESMF aims to support the social forestry activities under the ERP by providing a framework for managing access restrictions and avoiding involuntary resettlement (refer Appendix 9).

The social forestry and/or concession areas are subject to environmental risks such as contamination of soil and water, health risks associated with the use of pesticides and as result of poor waste management practices. These risks are of less concern considering that social forestry will be designed to meet Gol regulated requirements, especially through the development of environmental and social management plans and environmental licensing of the activities. The ESMF aims to support the existing Gol systems by providing a screening mechanism, code of practices and guidance on environmental licensing for establishing social forestry activities.

While improving land governance will contribute positively to reducing deforestation, there is potential for loss of natural habitats and/or loss of key species at concession areas managed under private licenses caused by weak supervision. However, this risk is of a less concern considering that efforts in improving land governance aim to prioritize the securing of protected forest areas which shelters key natural habitats and key species. Furthermore, under the Gol regulation, plantation concessions are required to conduct HCV study, and are required to preserve the high conservation value areas identified in the HCV study. These HCV areas are considered to also shelter key natural habitats and key species that are protected by the government and international conventions.

Successes in reducing impacts on forests may lead to indirect environmental and social risks such as leakage and reversals of these impacts to other areas. The indirect risks around leakage and reversal prevention will be addressed in conjunction with support to community welfare and livelihoods, access rights to use of land and natural resources, protection of local wisdom, and gender equality and social inclusion (e.g. participation of Indigenous Peoples and Adat communities as well as marginalized and vulnerable groups). Addressing these issues is expected to feed into, and subsequently enhance the program's benefit sharing mechanisms, forest governance, including prevention of leakage and reversals, transparency and accountability. Interlinkages amongst these initiatives have been observed in the ERP design. Synergy and coordination between national, provincial and district levels for safeguards management will continue to be defined and strengthened as the ER Program is being prepared and implemented.

Risks that are considered to remain residual and/or will have to be managed and contained by the government include resolving conflicts and redressing grievances related to tenurial disputes. The management of these risks are relatively complex and require coordination among many stakeholders.

As such, the ESMF considers tracking and monitoring of resolving grievances to be essential for the ERP, as well as the monitoring and reporting of leakages and reversals.

For the management of direct environmental and social risks and impacts resulting from ER Program implementation, the ESMF along with its associated frameworks, including the RPF and PF, IPPF, and FGRM will serve as the main reference for such.

4.2 MANAGEMENT OF INDIRECT RISKS AND IMPACTS RELATED TO LEAKAGES AND REVERSALS

Indirect or downstream risks such include displacement/leakages and reversals. Such risks have been considered as follows:

- Displacement/leakages: may emerge as risks attributed mainly to governance risks (i.e., regulatory aspects) that cannot restrict the expansion of timber/palm oil/mining concessions to compensate for HCV allocation. Conventional practices (rather than the sustainable ones) in expansion areas of forest or palm oil concessions may constitute the risk of leakages; and
- Reversals: may be produced as the results of governance risks such as lack of regulation enforcement to ensure sustainable forestry or plantation management, and lack of regulations on benefit sharing mechanism. Other issues that may constitute reversals are lack of participation in controlling fire, and tenurial conflicts (e.g., overlapping land use)

Leakages and reversals may occur in later in time or farther removed in distance than direct impacts. Such risks may likely occur in jurisdictions where there is lax law enforcement and weak oversight from relevant authorities.

Indirect E&S risks around leakage and reversal prevention will be addressed in conjunction with support to community welfare and livelihoods, access rights to use of land and natural resources, protection of local wisdom, and gender equality and social inclusion (e.g. participation of indigenous peoples and Adat communities as well as marginalized and vulnerable groups). Addressing these issues is expected to feed into, and subsequently enhance the program's benefit sharing mechanisms, forest governance, including prevention of leakage and reversals, transparency and accountability. Interlinkages amongst these initiatives have been observed in the ERP design. Synergy and coordination between national, provincial and district levels for safeguards management will continue to be defined and strengthened as the ERP is being prepared and implemented.

Additionally, downstream risks such as displacement/leakages and reversals are considered in the following ways:

- Displacement/leakages may emerge as risks attributed mainly to governance risks (i.e., regulatory aspects) that cannot restrict the expansion of timber/palm oil/mining concessions to compensate for HCV allocation. Conventional practices (rather than sustainable ones) in expansion areas of forest or palm oil concessions may constitute a risk of leakages; and
- Reversals may be produced as the results of governance risks such as lack of regulation enforcement to ensure sustainable forestry or plantation management, and lack of regulations on benefit sharing mechanism. Other issues that may constitute reversals are lack of participation in controlling fire, and tenurial conflicts (e.g., overlapping land use).

Each of these risks has been considered during the ERP development and mitigation measures have been proposed to address such risks. Each risk category, along with the proposed measures, is presented in **Error! Reference source not found.** and Table 6.

Table 4-1 Management of Indirect E&S Risks due to Leakages/Displacement.

Potential Risks	Proposed Mitigation Measures	Risk Level
The ERP will promote the protection of remaining HCV areas within existing industrial timber concessions, thereby reducing the potential planted area. While this may create demand for new plantation concession areas, the expansion of timber plantations, unlike palm oil plantations which are associated with small scale encroachment, is tightly regulated through the concession system. Some limited displacement to other regions is possible.	Preparation of HCV management and guidance regulations	Low
Successes in reducing the mining industry's impacts on forests in East Kalimantan could lead some actors to shift operations to other provinces. As long as the national governance framework on mining in forested areas remains weak, the risk of displacement is high.	<p>Enforcement of the existing policies such as forest and peat moratorium policies and also more stringent procedure for licensing of activities in forest areas, especially for mining and estate crops. Provincial regulation on sustainable plantation has been issued which regulate the obligation to increased productivity of plantation, utilization of low carbon stock land and/or critical land for plantation, and to conserve high conservation value areas. Regulation related to the abandoned land definition will be solved and incentive policy for the implementation of green development will also be designed.</p> <p>East Kalimantan's Spatial Plan has prohibited the issuance of new coal mining licenses which is expected to reduce the threat of forest loss in the mining area. Moreover, post-mining commissions to supervise mining plans and to strengthen reclamation will be implemented as well as community participation programs through the development of community development and empowerment blueprints.</p>	High
The program aims to reduce conversion of forested to oil palm plantations by promoting the protection of HCV areas in concessions, and by preventing the allocation of forested land to agricultural purposes. In the long term though, more stringent policies linked to plantations and estate crops in East Kalimantan could lead industries to shift expansion to neighbouring provinces.	Preparation of HCV management and guidance regulations	Low
Peat fires. Underlying causes of peat fires tend to be localized, and fires will be addressed mainly through fire prevention and control.	The ERP will empower communities to respond to forest and land fire. It will also develop a model partnership between community and large companies in controlling forest and land fires. This partnership will	Low

Potential Risks	Proposed Mitigation Measures	Risk Level
There is no apparent risk of these activities leading to increased deforestation elsewhere.	facilitate development of community group especially in areas vulnerable to fires and provide training in community-based fire management.	
Implementation of RIL and other SFM practices is expected to lead to increased harvests in the long term, with reduced damage to remaining stands and improved forest conditions.	East Kalimantan Provincial Government has established a Working Group on FMU, which strengthens FMU and indigenous peoples towards sustainable forest management.	Low

Table 4-2 Management of Indirect E&S Risks due to Reversals.

Potential Risks	Proposed Mitigation Measures	Level
There is some risk of reversals linked to unclear tenure and overlapping claims, within forested areas. While the ERP is designed to support reforms linked to forest access, it is unlikely that all conflicts will be settled during the ERPA period.	The ERP includes a number of measures for recognizing and managing conflict. These include supporting and refining existing local conflict handling protocols and developing the FGRM which will include a mediation mechanism.	Medium
There is some risk from issues related to benefit sharing. In East Kalimantan, benefit sharing has been implemented in several areas and standard procedures are being developed. However, there is little experience with performance-based benefits, and it will be important to manage the expectations of beneficiaries to avoid dissatisfaction with the Program, which could potentially lead to reversals.	The benefit sharing system will be prepared through a participative process at the local level with inclusion of the owners and inhabitants of forest land.	Medium
There are some risks of ineffective inter-sectorial coordination. Significant progress has been made in developing inter-sectorial coordination mechanisms; however, coordination across sectors remains a challenge in Indonesia, especially for the land-based sectors as separate ministries are responsible for mining, agriculture, and forestry.	Implementation of the ER Program is facilitated by a working group comprised of inter-sectorial and cross level (national and sub-national) components. A focal point for the ER Program will be established in each relevant sectorial agency to assist in coordinating inputs from all sectors.	Medium
Most fires occur on land that is not classified as state forest	Expand and empower community fire brigades in managing fire risk as well as facilitate education for farmers in land clearing method without fires Increase the capacity of local government in utilizing fire early warning system to better anticipate the fire hazards; Design measures to inform the public on ways to prevent forest fires; Develop monitoring system for various types of disasters, making it possible for community to report any the occurrence of disaster event as quickly as possible	Medium

4.3 MANAGEMENT OF RISKS ASSOCIATED WITH POLICY DEVELOPMENT

Policies, laws, regulations and standard operating procedures, which are to be reviewed and the drafting of which technical assistance may be provided under the ERP will be assessed in light of potential downstream E&S risks, especially in relation to land disputes and conflicts.

Policy development and technical support under the ERP seek to improve stakeholder and community participation in policy and regulatory development through support being provided to enhance community-level dialogue and consultations. The ERP implementation will also undertake targeted activities to reach out and ensure participation and consultations with indigenous peoples, Adat communities and other vulnerable groups.

E&S specialists at the Provincial Secretary (SEKDA) will assess the E&S implications of each policy development and technical assistance activities under the Program. If technical assistance and inputs are provided to regulations and laws, the drafted amendments will be vetted by respective implementing agencies (OPDs), with coordination from the Provincial Secretary (SEKDA) and DGCC, to enable consultative processes and discussions with relevant stakeholders who may be impacted by such regulatory and policy changes.

Where policy development and technical assistance are assessed by E&S specialists to potentially have widespread and adverse E&S implications, the Provincial Secretary (SEKDA), in consultation with the relevant specialists, will determine if an impact assessment is necessary or further consultations are required to ensure a broader inclusion of stakeholders and enable E&S inputs to be mainstreamed in the overall policy development and technical assistance processes.

In particular, where E&S implications indicate potential for land disputes and/or conflicts, the following alternative efforts should be considered to be undertaken by the relevant implementing agencies (OPDs):

- Incorporate approach for community engagement and participation for tenure settlements for both forest and non-forest estates; and
- Incorporate specific provisions under the FGRM on how grievances are handled for specific cases on land disputes/conflict resolution.

5.0 IMPLEMENTATION AND INSTITUTIONAL ARRANGEMENT

This Section describes how the environmental and social measures can be implemented in accordance with the ESMF and address the Government of Indonesia's environmental and social requirements. The preparation of social and environmental instruments and their implementation will be the responsibilities of the implementing agencies at the national, provincial and district levels. The implementing agencies may be assisted by third party consultants/experts for the preparation of the safeguards plans and provide capacity building. The Appendices of the ESMF provides guidance on how those plans/documents are to be prepared and implemented, in accordance with the ESMF.

5.1 ENVIRONMENTAL AND SOCIAL PROCEDURE

Environmental and social risks are expected to be minimized by strengthening safeguards supervision and technical support at the Program level. An overview of the proposed measures under the ESMF to address direct risks and impacts associated with the ERP include:

- a. Prior to the implementation of the ERP, relevant E&S capacity building and ESMF training outside the program, will be delivered. This is expected to enhance in-house E&S capacity within each implementing agency. Periodic E&S training and regular mentoring will benefit the environment and be provided by relevant E&S specialists at the Provincial Executive Agency at the Provincial Level (SEKDA);
- b. An early screening of potential E&S red-flags, including checking against the negative list (Appendix 1) will be conducted for each implementing district by Provincial E&S specialists. In the event that E&S risks are identified, and/or ERP implementation is deemed to potentially escalate existing risks (e.g. conflicts and/or disputes), necessary measures must be in place before the activities in question start and/or continue. Such measures may range from strengthening community engagement, putting in place E&S remediation measures, mediation, technical support for the implementation of the ESMF to putting specific activities on hold until E&S risks have been contained and/or addressed;
- c. Implementation of an early E&S warning system through emissions reduction and protection of natural habitats that the FGRM developed under the ERP. The FGRM defines steps and procedures for risk reporting and grievances to respective focal points at the district implementing agencies, E&S specialists at the Provincial Level, and DGCC;
- d. Building on the FGRM, the ERP during implementation seeks to introduce mechanisms for strengthening processes to receive and respond to citizen feedback and ensure timely responses. The ERP will put in place a strategy to ensure that the FGRM is widely communicated, accessible and affordable. Furthermore, under ERP design, proportionate resources and efforts will be invested in community dispute mediation processes, in a culturally and socially acceptable manner;
- e. Strengthening ERP communication and outreach strategy to enable broad traction across stakeholder groups; and
- f. On-going E&S monitoring, by capitalizing on the existing SIS REDD+ will be enhanced. SIS-REDD+ requires REDD+ implementers to independently assess and report on safeguards implementation. The system is intended to promote transparency and accountability from the

site level. For this purpose, the MoEF has formulated APPS, a Safeguards Implementation Assessment Tool. The tool was developed on the principles of simplicity, transparency, accountability, completeness, and comparability. APPS provides a checklist of supporting documents required as evidence of REDD+ safeguards implementation. It is provided along with the complete PCI under SIS-REDD+ in the Appendix and can be downloaded on the SIS-REDD+ website (<http://ditjenppi.menlhk.go.id/sisredd/>).

By ensuring that the above processes at the Program level are in place and adequately resourced, E&S risks and subsequent impacts resulting from ERP individual activities are expected to be minimized and contained to a lower risk level over the life of the project. A critical objective of the Program, as strengthened in the measures set out in this ESMF, is to prevent and reduce existing conflicts and disputes. To do so, the ESMF has been strengthened with:

- a. A FGRM for ERP implementation, which is presented as a separate Appendix to the ESMF (Appendix 8). The FGRM proposed under the program seeks to set out relevant measures to address grievances and emerging disputes and incorporate additional steps to strengthen the existing Grievance Redress Mechanisms across project and sub-project levels;
- b. Addressing risks and impacts to indigenous peoples, and Adat communities through an IPPF which form part of this ESMF. The IPPF is provided as Appendix 8;
- c. In addressing potential access restrictions and livelihoods displacement, an RPF which includes a Process Framework (PF) has been developed as part of this ESMF as a precautionary measure. These frameworks establish screening processes to identify and respond to such risks, define roles and responsibilities, establish risk avoidance and if not feasible, set out mitigation measures associated with access restrictions and livelihoods displacement in accordance with OP 4.12.

The environmental and social management procedure for the ERP key activities is illustrated in the following flowchart (Figure 5-1). The responsible parties for undertaking the procedure for each step is defined in the flowchart and the following tables describing institutional arrangements at the program and activity levels (refer sections 5.4.1 and 5.4.2). The overview of the institutional chart outlining the institutions in charge and their responsibilities in implementing the safeguards tools of the ESMF is also provided in Figure 5-2. The institutional chart will be further refined by the safeguard specialists at the East Kalimantan Provincial level after the roles and responsibilities of the institutions in charge are formalized through the East Kalimantan Governor's Decree.

Figure 5-1 ESMF implementation flowchart.

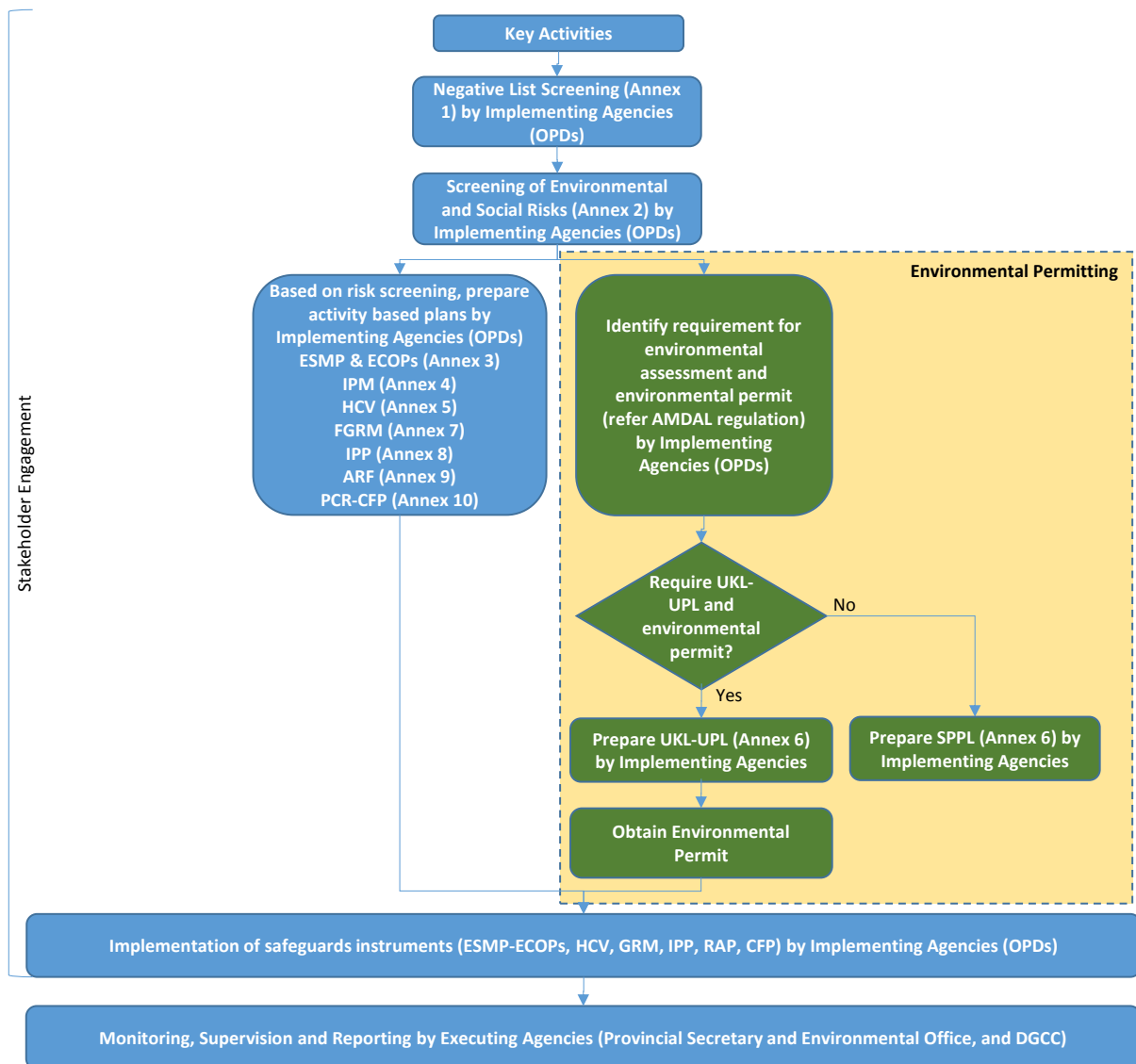
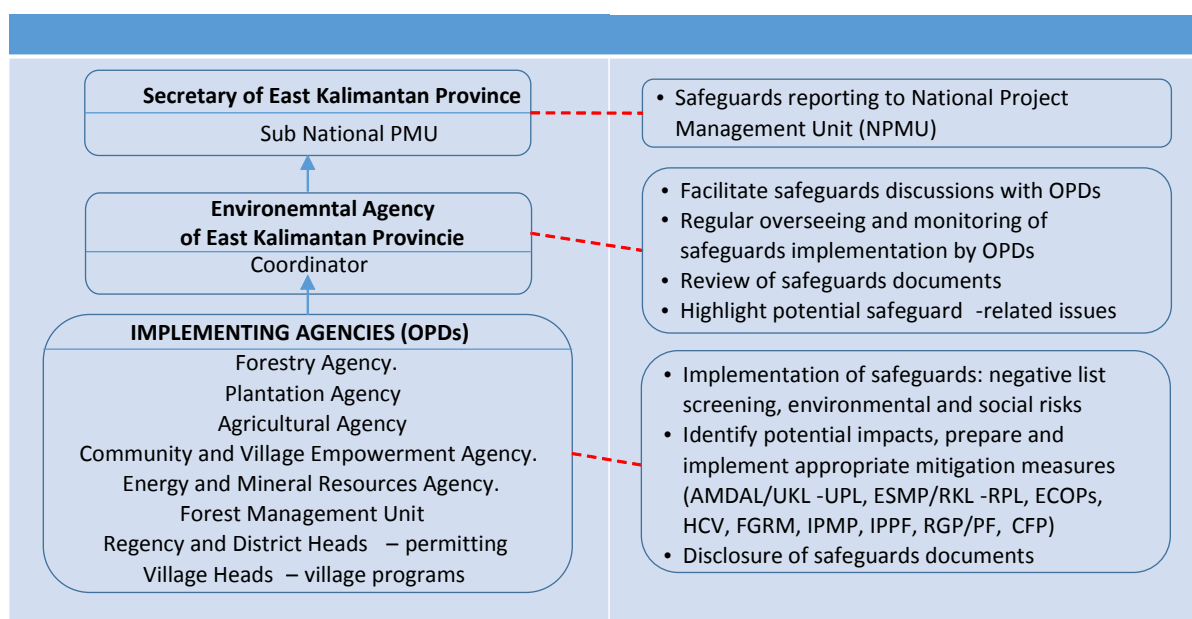


Figure 5-2 Institutional chart for implementing the safeguards tools of the ESMF.



5.1.1 Negative List Screening

ERP subcomponents' key activities will be screened against a negative list (see Appendix 1) by the implementing agencies (*Organisasi Perangkat Daerah* or OPDs) at the national and provincial levels. Key activities that trigger one or more of the negative lists will not be conducted.

5.1.2 Screening of Environmental and Social Risks

ERP subcomponents' key activities that passes the negative list screening will then be further screened for potential environmental and social risks by the implementing agency (OPDs) at the provincial level. Activities will be screened and assessed on the basis of their potential risks and impacts. Such screening will define the required safeguards management and recommendations to address the identified risks and impacts (preventive measures, capacity building, technical assistance and oversight to strengthen risk management). Specifically, the screening will identify the safeguards instruments that are required to be applied for the activity, as follows:

- Relevant environmental codes of practices to be applied for the activity (refer Appendix 3);
- Requirement for pest management (refer Appendix 4);
- Requirement for HCV assessment and management to identify potential impacts on communities living within HCV areas or relying on HCV areas for livelihoods, including Adat communities and other communities who meet the criteria of Indigenous Peoples as per-OP 4.10 (refer Appendix 5);
- Requirement for environmental permits as relevant in conjunction with Gol's regulations (appendix 6)
- Requirement for implementing FGRM as applicable to all ER activities (refer Appendix 7)
- Requirement for developing IPPs (Appendix 8);

- Requirement for developing RAP and/or Plan of Action/PoA in the event of resettlement and/or access restriction risks (Appendix 9)
- Requirement for application of chance-finds procedures for PCRs (Appendix 10)

Stakeholder consultations and community engagement will precede any activities under the ER Program. In the event Adat communities and/or other community groups who meet the criteria of OP 4.10 will be affected, Free, Prior and Informed Consent (FPIC) will need to be obtained prior to any activity with potential impacts. These consultations and engagement will be carried over during ERP implementation.

5.1.3 Preparation of Environmental and Social Management Plans and Permit

Following the screening and identification of required safeguard tools, the implementing agencies (OPDs) at the provincial and/or district levels will prepare the ESMP and permit. The implementing agency may obtain assistance from third party consultants in preparing the required plans and/or permits to meet the safeguard requirements.

Verification on the quality of the environmental and social plans and permits will be made by the appointed safeguards staff at the provincial level with oversight from DGCC, District/Provincial Environmental Agencies and/or Provincial Sekda.

5.1.4 Implementation of Safeguards and Verification

The safeguards will be implemented for the ERP activities by the implementing agencies (OPDs) following the endorsement of the environmental and social plans and permits as applicable in conjunction with GoI environmental regulations. Under such circumstances, key activities shall only commence once applicable environmental permit(s) have been granted by the authorities. When required, Environmental and Social Management Plans (ESMPs) as well as other relevant risk mitigation instruments such as ECOPs, IPP, RAP, Plan of Action etc. will have to be completed and reviewed by the relevant provincial safeguards team. Activities with potential adverse environmental and social impacts along with their management instruments/plans will need to be endorsed by the Executing Agency (DGCC and/or Provincial Sekda).

Since many of the underlying activities under the ERP will build on the Provincial and District Governments' regular activities or form part of activities being performed by development partners, both NGOs/CSOs and the private sector, participating agencies/organizations will be required to disclose information pertaining to their environmental and social management. On the basis of safeguards verification and assessments by the provincial safeguards team, remedial measures may be required to address gaps against the World Bank's safeguards policy requirements for the Program.

5.1.5 Monitoring and Reporting

The Provincial Environmental Service (DLH) with technical support from the provincial safeguards team and respective District Environmental Service (DLH Kabupaten) will be responsible to monitor and report the overall implementation of the ESMF amongst the implementing agencies (OPDs) and development partners to the DGCC and Provincial Secretary (SEKDA). DGCC will be responsible to liaise with and furnish the World Bank with relevant information, including periodic reporting of

safeguards implementation, including FGRM records. Further details on monitoring and reporting arrangements can be found in Section 5.6.

5.2 SAFEGUARDS APPLICATION FOR BENEFIT SHARING PLAN (BSP)

The use of BSP will be subject to the applicable safeguard requirements under the program. Any projects financed through the BSP would undergo screening and application of mitigation measures considered by the safeguard instruments. Such activities are mostly in the form of small and medium-scale Community Driven Development (CDD) type activities. This will be carried out by the Provincial and District Environmental Services, with oversight from MoEF. A negative list of activities will also be integrated into the BSP design and included in the safeguard management frameworks. Consultations will be required prior to BSP implementation and in the case of Indigenous Peoples and/or Masyarakat Adat, such consultations will follow a process of free-prior informed consultations leading to consent (FPIC). Mechanisms for such consultations are included in the IPPF.

Legal covenants will be incorporated into the contracts signed between the BLU and recipients based on approved proposals. Monitoring and evaluation of safeguards performance will be incorporated into the project design. Grievance redress for the BSP implementation has been considered in the FGRM prepared under the EK-JERP. Oversight for the program, including safeguards supervision, monitoring, and reporting will be responsibility of the Provincial and District Environmental Services with technical support from the national and sub-national level government agencies participating in the Program.

5.3 ESMF IMPLEMENTATION FOR OTHER INITIATIVES/ PROJECTS

The World Bank's safeguards policies apply to the entire ERP irrespective of financing source (that is, all activities included in the ERPD follow WB policies). Since the ESMF and other safeguard frameworks provide clear guidance on how to comply with the safeguards of the program, the future projects that are financed by bilateral donors and are located within the program area and contributing to the program objectives need to adopt and follow the safeguards of the program. This can be done by signing a memorandum of understanding (MOU) between MOEF/DGCC as the Program Entity and the project owner before approval of the bilateral donor's project.

The MOU will cover background of the ERP and the project, comment objective, commitment to compliance with the safeguards of the program, implementation arrangement, and monitoring, evaluation, and reporting. Alternatively, if bilateral donors' safeguards are considered for use under the ERP, MOEF/DGCC will conduct a due diligence to assess if the safeguards of the respective donor at the program level are consistent with the Bank's safeguards policies and requirements of the ESMF for the ERP before the project effectiveness.

For the on-going bilateral donors' projects, in addition to the due diligence above, MOEF/DGCC will also conduct a due diligence to assess if the donor's safeguards are properly applied. If the due diligence concludes that the bilateral donors' safeguards are consistent with the Bank Safeguards policies and that they apply their safeguards policies properly in conjunction with the ESMF, ER benefits from these interventions can be included in the BSP.

For other projects financed by the government budget and located within the ERP area and contributing to the achievement of the ERP objectives, they need to adopt and implement safeguards of the program as stipulated in this ESMF.

For the similar projects that are financed by the Bank, they need to follow their own safeguards requirements which are relevant to the ERP.

5.4 INSTITUTIONAL ARRANGEMENTS

The following section outlines the proposed institutional arrangements for ESMF implementation at the Program level (overall ERP implementation), activity level (site-specific implementation) and clarification on ESMF implementation for other initiatives or projects funded by other financiers (non-government agencies).

5.4.1 Institutional Arrangements at the Program Level

At the provincial level, the responsible party for ERP implementation is the Provincial Secretary (Sekda Provinsi Kaltim), with the Provincial Environmental Agency (Dinas Lingkungan Hidup) acting as coordinator or undertaking day-to-day management of the ER Program. During implementation of the ERP the Sekda will be advised by the Provincial Climate Change Council (Dewan Daerah Perubahan Iklim-DDPI).

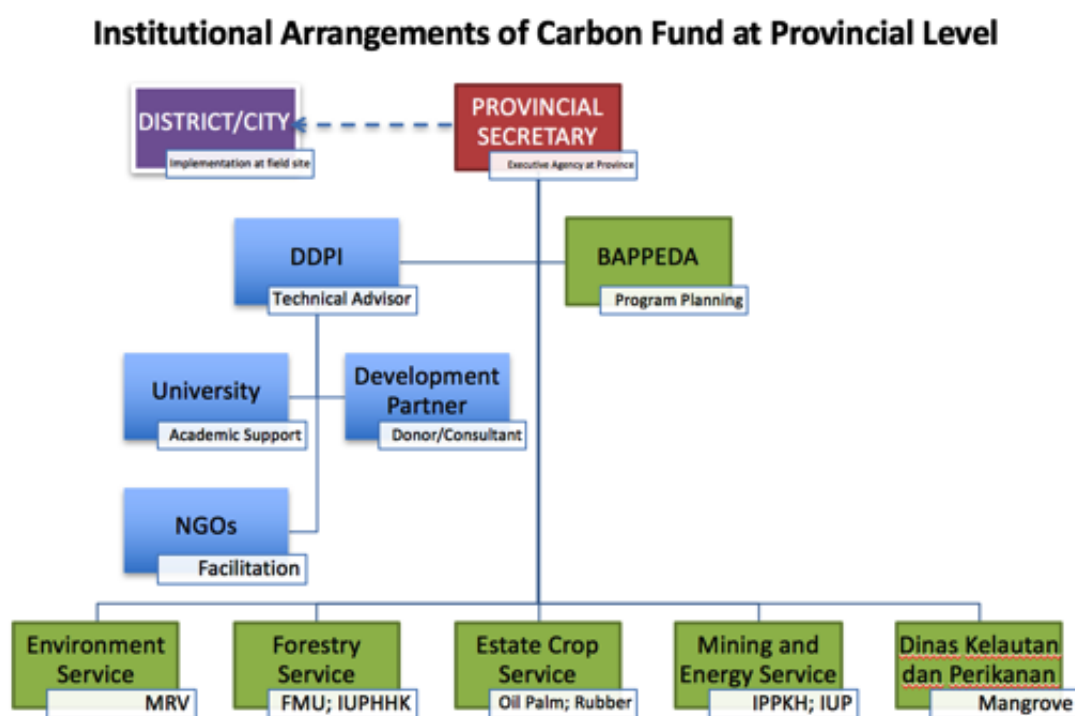
The Regional Council on Climate Change (DDPI) in East Kalimantan Province is a key partner in the implementation of the ER Program. DDPI is a multi-stakeholder organization that has coordinated the planning and implementation of low-emission development in East Kalimantan Province. It has significant experience (as well as operational infrastructure) in the management of donor development funding. A list of institutions and their respective roles are provided in Table 5-1, while the institutional arrangement is shown in Figure 5-3.

Table 5-1 The Sub-National Agencies and Organizations involved in the Implementation of the East Kalimantan Emission Reduction Program (ERP).

Agency	Status	Role
Provincial Secretary (SEKDA)	Executing Agency at Province Level	Responsible for Implementation and achievement of ER Program in the Province A member of the Steering Committee Overseeing ESMF and safeguards application and reporting by implementing agencies
The Regional Council on Climate Change (DDPI)	Advisory	Providing advice and inputs to local government in relation to ER Program A Member of Steering Committee
East Kalimantan Environment Agency	Implementing agency	Local responsibility for FREL and MMR ERP implementation Overseeing ESMF and safeguards application and reporting by implementing agencies

Agency	Status	Role
Other Provincial Government Services (OPD)	Implementing Agencies	ERP implementation Leading consultation processes within their respective jurisdictions Applying ESMF and safeguards instruments
Provincial Planning Board (BAPPEDA) East Kalimantan Province	Coordinative implementation at provincial level	Coordinate all activities of OPD in relation to the ERP
Development Partners (Prov. & Kab/Kota)	Partner	Provide supporting funds and technical advice to DDPI or District/City Government
University/NGOs (Prov. & Kab/Kota)	Partner	Provide scientific supports and facilitation to DDPI and District/City Government A Member of the Steering Committee (observer)
District/City Secretary	Executing Agency at District/City Level and Field Site	Responsible for Implementation and achievement of ERP in the District and Field Site
BAPPEDA District/City	Coordinative implementation at district/city level and field site	Coordinate all activities done by OPD in relation to the ERP at the District/City level
OPD District/City	Implementing Agencies	Implementing the ERP in the District/City and Field Site Applying ESMF and safeguards instruments
Village Government	Implementing Agencies – Field Activities	Implementing ERP in the District/City and Field Site

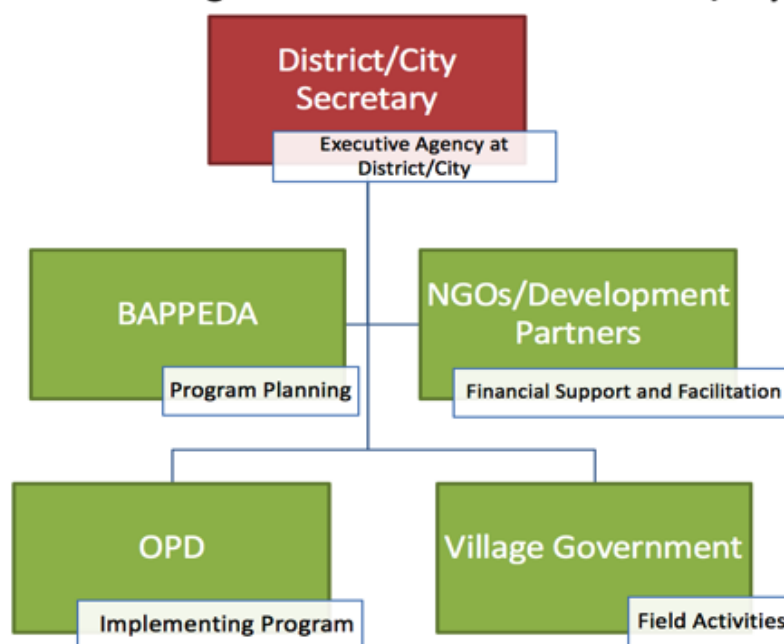
Figure 5-3 Institutional arrangements of ERP at the Provincial Level.



At the district/city level, the ERP will be carried out by the District Environmental Agency (Dinas Lingkungan Hidup). Each respective district/city government will be responsible for the implementing of the ER Program in its region. Detailed institutional arrangements for the ERP at the district/city level can be seen in Figure 6.3. At the village level, the village government, including the local community, is responsible for emission reductions in their village region.

Figure 5-4 Institutional arrangements of ERP at the District/City Level.

Institutional Arrangements of Carbon Fund at District/City Level



5.4.2 Institutional Arrangements at the Activity Level

Institutional arrangements for ESMF implementation comprise of a three-tier system, i.e. district/city, provincial, and national levels. The ESMF will be implemented by the various agencies at each of these levels. The main implementing agencies will be the PMU at the national level and the Program Implementing Units or Program Implementing Agencies (PIU/PIA) which will be the provincial taskforce with extension units at the district levels. The key elements and responsibilities of project implementation, stages and actions pertaining to application of safeguards framework are outlined in Table 8. The commitment of Bappeda (Development Planning Agency) of East Kalimantan to incorporate the ERP and allocation of budget in the provincial planning process is a good example of an institutional arrangement. Additionally, budget for Resettlement Planning Framework (RPF) and Process Framework (PF) needs to be considered in the overall allocation for Safeguard implementation. Should either RPF or PF be not required, this budget allocation needs to be revised through revision of state budget, before October each year. Revisions may include: cut-off from the total budget, or re-allocation to other safeguard components.

Table 5-2 Safeguards framework and responsible institutions.

Components	Mitigation Plan	Responsible Institutions
1. Forest and land governance	<p>Strengthening the existing FGRM to promote its accessibility, reliability and transparency. This includes appointing a contact person/team to handle grievances at an agency level;</p> <p>Capacity building for government agencies and private sector on ESMF, ECOP, including on aspects around community engagement and sustainable NRM;</p> <p>Capacity building on community participatory mapping, development of conflict database/inventory and analysis of social issues;</p> <p>Addressing access restriction risks through alternative livelihoods/employment/skills training;</p> <p>Regular monitoring of the Social Forestry program to ensure capacity building and technical support to community groups and mitigate unintended environmental impacts;</p> <p>Capacity building to engage with Adat communities and Indigenous Peoples as well as other vulnerable groups dependent on forest resources. A participatory Indigenous Peoples Plan (IPP) may be developed to establish a strategy for such engagement</p>	<p>BPSKL, Provincial forestry agency, Social Forestry Working Group, Social Agency and other relevant agencies</p> <p>Provincial Environmental Agency, Forestry Agency</p> <p>Implementing partners DDPI, and other partners, including NGOs and Donor agencies.</p> <p>Potential involvement of Communication and Information Agency as a hub for FGRM mechanism</p> <p>Customary councils of relevant <i>masyarakat hukum adat</i></p>
2. Improving Forest Supervision and Administration	<p>Capacity building for FMUs and relevant government institution on sustainable NRM and ESMF in particular;</p> <p>Effective scheduling for forest patrol as well as planning of forest use and resource management as encapsulated in the RPHJP (long-term development plans)</p> <p>Proper identification of capacity building strategy, including pooling of credible and qualified trainers/champions and/or training institutions to deliver the required capacity building activities and mentoring</p>	<p>DGCC as the Project Executing Agency, and Provincial Forestry Agency as Implementing Agency</p> <p>Other entities: FOERDIA, DDPI, NGOs</p>
3. Reducing Deforestation Forest Degradation Within Licensed Areas	<p>Community training/capacity development for small holders and private sector actors as well as government institutions on aspects related to good agroforestry practices, NTFP, zero-burning farming, etc.</p> <p>Community capacity building on forest and land fire management /community-based forest and fire management</p>	<p>DGCC as the Executing Agency, and Provincial Forestry Agency as implementing agency responsible for monitoring and evaluation</p>

Components	Mitigation Plan	Responsible Institutions
	<p>Incentive development to promote participation from the private sectors in land and forest fire management</p> <p>Capacity building on participatory HCV mapping and strengthening engagement with Adat communities and Indigenous Peoples, including those dependent on forest resources for sustainable HCV management</p> <p>Development of a Biodiversity Management Framework (BMF) or inclusion of biodiversity management under HCV or non-carbon benefit</p> <hr/> <p>Enforcement and strengthening the existing safeguard including ESMF for relevant stakeholders especially private sectors as well as government institutions)</p>	<p>Environmental Agency (East Kalimantan Province) for training and regulation enforcement. Implementation of ESMF, FGRM, IPPF and BMF</p> <p>Involvement of conservation NGOs for establishing BMF and facilitate its implementation</p> <hr/> <p>DGCC as the Executing Agency, and Provincial Forestry Agency as implementing agency responsible for monitoring and evaluation</p> <p>Other stakeholders FOERDIA, NGOs, private sectors (concession holders and associations)</p> <p>Environmental Agency (East Kalimantan Province) for training and regulation enforcement. Implementation of ESMF, FGRM, IPPF and BMF Involvement of conservation NGOs for establishing BMF and facilitate its implementation</p>
<p>4. Sustainable Alternatives for Communities</p>	<p>Strengthening FGRM, particularly to promote its accessibility and accountability</p> <p>Participatory village planning and community training on sustainable livelihoods options, including access to financing and inputs, good agricultural practices, and market</p> <p>Mainstreaming safeguards good practices in NRM, such as use of organic pesticides, revegetation, crop intensification, etc.</p> <p>Enhancing access to information and participation in social forestry licensing processes</p> <p>Capacity building to engage with Adat communities and Indigenous Peoples as well as other vulnerable groups dependent on forest resources. A participatory Indigenous Peoples Plan (IPP) may be developed to establish a strategy for such engagement</p>	<p>DGCC as the Executing Agency, and Provincial Forestry Agency as implementing agency responsible for monitoring and evaluation</p> <p>Environmental Agency (East Kalimantan Province) for training and regulation enforcement. Implementation of ESMF, FGRM, IPPF and BMF</p>

5.5 SAFEGUARDS STAFFING

Recognizing the vast geographic scope and potential number of participating communities, DGCC FCPF, and DDPI will assign a team of specialists assigned at the provincial level implementing agencies with expertise in the areas of Environmental and Social safeguards, gender, CBNRM and GRM to ensure effective oversight of ERP safeguards. The team will perform the following tasks:

- Help evaluate action plans in accordance with ESMF;
- Help supervise and monitor the ESMF document preparation;
- Assist in training programs on preparation of ESMF documents and efforts to mitigate the negative environmental and social impacts at the preparation stage and during implementation of projects;
- Help facilitate the planning that includes relevant safeguards provisions under the ERP;
- Help in implementing ESMF at the site level;
- Assist in preparing the ESMF implementation report; and
- Provision of technical support to the implementing agency in ensuring awareness of good environmental and social practices and management of grievances.

A TOR for the Environmental and Social Team can be found in **Appendix 12**.

5.6 CAPACITY BUILDING PLAN AND INDICATIVE FINANCIAL REQUIREMENTS

The ERP recognizes that capacity for implementing safeguard measures required in the ESMF may greatly vary across project proponents. The institutional capacities of project proponents have been assessed and provided in the Appendix A3 of SESA document. This institutional capacity was aimed to assess the baseline capacities across participating agencies and development partners for the management of environmental and social aspects of the Program. This assessment informed the capacity building plan as outlined in this ESMF.

A brief summary of the Institutional Capacity Assessment is provided below.

- National level government agencies require technical support and capacity strengthening for coordination between Indonesian government and FCPF, as well as between national and sub-national levels, as well as political and management supports for one-map policy, sustainable forest management, ensuring timber legality, sustainable palm oil, sustainable mining, and integration of environmental and social safeguards into the development strategies.
- Provincial level also requires capacity for coordinating ERP implementation (including safeguards mechanism) with technical support from national government, as well as proper implementation of benefit sharing mechanism (e.g., through BLU). Technical capacity is needed to ensure optimal operation of implementing agencies.
- District Level requires capacity relevant with recognition of indigenous peoples (District PERDA), as well as application of sustainable plantation, mining and forestry practices. Capacity at district level will also include recommendations for HGU for estate crops.

- Village Level requires capacity relevant with implementing ERP (mainly in APL), as well as taking part in administering FGRM.
- Private sectors need to increase the capacity for engaging with local communities and local government, as well as for mitigating risks. Private sectors need the capacity for sustainable forest management practices such as PHPL (forestry), RIL (forestry) and HCV, as well dispute resolution and the implementation of relevant safeguard mechanisms.

Acknowledging such constraints, the DGCC together with the national project and sub-national project management units will be responsible to ensure that capacity building components are integral to the project design, and gradually builds on previous efforts to leverage understanding and awareness of safeguards amongst key actors. In addition to Component 2 of the ERP, there are several steps envisioned under the ERP implementation where safeguard capacity building will be focused, including:

- Community Participation Approaches, particularly FPIC;
- Identification of potential environmental and social issues, as well as risk mitigation;
- Overview of policy and regulatory frameworks related to ERP and social and environmental management in Indonesia, procedures for obtaining environmental permits;
- Implementation of safeguard components, in particular Indigenous People's Planning Framework (IPPF), Restriction Planning Framework (RPF), and Process Framework (PF); and
- Design and development of ESMPs, integrating provisions of land and resource management, pest management, PCRs, community participation, and free, prior and informed consultations.

Capacity building will also provide implementation support where safeguards and technical specialists are assigned to assist throughout ERP implementation. Workshops for the ERP are aimed to disseminate information and reach out to the key players at the activity level. The workshops will be divided into two types:

- **Public Workshops.** Public workshops will be organized for a wider audience of stakeholders consisting of participants from the national and sub-national levels, media, researchers, public forums, NGOs etc. Basic information about the ERP, the framework for environmental and social management as referenced in the ESMF will be part of the workshop materials.
- **Thematic Workshops.** Thematic workshops will be implemented based on a need assessment at the project activity level. Thematic workshops for each component of the ERP ranges from the sub-national to the village levels. Example of such theme may be based on potential and/or existing cases at the project activity level, which may include the approach to the resolution of access restrictions, tenure conflicts, and how the safeguards tool in the ESMF can be referenced to manage such conflicts. Thematic workshops will be conducted to ensure that the project implementation will be in accordance with the ESMF.

The capacity building program for the ERP including the objectives, indicator of success, schedule, speaker and targeted audiences are provided in the following tables.

Table 5-3 Indicative Capacity building program plan for ERP Safeguards.

No.	Training/Capacity Building Program	Objective	Indicator of Success	Program Target	Schedule	Source/Speaker
1.	<p>Basic Training on Environmental and Social Awareness</p> <p>The general material will be related to the potential environmental and social risks of the ERP, that is essentially discussing the Assessment of Environmental and Social Risks and Mitigation Measures (Appendix 10 of the ESMF)</p>	<p>Disseminate information on the environmental and social risks of the ERP.</p> <p>Obtain buy in to make the ESMF a reference for the management of environmental and social aspects of the ERP.</p>	<p>All stakeholders, specifically the implementing agencies/OPDs understand the basic environmental concepts, existing issues, and applicable regulations.</p>	<p>Program management units at national and sub-national levels, Economy Bureau</p> <p>Implementing agencies (OPDs)</p> <p>Field facilitators</p>	<p>In the beginning of the program and annual refresher trainings for all ERP stakeholders.</p>	<p>Safeguards specialists at national or sub-national level</p>
2.	<p>Technical / Thematic training: Training material will be specific to the theme at the project activity level, which include the safeguards tools, contained in the ESMF including negative list screening, ECOPS, HCV, IPPF, FGRM, RPF/PF, and also hands on guidelines on how to utilize existing SIS-REDD system for safeguards reporting of the ERP</p>	<p>Implementing agencies fully understand to implement the safeguards tools in the ERP at the project activity level.</p>	<p>Documented plans and or minutes of meeting on implementing the safeguard tools at the project activity level.</p>	<p>Economy Bureau</p> <p>Implementing agencies (OPDs)</p> <p>Field facilitators</p>	<p>Early stage of the program and every quarterly during ERP implementation.</p>	<p>Safeguards specialists at national or sub-national level</p> <p>SIS-REDD administrator</p>
3.	<p>Public Workshops: Training material will broadly include basic information on the ERP components, the benefits and how the ESMF can mitigate the potential environmental and social risks.</p>	<p>Provide outreach on ERP components to a wider audience of stakeholders and obtain support in implementing the ESMF</p>	<p>Improved understanding and support from the public on ERP activities leading to overall success of the ERP.</p>	<p>Economy Bureau</p> <p>Implementing agencies (OPDs), field facilitators, targeted villages and communities, media, public forums, NGOs</p>	<p>Semi - annually</p>	<p>DGCC, Program management units at national and sub-national levels, safeguards specialists</p>
4.	<p>Safeguards Coaching/Mentoring: technical support to ERP implementing agencies on the application of</p>	<p>Provide hands-on skills enhancement and awareness of environmental and</p>	<p>Improved understanding and awareness amongst implementing agencies and enhanced in-house</p>	<p>Program management units at national and sub-national</p>	<p>During ERP implementation</p>	<p>Safeguards specialists at</p>

No.	Training/Capacity Building Program	Objective	Indicator of Success	Program Target	Schedule	Source/Speaker
	environmental and social safeguards within project activities.	social good practices, develop cadreship of environmental and social champions and/or local experts within implementing agencies	skills for the management of environmental and social aspects	levels, Economy Bureau Implementing agencies (OPDs) Field facilitators		national or sub-national level
4.	Thematic Workshops: discussions on managing resolution of potential and/or existing ERP cases at the project activity level such as access restrictions, tenure conflicts to facilitate sharing of information on implementing the safeguards tools.	Provide a means of sharing of information and discussion in implementing the safeguards tools in the ESMF to manage the environmental and social risks of the ERP.	Implementing agencies (OPDs) and field facilitators at the project activity level can share information, raise constraints in project implementation and identify possible solutions.	Economy Bureau, implementing agencies (OPDs), SIS REDD administrator, field facilitators, safeguards specialists	Quarterly	Safeguards specialists, implementing agencies (OPDs), field facilitators

Table 5-4 Target group and participant for training and workshop for ERP Safeguards

No.	Target Group	Basic Training	Technical/Thematic Training	Public Workshop	Thematic Workshop
1.	Project team and staff (PMU)	√	√	√	√
2.	Consultant and technical advisors	√	√	√	√
3.	Economy bureau	√	√	√	√
4.	Implementing agencies (OPDs)	√	√	√	√
5.	District and village governments	√	√	√	√
6.	Targeted village communities and forums	√	√	√	√
7.	Field facilitators	√	√	√	√
8.	Media			√	
9.	NGOs			√	
10.	Academic community/researchers			√	
11.	Environmental office/agencies	√		√	
12.	National Land Agency (BPN)	√		√	

The indicative financial requirements per year for conducting the above capacity building programs including outreach to the various stakeholders and communities, and also safeguards staffing, monitoring and supervision activities and FGRM strengthening is provided in the following table. Those activities will be funded by APBD and development partners.

Table 5-5 Indicative financial requirements for capacity building program

No.	Training/Capacity Building Program	Number of programs	Estimated cost per program (USD)	Total Cost (USD)
1.	Basic Training	2	30,000	60,000
2.	Technical / Thematic training:	4	30,000	120,000
3.	Public Workshops	2	40,000	80,000
4.	Thematic Workshops	4	30,000	120,000
5.	Safeguards staffing	4 personnel x 5 years	30,000	150,000
6.	Monitoring and supervision activities by sub-national PMU	2 times x 5 years	30,000	30,000
7.	FGRM strengthening and outreach	4	30,000	120,000
8.	FGRM operationalization	5 years	5,150	25,750
			TOTAL	975,750

5.7 SAFEGUARDS MONITORING AND REPORTING

5.7.1 Internal Review and Clearances

At the sub-national level, the implementing agencies such as OPDs, private sectors and village governments will be required to prepare and implement relevant environmental and social safeguard measures with technical support from the Environmental and Social Specialists. These measures will be then reviewed, approved and monitored by the Provincial and District Environmental Services with technical support from SEKDA and DGCC of MoEF. Mitigation plans, particularly for potentially high-risk activities, such as tenure conflict resolution must be endorsed by DGCC.

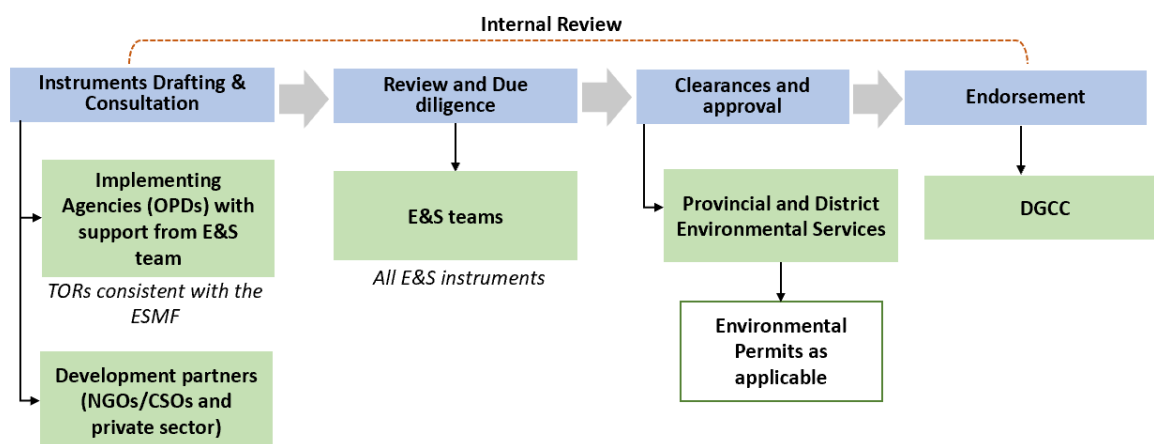


Figure 5-5 Internal Review and Clearance

5.7.2 Safeguards Monitoring and Supervision

Supervision, monitoring, evaluation and performance review of ESMF will be conducted at the site level and throughout the ERP.

Although the entire province is under the ER Program, most of the reductions in carbon emissions are expected from a targeted number of activities and areas. The following table presents the program boundaries which form the basis for safeguards monitoring and supervision.

Table 5-6: ER Program Boundaries

ER PD Component	Activity	Targets/Boundaries
1. Forest and Land Governance	1.1 Strengthening the licensing regime	Revoking 809 out of 1404 mining permits 341 social forestry licenses delivered by 2024 Review of 373 licenses for Oil Palm Estates
	1.2 Dispute Settlement	No target
	1.3 Support for the recognition of adat land	Participatory mapping for 200 IP villages
	1.4 Strengthening village spatial planning	Village Development Plans - 150 priority villages
2. Improving Forest Supervision and Administration	2.1 Forest Management Units	20 FMU business plans completed by 2022
	2.2 Province/District supervision of Estate Crops	Restore 640,000 ha of natural forests Restore 50,000 ha of peat land (2030 target) Supervision of 100 Palm Oil Estates (2024) Declaration on sustainable estate crops is signed by seven districts

3. Reducing Deforestation and Forest Degradation within Licensed Areas	3.1 HCV on Palm Oil Estates	100 estate crop license holders
	3.2 Smallholder fire mgmt. and monitoring	180 local farmer groups trained in forest fire suppression
	3.3 HCV/RIL Policies in Forestry Concessions	26 trainings on HCV and RIL 11 logging concessions and 4 KPHs would implement RIL 20 timber plantation companies will identify and manage HCV forests inside their concessions (by 2024)
4. Sustainable Alternatives for Communities	4.1 Sustainable livelihoods	Demonstration plots - 10 villages in 2 districts
	4.2 Conservation partnerships	Training for 18 village communities on alternative livelihoods around 6 conservation areas
	4.3 Social Forestry	341 licenses issued for Social Forestry (2024) 85 villages targeted 50 villages trained 70 business plans prepared

The evaluation and review of the ERP will be focused on the process of planning and implementation of ERP activities and how environmental and social measures as required in this ESMF are being implemented. These include but not limited to:

- Records of Free, Prior, Informed Consultations processes during planning of activities and its implementation. Assessments shall be based on the quality of decisions whether they are genuinely made by Adat communities and Indigenous Peoples and local communities concerned through culturally appropriate and inclusive decision-making mechanisms. Monitoring review will also need to assess implementation of environmental and social measures by respective implementing agencies (further described in the IPPF);
- Quality of community participation as well as the Program's impacts and implications (both positive and negative) on forest management, livelihoods, conflicts, etc.
- Gender mainstreaming practices at the program and activity levels, including gender barriers such as socio-cultural norms, access to information, nature of activities, etc.
- Records of community participation at all ERP stages, including initial FPIC consultations at the village level, and to what extent vulnerable groups have been meaningfully involved;
- Evidence of environmental permits and how environmental and social measures are being implemented for relevant activities;
- Reports of environmental management and monitoring plans (e.g., ESMPs) as well as the implementation of UKL-UPL or SPPL as relevant; and
- Feedback from participating agencies, and affected stakeholders, including *Adat* communities and Indigenous Peoples and local communities and broader stakeholders related to the ERP implementation and its environmental and social aspects.

5.7.3 Safeguards Reporting

The results of monitoring are used as the basis for developing ESMF implementation reports which will include evaluation and corrective actions for improvement. The implementing agency at the central level will routinely consolidate ESMF reports and advise the Bank on the results. Relevant groups of indicators from SES REDD+ Kaltim that are relevant with regular safeguards reporting are:

- Indicators on policies to determine if relevant policies to support safeguards (policy, legal and institutional frameworks) have been developed and implemented;
- Indicators on process to determine if safeguard mechanisms are properly designed and implemented; and
- Indicators on impact to determine if social and environmental risks are properly addressed.

The above indicators are monitored and monitored through a specific schedule. Timeline for reporting the ESMF implementation on Environmental and Social Indicators and summary of issues is provided in Table 5-72.

Table 5-7 E&S aspects to monitor/track during over the ERP implementation

E&S Indicators	Summary of Issues	Data Sources	Timeline for Reporting
Changes in access to land and natural resources	Previous and existing rights or usage of local communities and Indigenous Peoples	<ul style="list-style-type: none"> ▪ Village administration; ▪ Community consultations ▪ FMU; 	Six-monthly
Occurrences of conflicts and disputes in forest areas	<ul style="list-style-type: none"> ▪ Overlapping allocation and concessions for oil palm and forestry plantations ▪ Unclear border of FMUs ▪ Accumulation of unresolved problems, including overlapping claims, conflicts, unsustainable forest use; ▪ Conflicting licenses 	<ul style="list-style-type: none"> ▪ FMU; ▪ Community consultations ▪ FGRM mechanism ▪ SIS-REDD+ database 	Quarterly
Occurrences of conflicts and disputes in non-forest areas (e.g. plantation conflicts, revocation of mining permits)	<ul style="list-style-type: none"> ▪ Tenurial conflicts between communities and palm oil plantations/mining concessions ▪ Accumulation of unresolved problems, including overlapping claims, conflicts, unsustainable resource use, etc. ▪ Disputes over benefit sharing (i.e. in the case of small-holder palm oil plantations) ▪ Conflicting licenses; ▪ Inter-communal conflicts due to competing land access and resources; ▪ Limited capacity on good agricultural practices and intensification may incentivize palm oil expansion; 	<ul style="list-style-type: none"> ▪ Plantation agency; ▪ Community consultations ▪ FGRM mechanism ▪ SIS-REDD+ database 	Quarterly
Occurrences of access restrictions and livelihoods displacement, including those affecting Indigenous Peoples	Forest and plantation concessions may result in access restrictions to land use, livelihood activities and cultural rituals	<ul style="list-style-type: none"> ▪ FGRM mechanism through SIS-REDD+; ▪ Community consultations ▪ Concession holders; 	Quarterly The frequency of monitoring may be adjusted depending on likelihood of emerging risks. This will be

E&S Indicators	Summary of Issues	Data Sources	Timeline for Reporting
		<ul style="list-style-type: none"> ▪ RAPs, or PoAs 	assessed during implementation.
Changes in biodiversity	<ul style="list-style-type: none"> ▪ ERP accounting areas overlap with key biodiversity areas with presence of endangered species ▪ Community- based monitoring is not optimal ▪ Lack of clear conservation guidelines, and awareness of biodiversity conservation 	<ul style="list-style-type: none"> ▪ FMU; ▪ Community consultations ▪ BKSDA 	Annually
Cases of contamination and pollution	<ul style="list-style-type: none"> ▪ Use of pesticides in agriculture and plantation sector ▪ Small-scale civil/construction works and waste management 	<ul style="list-style-type: none"> ▪ Environmental agency (Province) 	Six-monthly
Changes in political actions	<ul style="list-style-type: none"> ▪ Lack of cross-sectoral conflict resolution mechanisms (e.g., plantation, forestry sectors and environmental disturbances) ▪ Lack of agreement/concensus on benefit sharing mechanism 	<ul style="list-style-type: none"> ▪ FGRM mechanism ▪ SIS-REDD+ database ▪ DGCC ▪ FCPF (P3SEKPI) 	Six-monthly
Institutional capacity to manage environment & social potential risk	<ul style="list-style-type: none"> ▪ Capacity constraints to implement & monitor RIL, HCV management amongst FMUs ▪ Limited ability for environmental and social conflicts mediation ▪ Lack of capacity to implement sustainable palm oil plantation, particularly to support implementation of ISPO targeting small holder plantation owners; 	<ul style="list-style-type: none"> ▪ FMU; ▪ Forestry agencies; ▪ Plantation agencies; ▪ Concession holders 	Six-monthly
Number of grievances documented and status of resolution in the FGRM	<ul style="list-style-type: none"> ▪ Lack of cross sectoral conflict resolution mechanisms (e.g., plantation, forestry sectors and environmental disturbances) ▪ Lack of formal designation for FGRM institutions and resources to operationalize the system 	<ul style="list-style-type: none"> ▪ Implementing agencies ▪ FGRM mechanism through SIS-REDD+; ▪ Plantation agencies ▪ Environmental agency ▪ Forestry agency / FMU 	Quarterly
Changes in access to sustainable livelihood options	<ul style="list-style-type: none"> ▪ Limited capacity and resources to support alternative livelihoods options for local people; ▪ Market incentives for palm oil expansion and resource extraction; 	<ul style="list-style-type: none"> ▪ District government (BPMPD), Bappeda; ▪ Provincial agencies 	Six-monthly

E&S Indicators	Summary of Issues	Data Sources	Timeline for Reporting
	<ul style="list-style-type: none"> Limited participation, incentives and access amongst target communities in sustainable NRM activities. 	(plantation, forestry/FMU)	
Incidents related to community health & safety	<ul style="list-style-type: none"> Health and safety aspects in fire control/prevention measures 	<ul style="list-style-type: none"> Health Agency (Province) Environmental Agency 	Quarterly
Changes in patterns for gender and social inclusions	Sub-optimal involvement of women and lack of participation	District agencies: Bappeda, Women Empowerment Agency	Quarterly
Number of cases indicating risks of leakages and reversals	<ul style="list-style-type: none"> Shifting carbon emissions to other areas or provinces Lack of participation in fire control/prevention resulting in increased carbon emission 	<ul style="list-style-type: none"> DGCC DDPI 	Annually

5.7.4 Safeguards Reporting through SIS REDD+

SIS-REDD+ requires REDD+ implementers to independently assess and report on safeguards implementation. The system is intended to promote transparency and accountability from the site level. For this purpose, the MoEF has formulated APPS, a Safeguards Implementation Assessment Tool. The tool was developed on the principles of simplicity, transparency, accountability, completeness, and comparability. APPS provides a checklist of supporting documents required as evidence of REDD+ safeguards implementation. It can be downloaded on the SIS- REDD+ website (<http://ditjenppi.menlhk.go.id/sisredd/>). The followings items constitute the main content of the SIS REDD+, of which details are provided in each of this key content:

SIS-REDD+ aims to gather, process, analyze, and present the necessary information on how safeguards are managed and respected in REDD+ activities, ranging from the project sites to district, provincial and national SIS management units. To ensure efficiency, an institutional structure and distribution of tasks and responsibilities for the information system from the site to national level have been established. Further refinement is currently underway to achieve a well-established Safeguard system. The responsibility to further develop, implement, and manage SIS-REDD+ is currently under the REDD+ Division of MoEF.¹² Two components were created to promote transparency and ease access to safeguards information provided in SIS-REDD+:

- a. A database, to manage data and information on safeguards implementation; and
- b. A website, tracking progress on safeguards implementation

The SIS-REDD+ website provides a public access to REDD+ implementers or users to report their activities by filling in the checklists and uploading necessary documents as required by the APPS. Stakeholders can find a summary of both general REDD+ activities data and specific information on

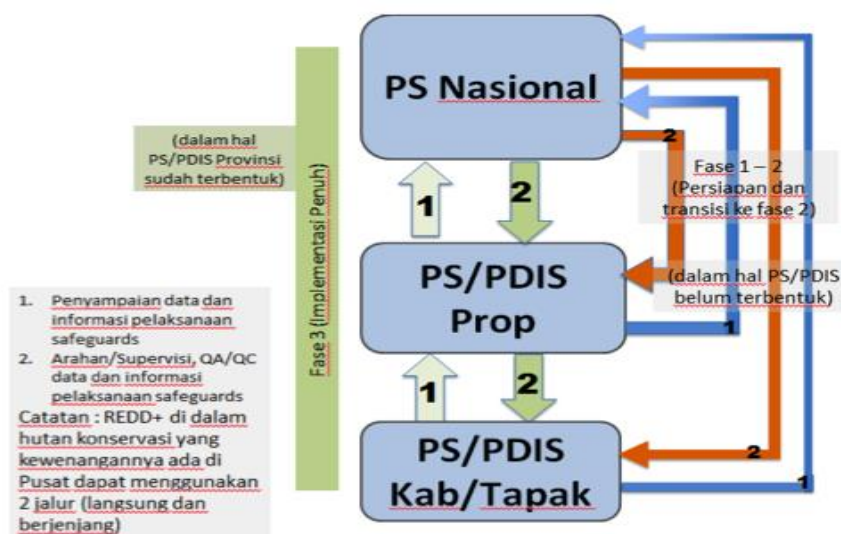
¹² The responsibilities were previously under Pustanling of the former Ministry of Forestry, which changed to the Ministry of Environment and Forestry (MoEF).

REDD+ safeguards. The REDD+ Division at MoEF is also considering several options to link the web-platforms to other forestry instruments with REDD+ relevant safeguards elements.

The SIS-REDD+ website is designed to provide comprehensive and up to date information on safeguards implementation under REDD+, as well as other details of REDD+ (project names, locations, implementers, partners, duration, scope of activities, key achievements as well as challenges and supporting factors). As more data arrives, the website will eventually be able to provide a summary of REDD+ activities in Indonesia in a more precise manner, for both general and detailed information. Further user-friendly and more integrated data and information presentation, such as maps and graphics can be generated.

The National SIS Management Agency (PSIS-Nas) placed under the MoEF's REDD+ Division is assigned as the administrator and manager and is mandated to maintain and further refine the system as well as providing guidance to PSIS at sub-national levels. Including in PSIS-Nas roles and generating analytical information (such as maps and graphics) on safeguards implementation. PSIS Nas, serving as the national information focal point, is responsible in preparing information for the MoEF, to be integrated into the National Communication and/or Biennial Update Report for submission to the UNFCCC.

PSIS Province (Provincial Environmental Service) and PSIS District (District Environmental Service) act as clearing houses that collect, verify, consolidate, process, manage data from PDIS Tapak, the smallest institutional unit, and provide consolidated periodical reports to national level that will be made public. In this regard, PSIS Sub-Nas is tasked to provide guidance and facilitation for the development of information systems and databases at provincial and district levels. Included in the guidance are standards, operational procedures, reporting mechanisms and other technical guidelines for SIS implementation. The administrator of data and information at PDIS Tapak is the REDD+ activity implementer, who will be responsible for conducting a periodical self-assessment on project implementation. Upon completion of the self-assessment, the PDIS Tapak data and information administrator will fill in the aforementioned checklist prepared by the REDD+ Division, under the DG for Climate Change of MoEF, and submit it to the SIS management at district or province (District/Provincial PSIS, also called sub-national SIS) together with the required supporting documents. PDIS Tapak, or 'users', is also in charge of preparing user-friendly information on safeguards implementation to the public about their respective site, establishment of a grievance mechanism, as well as opening communication channels with stakeholders and disseminating information.



5.8 SAFEGUARDS COMPLIANCE DOCUMENTATION

On the basis of program-level monitoring results and report submission by each implementing agency, DGCC with support from the Provincial Environmental Service and the Provincial Safeguards team will consolidate relevant information in the form of progress reports pertaining to the overall safeguards implementation, including additional environmental and social measures and pending action items. These reports should also include a summary of grievances and status of their resolution and required evidence and documentation, such as copies of mitigation plans, stakeholder consultation documentation, and grievance records. DGCC will furnish the World Bank with overall safeguards implementation progress reports every six-month following the ERPA signing.

The following Table 5-8 outlines key documentation requirements to assess safeguards compliance across interventions under the ERP. Such documentation may be consolidated to cover multiple activities by different implementing agencies. The World Bank will request such documentation as the basis to assess the ERP's safeguards system capacity to manage E&S risks consistent with the ESMF and its associated frameworks. Spot checks by the World Bank may be requested as part of the overall supervision (further described in Section 5.7).

Table 5-8: Safeguards Compliance Documentation

ERPD Component	Activity	Type of Activity	Risk/Potential Impact	WB Policy	Mitigation Measures and Relevant SG Instrument	Compliance Documentation
1. Forest and Land Governance	1.1 Strengthening the licensing regime	TA/Enforcement	Conflicts and Disputes	4.01	ESMF and FGRM	<ul style="list-style-type: none"> • Reports on ESMF implementation, including impact management resulting from access restrictions as per-PF • FRGM records • E&S monitoring and supervision reports • Consultation documentation
			Loss of livelihoods (mine closures, etc.)	4.01/4.12	Social impacts to be covered in ESMF or access restrictions covered under PF	
			Displacement of emissions	4.01/4.04 4.36	Policy and enforcement related to licensing Monitoring of ER Program	
	1.2 Dispute Settlement	TA/Land Conflict Resolution	Conflicts and Disputes	4.01/4.12	ESMF/RPF and PF, FGRM	<ul style="list-style-type: none"> • Reports on IPPF and PF implementation • FGRM records • E&S monitoring and supervision reports
1.3 Support for the recognition of <i>adat</i> (IPs) land	TA/Land Title Resolution	Conflicts and Disputes Access restrictions	4.10/4.12	ESMF/RPF and PF, IPPF and FGRM	As above	
1.4 Strengthening village spatial planning	TA/Planning	Conflicts and Disputes	4.01	ESMF, IPPF, and FGRM	<ul style="list-style-type: none"> • E&S monitoring, TA and supervision reports 	

ERPD Component	Activity	Type of Activity	Risk/Potential Impact	WB Policy	Mitigation Measures and Relevant SG Instrument	Compliance Documentation
			Poor planning may result in forest degradation or overuse of resources	4.36 4.04/4.11	ESMF including TOR/approach for TA	<ul style="list-style-type: none"> • FGRM records • Documentation on E&S considerations in village planning processes • Evidence of community participatory processes, with gender analysis
2. Improving Forest Supervision and Administration	2.1 Forest Management Units	TA/Planning	Overall operations may not be compliant or have social conflict	4.36	ESMF including TOR/approach for TA EK-JERP to build on the FIP 2 ESMF	<ul style="list-style-type: none"> • E&S monitoring and supervision reports, incl. RIL and HCV implementation • FGRM records • Documentation of E&S considerations in FMUs' RPHJP and business plans • Evidence of community consultations
	2.2 Province/District supervision of Estate Crops	TA/Enforcement & Planning	Overall operations may not be compliant or have social conflict	4.36	ESMF including TOR/approach for TA	<ul style="list-style-type: none"> • FGRM records • Evidence of community consultations

ERPD Component	Activity	Type of Activity	Risk/Potential Impact	WB Policy	Mitigation Measures and Relevant SG Instrument	Compliance Documentation
3. Reducing Deforestation and Forest Degradation within Licensed Areas	3.1 HCV on Palm Oil Estates	TA/Planning	Overall operations may not be certified or have social conflict	4.36	ESMF including TOR/approach for TA	<ul style="list-style-type: none"> • Reports on ESMF implementation, including IPPF and RPF/PF as applicable; • E&S monitoring, TA and supervision reports; • FGRM records; • Evidence of community consultations; • Documentation of E&S considerations in HCV planning
			Poor planning may result in forest degradation or overuse of resources	4.36/4.04	ESMF including TOR/approach for TA	
	3.2 Smallholder fire mgmt. and monitoring	TA - Training	Occupational, Health and Safety (OHS) issues with fire prevention and suppression	4.01	ESMF with OHS provisions, capacity-building and budgets	<ul style="list-style-type: none"> • Documentation of OHS training under fire suppression activities • FGRM records • E&S monitoring, TA and supervision reports;

ERPD Component	Activity	Type of Activity	Risk/Potential Impact	WB Policy	Mitigation Measures and Relevant SG Instrument	Compliance Documentation
	3.3 HCV/RIL Policies in Forestry Concessions	TA/Planning	Overall operations may not be compliant or have social conflict	4.01 4.36/4.04	Advice compliant with OP 4.36 – ESMF including TOR/approach for TA	<ul style="list-style-type: none"> Evidence of community consultations; Reports on ESMF implementation, including IPPF and RPF/PF to address access restrictions as applicable;
			Poor planning may result in forest degradation or overuse of resources	4.36/4.04	Advice compliant with OP 4.36 – ESMF including TOR/approach for TA	<ul style="list-style-type: none"> Evidence of community consultations; FGRM records
4. Sustainable Alternatives for Communities	4.1 Sustainable livelihoods	TA/Investment/CDD	Small-scale impacts related to agriculture, ecotourism, NTFP, and forestry sub-projects	4.01/4.36 4.04/4.09 4.10/4.11 4.12	ESMF procedures for small-scale sub-projects, IPPF	<ul style="list-style-type: none"> E&S screening report Documentation of E&S considerations in livelihoods planning; Environmental permits as required under legislation; E&S monitoring, TA and supervision reports; IPPF implementation if activities involve Indigenous Peoples

ERPD Component	Activity	Type of Activity	Risk/Potential Impact	WB Policy	Mitigation Measures and Relevant SG Instrument	Compliance Documentation
						<ul style="list-style-type: none"> Evidence of community consultations; FGRM records
	4.2 Conservation partnerships	TA/Investment	Poor planning may result in forest degradation or overuse of resources	4.36/4.04	ESMF including TOR/approach for TA	<ul style="list-style-type: none"> Reports on ESMF implementation, including IPPF, RPF/PF as applicable; Evidence of community consultations; FGRM records
	4.3 Social Forestry	TA/Forest Mgmt. Planning	Poor planning may result in forest degradation or overuse of resources	4.36/4.04	ESMF including TOR/approach for TA, IPPF	<ul style="list-style-type: none"> E&S management plans as per the community business plans; Environmental permits as required under legislation; E&S monitoring, TA and supervision reports; IPPF implementation if activities involve Indigenous Peoples;

ERPD Component	Activity	Type of Activity	Risk/Potential Impact	WB Policy	Mitigation Measures and Relevant SG Instrument	Compliance Documentation
Benefit Sharing		Investment/Non-monetary/CDD	Small-scale impacts related to agriculture, ecotourism, NTFP, and forestry sub-projects, potential exclusion of Indigenous Peoples who may not be recognized	4.01/4.36 4.04/4.09 4.10/4.11 4.12	ESMF procedures for small-scale sub-projects, IPPF, RPF and PF, BSP	<ul style="list-style-type: none"> • Evidence of community consultations; • FGRM records • E&S screening report • Reports on ESMF, IPPF, RPF/PF as applicable; • E&S management plans (UKL/UPL, SPPL) as applicable; • Environmental permits as applicable; • E&S monitoring, TA and supervision reports; • Evidence of community consultations; • FGRM records

5.9 WORLD BANK OVERSIGHT

During the implementation period of an ERPA Operation, the World Bank has the responsibility for monitoring and ensuring effective implementation and compliance of the Program Entity with agreed management measures as stipulated in the ESMF. The Bank's primary responsibility for oversight would be to assess whether the environmental and social management systems established by the Program Entity address and respect all aspects of the Safeguard Plans that apply to the ERPA Operation.

To do so, the World Bank will review the reports of the Program Entity (self-reporting) and third-party monitoring to determine whether the safeguards system is operational and adequately resourced to implement the ESMF and its agreed measures.

5.9.1 Development, approval and implementation of the safeguards system

The World Bank retain the responsibility to determine that the safeguards system which applies to the ER Program and ERPA is sufficient to result in program implementation that complies with World Bank safeguard policies. Specifically, this entails providing appropriate advisory services, conducting quality assurance and compliance reviews, and oversight of the systems to implement environmental and social management frameworks and/or plans which are formulated at the ER Program appraisal and ERPA signing stages of the FCPF process. The Bank's role is to confirm that all such frameworks and plans meet World Bank safeguard policy requirements and that the Program Entity will establish and maintain effective management systems to implement the requirements specified within those frameworks and plans.

5.9.2 Review, approval, and oversight of specific program activities

For the Bank-financed projects contributing to the ER Program such as DGM-I and FIP 2 being implemented in East Kalimantan (see section 3.5), the Bank will retain full responsibility for safeguards compliance and oversight as it would for any other Bank financed activity;

For the ER Program activities financed by others, MOEF/DGCC as the Program Entity, together with financiers, would be responsible for ensuring that requirements of applicable safeguards frameworks and plans are addressed and respected. The World Bank would not be responsible for any prior review, clearance, or supervision of such activities. The Program Entity will be responsible to ensure that environmental and social management and relevant measures for the ERP are implemented in line with Bank policies regardless of the source of financing.

The World Bank's role would be to undertake periodic assessments to determine whether the agreed safeguards systems are being implemented in accordance with agreements and that these systems are effective in addressing safeguards risks and impacts. This includes confirming aspects such as, adequacy of budgets and staffing to support the implementation of the Safeguards Plans; that the Program Entity can demonstrate credibly that environmental and social assessments and management plans are prepared in accordance with the safeguard frameworks; mechanisms for self-reporting and Third Party monitoring are in place and functional; grievance redress and dispute resolution mechanisms are established and functional; the implementing entities have demonstrated ability to solve issues of non-compliance and so on. The Bank will establish a clear time-table for supervision

and implementation support missions. In the early years of an ERPA Operation, oversight would typically need to be robust and conducted regularly to verify that systems are functioning as agreed.

For activities in the ERPA accounting area which may in some way contribute to emissions reductions but are not part of the ER Program, the World Bank would bear no responsibility for review or oversight either at the transaction or program level.

5.9.3 Third-party monitoring

In addition to self-monitoring and World Bank oversight, an important aspect of performance and compliance monitoring is the use of Independent Third-Party monitors. Third Party monitoring would involve a combination of independent verification of self-reporting data provided by the Program Entity and annual audits of a sample of ER Program activities to confirm procedural compliance as well as timely preparation of key documents, post-review of the quality review of safeguards documentation which has been prepared, consultation processes, effectiveness of management measures specified in the Safeguards Plans, and disclosure of information, among other important aspects. Third Party monitoring can serve at least three purposes. First, to provide timely information to the Program Entity on specific issues of non-compliance or significant implementation problems so that the Program Entity can take corrective actions, if needed. Second, Third Party monitors provide information to the Program Entity and implementing agencies and the World Bank on systemic safeguard performance issues which may require changes in management approach and/or additional financial or human resources. Third, the disclosing the results of monitoring will inform concerned stakeholders about implementation experience under the ERPA Operation. In practice, Third Party monitors will typically be private consulting firms, individuals or teams recruited from universities or colleges, government institutes not affiliated with the operation, or NGOs with knowledge and experience in safeguards.

This third-party monitoring will be funded by the World Bank and its arrangement will be facilitated by the Program Entity to enable independent monitors to conduct relevant assessments and consultations at both the program and activity levels.

5.9.4 Safeguards Due Dilligence for ERs generated prior to ERPA signature

The ERs generated before ERPA signature are required to meet the requirements of the FCPF Methodological Framework. Potential payments for such ERs are subject to the General Conditions Applicable to ERPAs for FCPF ER Programs and World Bank's due diligence.

Payments for ERs generated prior to ERPA signature can only be made provided that relevant safeguards measures for the ERP as stipulated in this ESMF are in place. Eligible activities include underlying ER activities as proposed under the ERPD. Any activities in the negative list will not be proposed under the Program.

Prior to the signing of the ERPA, the Program Entity will provide evidence, in form and substance satisfactory to the World Bank, to demonstrate that the ER Program Measures generating the (retroactive) ERs were implemented in a manner consistent with the approved ESMF. This entails a process of due diligence assessments by the Program entity of each proposed activity whereby ERs generated are being proposed for payments.

Roles and responsibilities for such due diligence processes will follow the ERP institutional arrangements. At the provincial level, the responsible party for due diligence process for ERP activities

is the Provincial Secretary (Sekda Provinsi Kaltim), with coordination support from the Provincial Environmental Agency (*Dinas Lingkungan Hidup Provinsi*). An independent oversight will be provided by the Provincial Climate Change Council (*Dewan Daerah Perubahan Iklim-DDPI*). Technical support from qualified environmental and social specialists/auditors may be called for depending on the scope of the due diligence works required.

The Regional Council on Climate Change (DDPI) in East Kalimantan Province is a key partner in the implementation of the ER Program. DDPI is a multi-stakeholder organization that has coordinated the planning and implementation of low-emission development in East Kalimantan Province.

At the district level, environmental and social due-diligence processes will be coordinated by the District Environmental Agencies (*Dinas Lingkungan Hidup Kabupaten*). Each respective district/city government implementing of the ER Program in its region will be required to disclose relevant information pertaining to their environmental and social management such as through the SIS REDD+ platform. The results of the due diligence assessments will be publicly disclosed by the Program Entity.

The above provision requires that (retroactive) ERs can only be paid for if the ER Program implementation meet the World Bank social and environmental requirements as established in the ESMF. The World Bank may request additional due diligence assessments and documentation on safeguards and request the Program Entity to commit to implementing remedial measures prior to any (retroactive) payments.

Furthermore, all payments for (retroactive) ERs are subject to the final Benefit Sharing Plan (BSP) for the ER Program, as approved by the World Bank. This condition requires that payments for ERs generated before ERPA signature also have to be shared in accordance with the approved BSP.

Information pertaining to environmental and social measures relevant for (retroactive) ERs must be made accessible to the World Bank and publicly disclosed. Consultations with relevant stakeholders, including community representatives may also be requested as part of the due diligence process, to ensure that the assessment reflect the views and concerns of the broader stakeholders.

5.10 INFORMATION DISCLOSURE

DGCC, and East Kalimantan Environmental Agency will maintain high-quality reliable documentation, as well as provide access to information for the public relating to the implementation of the ESMF. Activities that do not meet the requirements of public disclosure will not be financed by the ERP. DGCC and East Kalimantan Environmental Agency will update the status and inform stakeholders whose activities are selected versus those that will not be financed. ESMF document (both in Indonesian and English) should be uploaded to the World Bank website and official ERP (Carbon Fund) sites. In addition to ESMF website-based disclosure of information, ESMP documents will be displayed in places accessible to all levels of society who may be affected.

5.11 FEEDBACK GRIEVANCE REDRESS MECHANISM

The ERP FGRM is currently placed under the SIS-REDD+ system, set up by the Ministry of Environment and Forestry, which is currently being developed further into a web-based FGRM. The Government is in the process of refining the FGRM to best address ERP, including an internal and cross-sectoral coordination mechanism and referral system. The FGRM unit will be established under and operated through the existing mechanism that goes up to the field level. Several options are available for hosting the FGRM: Directorate General of Law Enforcement on Environment & Forestry (Ditjen PHLHK or also

well-known as Ditjen GAKUM), the Directorate General of Social Forestry and Environmental Partnership (Perhutanan Sosial dan Kemitraan Lingkungan/Ditjen PSKL), or a new established unit for ERP-FGRM under DGCC, in which the SIS is placed. Ditjen GAKUM has the institutional readiness for complaint handling with its four directorates of (1) complaint, surveillance and administrative sanctions, (2) dispute resolution, (3) forest prevention and protection, and (4) criminal law enforcement. Ditjen KLHS, with its Directorate on Complaints on Conflict, Tenurial, and Customary Forest, will also be relevant considering that addressing tenurial conflict is crucial for the success of ERP implementation. The FGRM document is provided in **Appendix 7**.

APPENDIX 1 ERP NEGATIVE LIST

ERP activities or subprojects will comply with all relevant World Bank environmental and social safeguard policies and Indonesian laws. Activities ineligible to be funded by ERP/Carbon Fund listed below are included, but not limited to:

No	Negative List	Yes	No	Remarks
1	Activities contributing to the drivers of deforestation and forest degradation (illegal logging, overlogging, uncontrolled burning and mining)			
2	New settlements or expansion of settlements within conservation forests, protected areas and parks;			
3	Any activity that can potentially lead to and/or result in conversion of primary forest and/or natural habitats;			
4	Purchase and/or use of hazardous chemicals including but not limited to pesticide and insecticides that are that are classified as IA or IB by WHO and GOI's regulations			

5	Activities where community endorsement and broad support through free, prior, and informed consultations is not obtained, or evidence for such support is not available			
6	Any activity associated with political campaigns and election;			
7	Poaching and/or trade of protected species and animals;			
8	Removal or alteration of any physical cultural property			
9	Activity which cause negative impact to Woman and Children			
10	Conversion or degradation of critical habitats, including adjacent or downstream critical natural habitats.			
11	Activities or subprojects that contravene applicable international environmental agreements and/or conventions.			
12	Conversion of primary forests.			

APPENDIX 2 SCREENING AGAINST ENVIRONMENTAL AND SOCIAL RISKS

Following Screening against the Negative List, DGCC/FCPF/DDPI in collaboration with subproject proponents will screen and assess proposed subproject activities with regards to potential risks and their management. This exercise will produce recommendations whether or not particular activities should be financed although they have passed the negative list in light of the risks foreseen. The recommendations will also include preventive measures, capacity building, technical assistance and oversight to strengthen risk management.

Proposed Activities/Sub-Activities	Implementing Entities/Partners	Potential Risks		Are the risks manageable (context, geographic, capacity, commitment, etc.)		Do implementing entities/partners have capacity to monitor and manage risks?		Does the proposal include adequate resources for risk management?		Recommendation for inclusion and/or exclusion in the proposals, including capacity building and additional resources if needed.
		Environmental	Social	Yes	No	Yes	No	Yes	No	

APPENDIX 3

ENVIRONMENTAL CODES OF PRACTICES, OHS GUIDELINES AND EMERGENCY RESPONSE

A. Plantation Developments

The codes of practice for plantation developments aim to increase income of the community and farmers, generate additional employment and help eradicate poverty in the rural areas by promoting the management of productive, profitable and sustainable plantation forests. This environmental protection guideline is prepared to ensure that forest plantations supported by the ERP are designed and managed to achieve the highest level of productivity and financial viability with the least possible negative impacts on local communities and the natural environment.

The most important pre-requisite to a successful plantation project is clear definition of management objectives, including the following:

- expected outcomes in terms of levels of productivity, rotation age and final products;
- the rehabilitation and maintenance of land productivity;
- soil and watershed protection;
- habitat conservation and restoration; and
- community participation and improved livelihoods.

The main objective for project activities under the ERP is to develop and manage productive and profitable forest plantations in a sustainable manner.

Environmental protection measures are incorporated into the following plantation management activities: site selection and landscape level planning and plantation design, site preparation, plantation establishment, tending, pest management, fire prevention and control, harvesting and access tracts improvement and maintenance.

1. Site Selection

Areas for commercial plantation forests must be carefully selected to ensure high productivity and profitability to farmers, and to avoid adverse impacts to the local community and to the natural environment. The forest plantation areas must be consistent with the spatial plan. The criteria for site selection are shown in the table below.

Criteria	Description
Forestland classification	Production forestland
Vegetative cover	1) Only bare lands will be used for plantations. 2) Forest plantations of low quality. 3) Avoid projects in HCV forest or areas with important ecosystem services
Slope	Not more than 25 ⁰ in slope
Accessibility	Plantation sites must be within 2 km of existing all-weather roads.
Soil conditions	Soil type other than laterite or sterile coastal sand, soil depth above 30 cm, pH above 4, and soil composed of less than 40% stones and coarse fragments.

Criteria	Description
Existing land use	Not used for food production, grazing of livestock, production of Non-Timber Forest Product so as not to compromise food security and other critical household needs. Area has no cultural or spiritual significance.
Land allocation	Land categorized by the spatial plan (national or local/regional) as land specified for other use (APL – Area Penggunaan Lain).

2. Plantation Planning

The Landscape Plantation Planning will be used for all forest plantation areas. This is to ensure that stream banks are protected, and access tracts, fire breaks and fire lines are planned to benefit plantation projects. The landscape plantation plan:

- 1) Defines areas for biodiversity conservation, stream bank protection, access tracts, fire breaks and poor areas that are unsuitable for commercial forest plantations;
- 2) Guides plantation owners on appropriate plantation models, suitable species, intercropping and other information necessary to prepare simple and practical individual forest plantation management plan.
- 3) Can be used to obtain forest certification.

The Landscape Plantation Plan must include the following basic considerations and which are properly delineated on a plantation plan map:

- 1) Slope and plantation operability:

No production plantations shall be allowed on slopes exceeding 25° for reasons of both slope instability and low productivity. Slopes between 20 – 25° should have lower than normal planting densities, 4 x 2 m or 1,100 trees per ha, to limit site disturbance during site preparation, planting, tending and harvesting. Where site is suitable, such areas may be planted to valuable timber species.

- 2) Buffer zone protection:

Buffer zone protection of reservoirs, entrenched streams, drainage canals where natural vegetation will be retained, no clearing or ground disturbance will be allowed during plantation establishment, and no clear cutting of trees will be allowed. Native vegetation in the buffer zone may be established through Assisted Natural Regeneration (ANR) techniques supplemented by the planting of ecologically important trees and other plants such as those eaten by birds and other wild animals or economically important species like bamboo (for poles), *Canarium album* (nuts), *Areca cathechu* (nuts), *Tricanthera gigantea* (forage for pigs, cattle, goats, rabbits), *Flemingia macrophylla* (forage), *Calliandra calothyrsus* (forage).

The recommended buffer zone protection for rivers that have no embankments, and located at rural areas (outside of cities) will refer to the Ministry of Public Works No. 28/PRT/M/2015 regarding Buffer Zone Protection for Rivers and Lakes, article 6, as follows:

- i. Large rivers having watershed area of > 500 km², at least 100 m of buffer zone from the edges of the river along the length of the river;
- ii. Small rivers having watershed area of ≤ 500 km², at least 50 m of buffer zone from the edges of the river along the length of the river.

3) Eroded areas:

Badly eroded areas characterized by deep gullies and land slips in road cuts and plantations will be stabilized using appropriate vegetative and structural soil control measure.

4) In-plantation biodiversity:

Plantations are not forests; they are much more like agricultural systems and have many of the same risks and uncertainties. Plantations can be made more like natural systems by incorporating diversity (of genetic materials, species, age classes and spatial structure at the landscape-level) to improve the ecological stability and resilience that limits the risk of failure and reduces the necessity for artificial inputs to these simplified ecosystems. All plantations over 50 ha should consist of several sub-compartments, the size and number of which will depend on the scale of the plantation, comprising different tree ages (to promote structural diversity), different species of indigenous and exotic trees, different genotypes within species, and residual indigenous natural vegetation types. Wherever practical given the scale of the plantation, design and layout should promote the protection, restoration and conservation of natural communities. This can be accomplished by utilizing wildlife corridors, retention of native tree species, stream protection corridors, sanitation and fire breaks of native vegetation and a mosaic of different age and rotation periods to mimic the landscape patterns of natural forest communities.

5) Access provisions:

Landscape plantation design must show the location of existing roads, access tracks and trails that may be used for transporting seedlings and other plantation inputs, as well as in fire prevention and control. Additional access tracks may need to be constructed for eventual product extraction.

6) Fire breaks:

The Landscape Plantation Design must provide for the location, specifications, construction and maintenance of fire breaks and fire lines. The design must maximize the use of the buffer zones in streams and drainage canals, other native vegetation, as well as roads and access tracks.

7) Poor sites:

Poor sites within the plantation block such as those with very shallow top soil, very stony areas, or areas with over 25 degrees n slopes which are unsuitable for commercial plantation forests should be delineated and earmarked for rehabilitation using assisted natural regeneration and other afforestation techniques that promote the growth of native species. This may be supplemented by planting leguminous species such as *Tephrosia candida* and other local species.

3. Site Preparation

Site preparation are activities done before planting to improve existing site conditions and enhance survival and promote fast initial growth of planted seedlings. This includes vegetation clearance to reduce competition and fire risks, hole digging to improve soil structure and enhance root growth, and basal fertilization to increase soil fertility.

1) Vegetation clearance

Environmental protection guidelines to be followed are the following:

- Broadcast burning cannot be used as a tool of site clearing and site preparation; vegetation must be cleared by hand or machine.
- Avoid comprehensive vegetation clearance on sloping areas. Clear vegetation in strips or on spots.
- Debris in vegetation clearance should be retained on site as source of nutrients and to provide soil cover and help in reducing soil erosion.
- Mechanical extraction of tree stumps and roots will not be allowed on sloping areas; only on flat terrain.
- Full cultivation will be allowed only on flat or slightly sloping terrain below 15 degrees. Between, 16 to 20 degrees slope, cultivate in alternate strips. No cultivation is allowed beyond 20 degrees.

2) Digging of planting holes

- Planting holes should not be excavated during the period of heavy rainfall.
- Back-fill the hole immediately as soon as possible to keep the loosened soil inside the hole and minimize soil erosion.
- In sloping terrain, dig planting holes along the contour and in fish scale- like pattern.

3) Basal fertilization

- Apply basal fertilizer on the hole; broadcast application is not allowed.
- Use a container not bare hands in handling fertilizer.
- Record the kind, dosage and date of fertilizer application.

4. Intercropping

Any intercropping activities on sloping plantation sites should be carried out along the contour. No intercropping will be allowed on slopes over 20 degrees and intercropping of root or tuber crops will not be permitted over 15 degrees.

5. Tending

Weeding should be limited to what is absolutely necessary to maintain high survival and fast growth of planted seedlings, employing spot weeding around the base of the seedlings, and slashing of vegetation in other areas, so as to maintain ground cover. Vegetation debris from weeding and slashing should be left on site as mulch.

Conduct singling during the dry season, when trees are about 4-6 months old and stems are still small. Do not conduct singling without the proper tools.

Pruning is required only on plantations that aim to produce saw logs. It is not necessary if the final product is pulpwood. It is also not necessary on species with good natural self-pruning characteristics like *Eucalyptus urophylla*. It will be applied only on selected trees that will constitute the final crop (saw

logs). As in singling, prune only with the proper pruning equipment, never a knife. Make a clean and straight cut at the outer edge of the branch collar. The branch collar must not be injured since this is where the healing process starts. Cut pruning debris into shorter pieces and spread them evenly in the plantation.

Thinning, as in pruning, is performed only on plantations where the objective is to produce saw logs. Moreover, thinning is recommended only on good sites where the yield is high enough to warrant additional investments in thinning and pruning. Conduct thinning when canopy begins to close and competition for light begins. After selecting the trees to be retained, cut all others but with care so as not to injure the retained trees.

After removing any usable stems, chop the thinning debris into shorter pieces and spread evenly on the area.

6. Fire Prevention and Control

Forest fire prevention and control activities must be an integral part of the operational plan for the plantation area. Such plans should establish a fire control organization, defined roles and responsibilities, and detailed prevention, public education, patrolling, enforcement and fire response programs.

In each plantation area, reduce amount of fuel in the plantation through timely and effective weed control. Cut debris in weeding, pruning and thinning to small pieces, and pile them in between tree rows. Compress the pile low by pressing or stepping on it.

If plantation is adjoining grassland or other fire prone areas, construct fire breaks of at least 10 meters wide along the boundaries, at the onset of the dry season.

Further guidance on OHS and community, health and safety aspects related to fire management and suppression is provided as a sub-appendix to this ECOP (sub-appendix 3.1)

7. Access Tracks

Access within plantation blocks will be limited to that necessary to transport planting materials to the site and to extract products from primary landings in the plantations to secondary landings at the road. Such tracks should be wide enough for motorcycles and or small tractors. Plantation block plans must show how the site is to be accessed; including details on location, design, construction and maintenance.

All roads and access tracks must be properly located, designed, constructed and maintained. Roads and trails must be constructed according to acceptable engineering standards and shall have regular maintenance. Detailed access guidelines should be prepared early in subproject implementation and may include design considerations such as the following:

- 1) primary extraction from felling site to the first landing at trackside will be by human labor or draft animals, depending on the size of product (i.e. fuel/pulp wood vs sawlogs);
- 2) density of secondary extraction tracks shall be the absolute minimum consistent with the practical distances of primary extraction;
- 3) tracks will be permitted to encroach into stream protection corridors only at points of crossing, which must be in areas of stable, moderate terrain;
- 4) stream crossings should be rock-stabilized drifts; culverts should be employed only in extreme cases where drifts are not practical;

- 5) tracks shall have a maximum width of 3 m, a maximum favorable grade of 15 degrees and a maximum adverse grade of 10 degrees;
- 6) cut and fill slopes must be avoided wherever possible;
- 7) no yarding of logs or other products will be permitted on the surface of tracks;
- 8) track rights-of-way will be lightly slashed and vegetation cover will be maintained on the running surface wherever possible;
- 9) all tracks on side-slopes shall be out-sloped or equipped with water-bars to disperse water onto stable areas down slope; and
- 10) tracks will be inspected regularly during rainy periods in the first three years after construction and during periods of active use, and immediate maintenance action taken to correct problems of drainage or erosion.

8. Plantation Harvesting

Harvesting of trees and other products shall not result in long-term soil degradation or adverse impacts on water quality and watershed hydrology. All logging operations must be strictly supervised and enforced by DARD/DFD. For slopes over 15 degrees, logging coupes shall not exceed 10 ha with at least 60 m between adjacent coupes logged the same year. For slopes less than 15 degrees, logging coupes shall not exceed 20 ha, with at least 30 m between adjacent coupes felled the same year. Ground vegetation shall be preserved as far as possible during logging and the site shall be re-planted in the year following logging.

B. Agro-Forestry

1. To participate in providing policy provisions to provide incentive to farmers adopting agro forestry (such as, land control or credit) and mitigate financial risks related to interventions, if possible. Threat of decreased firewood availability may not be an adequate incentive for the farmers to grow trees. Farmers are often as interested in other wood products as they are in non-wood products (such as construction poles, fruits or medicines);
2. To train farmers and field staff utilize field intervention, Training shall also include field visits by farmers and field staff to promising livelihood activities;
3. To build a partnership between the project and farmers. Farmers should have an opportunity during project identification and implementation process to convey their needs and choice in relation to biological and social economic interventions;
4. To develop a mechanism that enables farmers to cover operational costs, maintain control over trees, and receive technical advice. A revolving fund, association coordination or annual gathering can ensure support to project beneficiaries.

C. Home Industry / Small Industry

1. To ensure that the management plan can answer the anticipated use of natural resources and potential environmental impacts. Issues that must be addressed in the management plan should include:
 - a. Information on the area, scope and location of activity;
 - b. Raw materials (namely, wood, drinking water, and fuel) and required storage facility;

- c. Types and distance of contaminating disposal;
 - d. Evaluation of impacts of industrial activities;
 - e. Availability of disposal channel;
 - f. Placement and disposal of solid waste.
2. Monitor and diminish losses from environmental impact in each process of production.
 3. Ensure that the financed activities do not use, produce, store or relate to hazardous substances (toxic, rust or explosive) or substances resulting in “B3” waste (Toxic and Hazardous Substances) (as recorded in the list of Negative Protection regulations).

D. Farming

Animal droppings can maintain the fertility of soil and replace soil nutrition when collected and treated accordingly. On a contrary, uncontrolled droppings can pollute water and endanger human’s or animal’s health. For instance, dropping bacterial organisms can pollute drinking water supplies with nitrate. Animals’ droppings can be managed by:

- Preventing the rainfall from entering, irrigation and surface water nozzle into animals pen and storage facilities;
- Preventing keeping too many animals in a pen;
- Shoveling/removing droppings from the breeding pens;
- Covering droppings with absorbent materials;
- Removing lumps of droppings / animal droppings;

Complaints of odor from a farm can be minimized by:

- For a sensitive environment, choosing a location and design of a farm prudently with adequate distance between supports;
- Taking into consideration the existing direction of the wind, especially during dry season;
- Optimizing frequency of cleaning of pens;
- Maintaining dust at low level since the odor is absorbed and carried by granules of dust;
- Number of animals should not exceed the recommended density;
- Ventilation that can maximally shed the odor during cleaning of pens;
- Utilizing solid vegetation as support partition to circulate air flow (to disintegrate odor), filter dust and relocate odor from sensitive areas;
- Placing halls of pens thoroughly, in relation to the direction of disposal of odor;
- Collecting droppings and manure under a weather-resistant cover, before relocating the droppings and manure from the location; and
- Utilizing healthily formulated livestock feed.

E. Fishery

1. Conditions of fish cultivation

Characteristics of good fish:

- a) Shape: good shape
- b) Color : bright and glossy
- c) Scale : no sign of loss of scale
- d) Movement : active and showing normal movement
- e) Reflex : trying to escape when touched
- f) Feeling : slick texture

Transportation of fish:

- a) Fish can be transported in a plastic or polyethylene container and open container such as drum, aluminum filled with oxygen.
- b) Support power of container / beg depends on
 - Size and health condition of fry
 - Distance and time used
 - Water temperature
 - Availability of dissolved oxygen
- c) Normally 8.000 – 10.000 fry (10 and 5 cm) can be transported in a drum (200 liter) for 12 – 14 hours
- d) The following table can help plan the transportation of fry for 5 – 6 hours

Size	Type of material of container			
	30 liter capacity		Drum (200 liter)	
	Total	Per liter	Total	Per liter
Spawn	50000	1700	–	–
1 - 2 cm	3000	100	20000	100
2 - 3 cm	200	30	10000	50
10 - 15 cm	100	3	1400	7

Ways to keep fish alive:

- a) Check the quality of soil and water of the embankment before releasing the fry
- b) Ensure the embankment is free from:
 - Grass and predator fish

- Molluscs / barnacle
 - Predators such as snakes, frogs, birds, insects, and so on
- c) Ensure that fry is placed in different ponds according to age and size groups
- d) Ensure the availability of fish natural fodder
- e) Use healthily formulated additional fodder

2. Conditions for equipment to catch fish:

a) Type and size of the equipment must follow the regulations of Government of Indonesia (Minister of Marines and Fishery Affairs Regulation No. 71/PERMEN-KP/2016 regarding Fishing Areas and Placement of Fish Catching Devices in Indonesia Fisheries Management Zone)

- Jaring lingkar (surrounding nets);
- Pukat Tarik (seine nets);
- Pukat hela (trawls);
- Penggaruk (dredges);
- Jaring angkat (lift nets);
- Alat yang dijatuhkan (falling gears);
- Jaring insang (gillnets and entangling nets);
- Perangkap (traps);
- Pancing (hooks and lines);
- Alat penjepit dan melukai (grappling and wounding)

b) The equipment shall not cause damages to the environment; and

c) The equipment shall be made from environmentally friendly materials

F. Tree saplings / vegetation seeds:

Tree saplings / vegetation seeds should be:

1. In good condition.
2. Healthy (free from diseases, fungus, bacteria, and virus).
3. Buds and roots are well grown.
4. Local original species.
5. Legalized from its known origin or local source (if possible)

Storing of seeds should meet the following:

- It should use bales / poly-bags for packaging
- Moss bales/poly-bags need to be kept wet until usage
- It should be stored in a cool storage with adequate ventilation
- Cultivation may be immersed in cultivation solution prior to transportation
- It should protect the seeds from overly hot or cold weather
- To know the number of trees to be planted, one must know the following:
 - Areas that need to be planted; and
 - Placement of distance of seeds.

G. Community Timber Activities

ERP/Carbon Fund may support commercial harvesting operations only when, on the basis of the applicable social and environmental screening and assessment, it is determined that the areas affected by the harvesting are not critical forests or related critical natural habitats and that are no land use conflicts with local communities or indigenous peoples. Harvesting operation by local communities under forest community management or under joint forest management arrangements are eligible to project support if: (a) have achieved a standard of forest management developed with meaningful participation of locally affected communities in a manner consistent with the principles outlined below; or (b) adhere to a time-bound action plan to achieve such standard:

1. compliance with relevant Indonesian laws;
2. recognition of and respect for any legally documented or customary land tenure and use rights as well as the rights of indigenous peoples and workers;
3. measures to maintain or enhance sound and effective community relations;
4. conservation of biological diversity and ecological functions;
5. measures to maintain or enhance environmentally sound multiple benefits accruing from the forest;
6. prevention or minimization of the adverse environmental impacts from forest use;
7. effective forest management planning;
8. active monitoring and assessment of relevant forest management areas; and
9. The maintenance of critical forest areas and other critical natural habitats affected by the operation.

ERP/Carbon Fund will not finance industrial scale-harvesting, i.e. carried out by firms (in opposition to local communities and forests operating under joint forest or community management). NEA, NSC and project proponents (CSOs/CBOs) will monitor all such operations with meaningful and documented

participation of participating communities. All of the above requirements should be assessed, documented and reflected in the progress implementation reports of participating CSOs/CBOs.

H. Village Spatial Planning

This is a simple guideline of Environmental and Social Code of Practices (ESCOP) for reference on the inclusion and consideration of good practices in environmental and social management in village planning process.

The village planning development may also generate indirect negative environmental and social impacts and the followings are the examples of potential impacts from the downstream activities of village development planning:

1. Affect local and Indigenous Peoples;
2. Lead to future land acquisition and resettlement;
3. Require relocation of people that may have substantial social implications;
4. Require the use of natural resources unsustainably (for example: excessive extraction of groundwater, massive sand mining);
5. Lead to the increase of greenhouse gases emissions (for example: poor planning of the energy use or preference to fossil fuel);
6. Lead to increase the vulnerability of these investments to climate-related hazards and other natural hazards (earthquake, tsunami, etc.);
7. Lead to mismanagement of solid wastes and wastewater (for example: the absence of allocation for local landfill and local wastewater treatment);
8. Steer the concerns on sensitive sites within or in the periphery of the village or district (for example: cultural heritage sites);
9. Enable to generate other unidentified environmental and social risks and opportunities.

Specific for land use planning at the village level, the following issues are recommended to be considered and integrated into the planning process:

10. Has the development plan identified land with legacy issues (such as historical legal cases, contaminated soils, etc.) in the planning?
11. Has the development plan identified the need for land acquisition and the need for possible relocation of people and people's assets in the downstream physical investment through participatory approaches in consultation?
12. Has the development plan identified the presence of indigenous peoples and designed the land use in village or district planning in a way that fosters full respect for Indigenous People's dignity, human rights and cultural uniqueness?
13. Has the development plan identified the areas vulnerable to climate-related hazards and other natural hazards (landslides, earthquake, tsunami)?

14. Has the development plan identified the areas with ecological values (such as forests) and designed the plan to include care and management of such areas?

I. World Bank Group EHS Guidelines

WBG EHS Guidelines for forest harvesting operations:

<https://www.ifc.org/wps/wcm/connect/1057c08048855740bbccfb6a6515bb18/Final%2B-%2BForest%2BHarvesting%2BOperations.pdf?MOD=AJPERES>

WBG EHS Guidelines for annual crop production:

<https://www.ifc.org/wps/wcm/connect/1057c08048855740bbccfb6a6515bb18/Final%2B-%2BForest%2BHarvesting%2BOperations.pdf?MOD=AJPERES>

These should be adapted with commensurate/proportional measures based on scale and scope of the activities and investments since these guidelines are meant for IFC investments rather than small-scale or community-based activities (although these may in some cases be equivalent to commercial activities).

J. OHS General Guidelines

The sub-project implementors are obliged to protect the health and safety of all workers. This section provides guidance and examples of reasonable precautions to be implemented in managing the key risks to occupational health and safety.

Preventive and protective measures should be introduced according to the following order of priority:

- Eliminating the hazard by removing the activity from the work process. Examples include substitution with less hazardous chemicals, using different manufacturing processes, etc;
- Controlling the hazard at its source through use of engineering controls. Examples include local exhaust ventilation, isolation rooms, machine guarding, acoustic insulating, etc;
- Minimizing the hazard through design of safe work systems and administrative or institutional control measures. Examples include job rotation, training safe work procedures, lock-out and tag-out, workplace monitoring, limiting exposure or work duration, etc; and
- Providing appropriate personal protective equipment (PPE) in conjunction with training, use, and maintenance of the PPE.

The application of prevention and control measures to occupational hazards should be based on comprehensive job safety or job hazard analyses. The results of these analyses should be prioritized as part of an action plan based on the likelihood and severity of the consequence of exposure to the identified hazards.

Several considerations for OHS mitigation, amongst others, that are of relevance to the ERP sub-project typologies include the following:

- **First Aid Facility.** Qualified first-aid can always be provided. Appropriately equipped first-aid stations should be easily accessible throughout the place of work. Where the scale of work or the type of activity being carried out so requires, dedicated and appropriately equipped firstaid room(s) should be provided. First aid stations and rooms should be equipped with gloves, gowns, and masks for protection against direct contact with blood and other body fluids. Remote sites should have written emergency procedures in place for dealing with cases of trauma or serious illness up to the point at which patient care can be transferred to an appropriate medical facility.
- **OHS Training.** Provisions should be made to provide OHS orientation training to all new employees to ensure they are apprised of the basic site rules of work at/on the site and of personal protection and preventing injury to fellow employees. Training should consist of basic hazard awareness, site specific hazards, safe work practices, and emergency procedures for fire, evacuation, and natural disasters, as appropriate.
- **Rotating and Moving Equipment.** Injury or death can occur from being trapped, entangled, or struck by machinery parts due to unexpected starting of equipment or unobvious movement during operations. Recommended protective measures include: Designing machines to eliminate trap hazards and ensuring that extremities are kept out of harm's way under normal operating conditions. Where a machine or equipment has an exposed moving part or exposed pinch point that may endanger the safety of any worker, the machine or equipment should be equipped with, and protected by, a guard or other device that prevents access to the moving

part or pinch point. Guards should be designed and installed in conformance with appropriate machine safety standards.

- **Chemical Hazards.** Chemical hazards represent potential for illness or injury due to single acute exposure or chronic repetitive exposure to toxic, corrosive, sensitizing or oxidative substances. They also represent a risk of uncontrolled reaction, including the risk of fire and explosion, if incompatible chemicals are inadvertently mixed. Chemical hazards can most effectively be prevented through a hierarchical approach that includes: Replacement of the hazardous substance with a less hazardous substitute, implementation of engineering and administrative control measures to avoid or minimize the release of hazardous substances into the work environment keeping the level of exposure below internationally established or recognized limits, keeping the number of employees exposed, or likely to become exposed, to a minimum, communicating chemical hazards to workers through labeling and marking according to national and internationally recognized requirements and standards, including Materials Safety Data Sheets (MSDS), or equivalent, and training workers in the use of the available information (such as MSDSs), safe work practices, and appropriate use of PPE.
- **Personal Protective Equipment (PPE).** PPE provides additional protection to workers exposed to workplace hazards in conjunction with other facility controls and safety systems. PPE is considered to be a last resort that is above and beyond the other facility controls and provides the worker with an extra level of personal protection. Recommended measures for use of PPE in the workplace include: active use of PPE if alternative technologies, work plans or procedures cannot eliminate, or sufficiently reduce, a hazard or exposure; identification and provision of appropriate PPE that offers adequate protection to the worker, co-workers, and occasional visitors, without incurring unnecessary inconvenience to the individual; proper maintenance of PPE, including cleaning when dirty and replacement when damaged or worn out; proper use of PPE should be part of the recurrent training programs for employees; selection of PPE should be based on the hazard and risk ranking described earlier in this section, and selected according to criteria on performance and testing established

K. Emergency Preparedness and Response Guideline

An emergency is an unplanned event when a project operation loses control, or could lose control, of a situation that may result in risks to human health, property, or the environment, either within the facility or in the local community. Emergencies do not normally include safe work practices for frequent upsets or events that are covered by occupational health and safety.

Sub-projects that are engaging physical activities should have an Emergency Preparedness and Response Plan that is commensurate with the risks of the activities being undertaken and that includes the following basic elements:

- Administration (policy, purpose, distribution, definitions, etc);
- Organization of emergency areas (command centers, medical stations, etc);
- Roles and responsibilities;
- Communication systems;
- Emergency response procedures;

- Emergency resources;
- Training and updating;
- Checklists (role and action list and equipment checklist); and
- Business Continuity and Contingency

If a local community may be at risk from a potential emergency arising at the facility, the project should implement communication measures as appropriate to alert the community, such as: audible alarms, such as fire bells or sirens, fan out telephone call lists, vehicle mounted speakers, communicating details of the nature of the emergency, communicating protection options (evacuation, quarantine), providing advise on selecting an appropriate protection option.

A mechanism should be provided for funding emergency activities and provision of emergency resources. These emergency resources include, among others:

- **Medical Services.** First aid attendants for the facility as well as medical equipment suitable for the personnel, type of operation, and the degree of treatment likely to be required prior to transportation to hospital should be considered to be provided.
- **Availability of Resources.** Appropriate measures for managing the availability of resources in case of an emergency include: i) Maintaining a list of external equipment, personnel, facilities, funding, expert knowledge, and materials that may be required to respond to emergencies. The list should include personnel with specialized expertise for spill clean-up, flood control, engineering, water treatment, environmental science, etc., or any of the functions required to adequately respond to the identified emergency; ii) Providing personnel who can readily call up resources, as required; iii) Tracking and managing the costs associated with emergency resources; iv) Considering the quantity, response time, capability, limitations, and cost of these resources, for both site-specific emergencies, and community or regional emergencies; v) Considering if external resources are unable to provide sufficient capacity during a regional emergency and whether additional resources may need to be maintained on-site.
- **Contact List.** A list of contact information for all internal and external resources and personnel should be provided for the sub-project. The list should include the name, description, location, and contact details (telephone, email) for each of the resources, and be maintained annually.
- **Training and Updating.** The emergency preparedness facilities and emergency response plans require maintenance, review, and updating to account for changes in equipment, personnel, and facilities. Training programs and practice exercises provide for testing systems to ensure an adequate level of emergency preparedness. Programs should: identify training needs based on the roles and responsibilities, capabilities and requirements of personnel in an emergency; develop a training plan to address needs, particularly for fire fighting, spill response, and evacuation; conduct annual trainings or more frequent when the response includes specialized equipment, procedures or hazards.

L. Guidelines for Forest and Land Fire Management and Suppression (covering Occupational, Health and Safety Aspects)

Safety is a core value and is a critical part of all activities, from planning through restoration. One of the most common reasons for establishing a fire management organization is to protect firefighters and communities from unwanted fires. Firefighter safety begins with the provision of the proper safety equipment and training to each personnel in fire suppression.

This sub section is prepared to provide guideline for fire prevention managers in managing health and safety aspects of firefighters and community volunteers. This guideline has been adapted from the FAO Fire Management: Voluntary Guidelines.

A Fire prevention

Key actions for fire prevention include but are not limited to:

- a. In areas in which objectives require minimizing the number of fires and the area burned, a comprehensive prevention plan should be developed.
- b. Prevention plans take into account traditional uses of fire, be based on laws or regulations restricting fires and involve local community leaders and organizations.
- c. Data collected on a monthly and annual basis on frequency, specific causes and locations of human-caused fires, reasons for starting the fires, and area burned in order to establish an effective prevention programme.
- d. Fire prevention programs include information on the need to use and manage fire in certain situations.
- e. The appropriate use and management of fire can promote sustainable livelihoods.

B Fire preparedness, including technical training

Fire preparedness includes training, equipping and staffing prior to the start of a fire. Safety training includes education in the local weather and terrain, as well as in the flammability of fuels. Firefighters, who may also involve community volunteers, must be trained to recognize the characteristics of fire behaviour, such as intensities, spread rates and when a smouldering fire can re-ignite and begin to spread. Firefighting crews need to understand how to monitor fires and to estimate potential changes to avoid becoming trapped by an unanticipated change in spread or intensity. Training in the effective use of equipment and fire suppression techniques is also important, and providing personal protective equipment such as helmets, gloves, fire-resistant clothing and safety boots should be done.

Key actions for fire preparedness include but are not limited to:

- a. Preparedness plans should include all activities to be undertaken prior to the start of a fire.
- b. Safety considerations, both for firefighters and the public, be part of preparedness plan.
- c. Plans and implementation should be based on an effective and cost-efficient mix of resources and organizations.
- d. Plans should take ecological considerations into account, such as the impact of suppression actions on the environment and the role of fire in the ecosystem or in cultural areas.

- e. Plans should include processes and procedures to assess risk and hazard and to determine appropriate response and mitigation actions.
- f. Plans should be based on predicted fire risks and capacities, including staffing and resources identified that correspond to the level of risk.
- g. Plans should assess the capabilities of remote communities and individuals living in outlying areas to protect their own assets and assist fire services in all phases of fire management.
- h. All training should be appropriate to local ecological, social and political conditions and should be delivered to the same standard for full-time, paid, volunteer or other rural workers for the expected fire characteristics.

C Fire detection, communications and dispatching

Key actions for fire detection, communications and dispatching include but are not limited to:

- a. A robust fire detection system should use an appropriate combination of remote sensing, established land- or water-based locations, aerial routes and private citizen and rural community networks.
- b. A public communications system should be in place for the reporting of fires by private citizens and agency personnel and for alerting managers, supervisors, landowners and citizens.
- c. A dispatch and communications system should be in place to determine the appropriate response to a reported fire, mobilize and support initial-attack and backup fire suppression resources, and provide appropriate information to responders, volunteers, landowners and others involved in the incident response. A communications plan should be developed and translated into local languages to inform the public of threats and potential severe conditions and to provide prevention messages.

D Initial Response

Key actions for initial attack/action include but are not limited to:

- a. The initial-attack groups should be properly trained, equipped, supported and staffed to meet local requirements.
- b. All initial-attack actions should be based on the resource, cultural, economic and ecological objectives and policies for the area, including the appropriate use of tactics and equipment.
- c. The initial-attack groups should utilize local resources, if possible, in order to build support within the community for fire management policies and plans and to gain from local knowledge and experience.
- d. The initial-attack groups should have access to communications systems to receive timely information on fire starts, locations and status from official sources and from the public.
- e. The initial-attack groups should be trained and prepared for the transition activities required when fires escape and become larger, requiring large-fire suppression strategies and tactics to be formulated and applied across the incident.

- f. The initial-attack organization should be prepared for non-fire activities, such as protecting private citizens and directing evacuation, and should be trained in rescue and emergency medical procedures.

E Large fire suppression and management

Key actions for large-fire suppression and management include but are not limited to:

- a. Plans and procedures should be established for large-fire suppression based on expected size, duration and complexity.
- b. An extensive process should be in place to gather intelligence and information on all aspects of a large fire in order to ensure effective planning, strategy formulation and community involvement.
- c. A versatile and expandable management system, such as Incident Command System (ICS), should be used to manage fires of all sizes and complexities in order to minimize confusion and risk during transition periods.
- d. Pre-fire-season agreements should be prepared that provide for assistance during large fires when local resources are fully committed.
- e. A process of review, evaluation and training should be in place so that personnel recognize the conditions under which a large fire is likely to occur and ascertain that prompt and adequate steps are taken in anticipation of the event.
- f. Plans should contain provisions for evaluating large fires to determine if some or all of the fire can be managed in a manner that benefits the ecosystem, reduces the risk to fire suppression personnel and minimizes costs.
- g. Plans should include risk analysis of the probability and consequences of failure in meeting plan objectives.

F Managing multiple incidents

Key actions for managing multiple incidents include but are not limited to:

- a. Prior to the start of the fire season, plans should be developed that provide for the management, resource-allocation, prioritization and other transboundary actions required during multiple incidents.
- b. Consideration should be given to the possibility that additional fires will start and to the allocating of suppression resources so as to reduce the potential of additional large and damaging fires occurring in critical areas.
- c. Through the use of incident command system in all jurisdictions and in response to any type of fire or other emergency, the agencies, groups and other organizations involved will acquire the experience to effectively use the system in transboundary and multiple fire situations.

APPENDIX 4

GUIDANCE NOTE FOR PEST MANAGEMENT

Pest Management refers to “the careful consideration of all available pest control techniques and subsequent integration of appropriate measures that discourage the development of pest populations and keep pesticides and other interventions to levels that are economically justified and reduce or minimize risks to human health and the environment. IPM emphasizes the growth of a healthy crop with the least possible disruption to agro-ecosystems and encourages natural pest control mechanisms”. ERP recognizes local wisdoms in managing pests and will support communities to mainstream such local knowledge into the ESMP. IPM is not a single pest control method, but rather a series of pest management assessments, decisions, and controls. The following elements of the IPM will need to be established in the development of the ESMP.

1. **Identify and Monitor Pests** - Not all insects, weeds, and other living organisms require control. Many organisms are innocuous, and some are even beneficial. IPM programs work to monitor for pests and identify them accurately, so that appropriate control decisions can be made in conjunction with action thresholds. This monitoring and identification removes the possibility that pesticides will be used when they are not really needed or that the wrong kind of pesticide will be used.
2. **Set Action Thresholds** - Before taking any pest control action, IPM first sets an action threshold, a point at which pest populations or environmental conditions indicate that pest control action must be taken. Sighting a single pest does not always mean control is needed. The level at which pests will either become an economic threat is critical to guide future pest control decisions.
3. **Prevention** - as a first line of pest control, IPM programs work to manage the crop, lawn, or indoor space to prevent pests from becoming a threat. In an agricultural crop, this may mean using cultural methods, such as rotating between different crops, selecting pest-resistant varieties, and planting pest-free rootstock. These control methods can be very effective and cost-efficient and present little to no risk to people or the environment;
4. **Control** - Once monitoring, identification, and action thresholds indicate that pest control is required, and preventive methods are no longer effective or available, IPM programs then evaluate the proper control method both for effectiveness and risk. Effective, less risky pest controls are chosen first, including highly targeted chemicals, such as pheromones to disrupt pest mating, or mechanical control, such as trapping or weeding. If further monitoring, identifications and action thresholds indicate that less risky controls are not working, then additional pest control methods would be employed, such as targeted spraying of pesticides. Broadcast spraying of non-specific pesticides is a last resort. The project will not procure or use pesticides and chemical fertilizers that are classified as IA or IB by WHO and GOI’s regulations. ERP will encourage use of organic (or readily biodegradable) fertilizers for activities related to agriculture and agroforestry. However, since small quantities of eligible pesticides may be procured and used, the project will screen at the project level and when justified, assess the potential environmental and social impacts associated with use, storage and disposal. The project will not finance any pesticide without clear guidance and monitoring of safeguard specialists nor without targeted training on use, storage and disposal or without the right equipment and installations necessary for the products to be used safely and appropriately. In the event pesticides must be used for project activities, the following criteria apply:

- 1) They must have negligible adverse human health effects;
- 2) They must be shown to be effective against the target species;
- 3) They must have minimal effect on non-target species and the natural environment. The methods, timing, and frequency of pesticide application are aimed to minimize damage to natural enemies. Pesticides used in public health programs must demonstrate to be safe for inhabitants and domestic animals in the treated areas, as well as for personnel applying them;
- 4) Their use must take into account the need to prevent the development of resistance in pests.

Relevant specialists and/or local agricultural extension officers will provide technical assistance for implementing stakeholders and target communities in the event of pesticide use. For each ERP component, the environmental mitigation plan (EMP) should include a Pest Management Plan (PMP) that:

1. Lists the banned pesticide use by the Government of Indonesia
2. Provides an assessment of current relevant pest management practices;
3. Identifies specific practices and conditions that could and should be improved (e.g. calendar-based spraying, use of overly toxic or otherwise inappropriate pesticides, failure to apply available non-chemical methods, insufficient access of farmers to information about IPM, policy biases towards chemical control, deficiencies in institutional capacity to implement IPM and control of pesticide use, etc.);
4. Provides measures and activities to be taken under the project to improve the situation; and
5. Provides a monitoring scheme to determine the effectiveness of these measures and enable correction where necessary.

Minimal outline for IPMP:

A well-written, easy-to-follow IPM plan provides staff and management with a written document on IPM procedures and policies for the facility. The plan should be a living document that is continually updated as new pest situations and new procedures or activities within the facility arise. This allows the facility to maintain a historical record of pest management procedures so the IPM coordinator can act on pest issues, with noted positive and negative experiences of their predecessors. The IPMP should be unique to each project activity, and minimally have the following sections:

1. Project description: describe the project and its salient features that will likely require pest management measures.
2. Existing and anticipated pest problems: Prepare an overview of the crops cultivated/managed in the project and the key pest and diseases problems experienced, especially by small holder farmers. Provide estimates (preferably based on local studies) of the crop/economic losses that can be attributed to the key pests, diseases and weeds.
3. Existing and proposed measures for pest control: Describe the current and proposed methods for pest or vector management practiced in the country/region. Describe the non-chemical pest control methods, IPM approaches that are available in the country. Describe

monitoring/sampling protocols, action thresholds and monitoring procedures. Assess if envisaged pesticide use under the project is justified by (a) explaining the IPM approach and the reason why pesticide use is considered, (b) providing an economic assessment demonstrating that the proposed pesticide use would increase farmers'/KPH revenues, provide evidence that the proposed pesticide use is justified from the best available (preferably WHO-supported) public health evidence.

4. Roles and Responsibilities: define who in the KPH will be in charge of the data collection and storage, reporting on IPM implementation. In the case of the use of chemical pesticides, assign responsibilities for the procurement, application and disposal of pesticides and the proper record keeping.
5. Monitoring and evaluation: define a reporting mechanism on the IPMP implementation, emphasizing its efficiency and efficacy.
6. Capacity building: define any capacity building measures necessary for KPH management, staff and beneficiaries to implement the IPMP.

NOTE: If any pesticides are required by the IPMP they will be procured by the project must be manufactured, packaged, labeled, handled, stored, disposed of, and applied according to acceptable standards¹³. The project does not finance formulated products that fall in WHO classes IA and IB, or formulations of products in Class II14.

List of Banned Pesticides use by the Government of Indonesia

The following is a list of banned pesticides according to Ministry of Agriculture Regulation No. 39/Permentan/SR.330/7/2015:

1. Pesticides classified as Class Ia and Class Ib according to the World Health Organization (WHO);
2. Active ingredients and/or additives that have carcinogenic effect (Category I and IIa according to the International Agency for Research on Cancer (IARC), mutagenic and teratogenic according to the Food and Agriculture Organization (FAO), and the WHO;
3. Active ingredients and/or additives that cause medicinal resistance to humans; and
4. Active ingredients and/or additives that are classified as POPs (Persistent Organic Pollutants) according to the Stockholm Convention.

There are at least 70 pesticides that are banned for use in Indonesia:

No.	Active Ingredient	CAS Number
1.	2,4,5-T	95-95-4
2.	2,4,5-T including its salts and derivative esters	93-76-5
3.	2,4,6-T	88-06-2

¹³ For pesticides application, storage and disposal guidelines please refer to http://www.fao.org/fileadmin/templates/agphome/documents/Pests_Pesticides/Code/Old_guidelines/Ground_application.pdf, http://www.fao.org/fileadmin/user_upload/obsolete_pesticides/docs/small_qties.pdf

¹⁴ For reference on the substances please consult the World Health Organization. Recommended Classification of Pesticides by Hazards and Guidelines refer http://www.who.int/ipcs/publications/pesticides_hazard_rev_3.pdf

No.	Active Ingredient	CAS Number
4.	Aldicarb	116-06-3
5.	Aldrin	309-00-2
6.	Alachlor	15972-60-8
7.	Alpha hexachlorocyclohexane	319-84-6
8.	All Tributyltin compounds (tributyltin) including: - Tributyltin oxide - Tributyltin fluoride - Tributyltin methacrylates - Tributyltin benzoate - Tributyltin chloride - Tributyltin linoleate - Tributyltin naphthenate	56-35-9 1983-10-4 2155-70-6 4342-36-3 1461-22-9 24124-25-2 85409-17-2 85409-17-2
9.	1,2-dibromo-3-chloropropane/DBCP	96-12-8
10.	Beta hexachlorocyclohexane	319-85-7
11.	Binapacryl	485-31-4
12.	Cyhexatin	13121-70-5
13.	Chlorobenzilate	510-15-6
14.	Dichloro diphenyl trichloroethane/DDT	50-29-3
15.	Dicofol	115-32-2
16.	Dieldrin	60-57-1
17.	2,3-dichlorophenol	576-24-9
18.	2,4-dichlorophenol	120-83-2
19.	2,5-dichlorophenol	583-78-8
20.	Dinozeb	88-85-7
21.	Dinitro-ortho-cresol/DNOC with its salts: - Ammonium, - Potassium; and - Sodium	534-52-1 2980-64-5 5787-96-2 2312-76-7
22.	Dichlorvos	95828-55-0
23.	Ethyl p-nitrophenyl benzenethiophosponate (EPN)	2104-64-5
24.	Ethylene dichloride	107-06-2
25.	Ethylene oxide	75-21-8
26.	Endrin	72-20-8
27.	Endosulfan	115-29-7
28.	Endosulfan low grade	115-29-7
29.	Etilen dibromida (EDB) (ethylene dibromide)	72-20-8
30.	Fluoroasetamida (fluoroacetamide)	640-19-7

No.	Active Ingredient	CAS Number
31.	Formaldehida (formaldehyde)	50-00-0
32.	Fosfor kuning (yellow phosphorus)	7723-14-0
33.	Heptaklor (heptachlor)	76-44-8
34.	Heksaklorobenzena (hexachlorobenzene)	118-74-1
35.	Kaptafol (captafol)	2425-06-1
36.	Klordan (chlordane)	57-74-9
37.	Klordekon (chlordecone)	143-50-0
38.	Klordimefon (chlordimefon)	19750-95-9
39.	Leptofos (leptophos)	21609-90-5
40.	Heksakloro Siklo Heksan (mixed isomers) (hexachlorocyclohexane)	608-73-1
41.	Gama Heksakloro Siklo Heksan	58-89-9
42.	Metoksiklor (metoxychlor)	72-43-5
43.	Mevinfos (mevinphos)	26718-65-0
44.	Monosodium metil arsenat (monosodium methylarsenate)/MSMA	2163-80-6
45.	Monokrotofos (monocrotophos)	6923-22-4
46.	Natrium dikromat (sodium dichromate)	7789-12-0
47.	Natrium klorat (sodium chlorate)	7775-09-9
48.	Natrium tribromofenol	591-20-8
49.	Natrium 4-brom-2,5-diklorofenol (natrium 4-brom-2,5-dichlorophenol)	4824-78-6
50.	Metil paration (methyl parathion)	298-00-0
51.	Halogen fenol (halogen phenol) (including Penta)	87-86-5
52.	Paration (parathion)	56-38-2
53.	Salmonella based	
54.	Penta kloro benzena (pentachlorobenzene)	608-93-5
55.	Arsen dan Senyawa arsen (arsenic compound)	1327-53-3, 007440-38-2
56.	Merkuri dan Senyawa merkuri (mercury compound)	10112-91-1, 7546-30-7, 7487- 94-7, 21908-53-2
57.	Striknin (strychnine)	57-24-9
58.	Telodrin (telodrin)	297-78-9
59.	Toksafen (toxaphene)	8001-35-2
60.	Mireks (mirex)	2385-85-5
61.	Asam sulfat (sulphur acid)	7664-93-9

No.	Active Ingredient	CAS Number
62.	Asam perfluoroktana sulfonat and its salts (perfluorooctane sulfonic acid/PFOS, its salt)	1763-23-1
63.	Perfluorooktana sulfonil fluorida (perfluorooctane sufonyl fluoride)	307-35-7
64.	Klorometil metil eter (Bis(chloromethyl)ether; chloromethyl methyl ether (technical-grade)	542-88-1, 107-30-2
65.	Kadmium dan senyawa kadmium (cadmium and cadmium compounds)	7440-43-9
66.	Senyawa kromium (VI) (Chromium (VI) compounds)	18540-29-9
67.	4,4'-metilenbis(2-kloroanilin) (4,4'-Methylenebis(2-chloroaniline)	101-14-4
68.	Tris(2,3-dibromopropil)fosfat (Tris(2,3-dibromopropyl) phosphate)	126-72-7
69.	Prokarbazin hidroklorida (Procarbazine hydrochloride)	366-70-1
70.	Antibiotics	

Forest type project activities involving pest control measures must consider four aspects, namely:

1. Biological aspects of pest (insect, nematodes, fungi, etc.) to decide the right time to control
2. Technical aspects by using simple but effective means.
3. Economical aspect is the inexpensive cost of control or equal to the maximum value of the loss that will be saved and
4. Ecological aspects are the controlling measures which avoid environmental pollution.

Pest control techniques can be applied naturally or artificially. Natural control is the ability to rely on natural pest control components that live in environments without involving the human role. In the contrary, artificial control techniques require humans role and can be physical-mechanical, in silviculture, biological basis, per-laws and regulations, chemical and pest management.

Pest-control in standing forest can be chemically and ecologically very dangerous for the environment and economically very costly, however, how this method can be done in the nursery. Biological pest control, by using predators and parasites as well as planting superior pest-resistant species has become priority alternative in the future because it has competitive advantages and promising prospects.

Framework for Pest Management

Narrative Summary	Expected Results	Performance Indicators	Assumptions/Risks
<p><u>Objective:</u> Increasing the awareness of all stakeholders on IPM approaches to crop management, and train the facilitators, farmers and plant foresters.</p>	<p>Members and stakeholders understand the importance of IPM approach</p>	<ul style="list-style-type: none"> • The increased application of IPM in the Field • Reducing the use of harmful pesticides in the field 	<p>Regulations, the provisions concerning the application of IPM is consistently implemented by the Government.</p>
<p>Activity1 Launch awareness programs</p>	<p>Stakeholders become more aware of the dangers of pesticides.</p> <p>Benchmarks: Electronic media, printed materials, distributed brochures to the stakeholders in the field</p>	<ul style="list-style-type: none"> • Reduced accidents in the handling, use, storage, and disposal pesticide. • The increasing use of bio pesticides • IPM practices adopted 	<p>KPH institution regularly active in information dissemination program</p>
<p>Activity 2 The introduction of IPM</p>	<p>Increased use of organic fertilizers</p> <p>Benchmarks: At project level, introduction to IPM is launched</p>	<ul style="list-style-type: none"> • In the Demonstration Area in different pilot KPHs the usefulness of IPM is demonstrated • Financial incentives are provided for farmers who participate • Monitoring results of the pilot project 	<p>Provincial governments is convinced of the need to introduce environmentally friendly practices in the forestry sector.</p>
<p>Activity 3 Strengthening Institutional Capacity in IPM</p>	<p>All KPH officials are following the development of IPM</p> <p>Benchmarks: Course on IPM for Forestry and district government facilitator so they stay updated of the latest developments</p>	<p>Evidence of improved official's knowledge about IPM Agriculture</p>	<p>The provincial government is committed to encourage and enable the officials to follow IPM training courses</p>

Examples of Forest Pest Management

Research and Development Centre on Forest Productivity Enhancement has been successfully controlling pests and diseases in sengon, Jabon and gmelina as follows:

Table of Type of forest pest and disease control

No.	TYPE	CONTROL
	PEST	
1	<i>Eurema</i> sp. (yellow butterfly)	<ul style="list-style-type: none"> • Insecticide with active ingredient Bacillus thuringiensis at a dose of 0.5 to 2 grams per liter of water and spray directly to the larval body. • Parasitoids Apanteles sp. (Hymenoptera). • Phyto-pesticides from suren leaves soaked for 24 hours then squeezed, later the juice is sprayed.
2	<i>Boktor/Xystrocera festiva</i> (borer pest on sengon stem)	<ul style="list-style-type: none"> • The Beauveria bassiana fungus is obtained by blending 200 grams of fungal inoculum then added to 8 liters of water (25gram per liter of water). • Insecticide with active ingredient Bacillus thuringiensis at a dose of 0.5 to 2 grams per liter of water and spray directly on the larval body.
3	Pocket worm	<ul style="list-style-type: none"> • The Beauveria bassiana fungus is obtained by blending 200 grams of fungal inoculum was added 8 liters of water (25gram per liter of water). • Phyto-Insecticides from gadung yam juice 125g per liter of water, mahogany seeds juice 150g per liter of water by spraying, bacok oles and infusion • Insecticide with active ingredient Bacillus thuringiensis. Systemic insecticide with active ingredient imidacloprid Confidor), methamidophos + boron or borax (1: 10)
4	Uret	<ul style="list-style-type: none"> • Using entomopathogenic fungi Metarrhizium - Insecticide with active ingredient fipronil (Reagent)
5	grayak worm	<ul style="list-style-type: none"> • Insecticide with active ingredient Bacillus thuringiensis, BPMP (Baycarp) and imidacloprid
6	Leaf-eater worm	<ul style="list-style-type: none"> • Insecticides with active ingredient BPMP and imidacloprid
7	Locust	<ul style="list-style-type: none"> • Insecticides with active ingredient BPMP and imidacloprid
8	White lice	<ul style="list-style-type: none"> • Using wood vinegar + Bacillus thuringiensis,
9	kepik renda pest	<ul style="list-style-type: none"> • Insecticide with active ingredient imidacloprid
	DISEASE	
1	Karat tumor disease	<ul style="list-style-type: none"> • Materials used; lime, sulfur and salt (sulfur: limestone + 1: 1; brimstone: salt = 10: 1; lime: salt = 10: 1; sulfur: limestone: salt 10: 10: 1). Treatment; sprayed and coated (materials to spray is more liquid and filtered first, while it is more viscous material for coating). Before the spraying and coating, first, eliminates gall on attacked sengon plants, galls were collected and buried in the ground so as to not contagious. After the galls removed, stem will be coated and sprayed.
2	Spotting leaves disease	<ul style="list-style-type: none"> • Using wood vinegar 40cc per liter of water • Fungicide with active ingredients benomil and active ingredients sulfur
3	Rotten root, tumbled sprout and wilt disease	<ul style="list-style-type: none"> • Using antagonist fungicides Trichoderma and Gliocladium • Fungicides with active ingredient triadimefon (Bayleton)
4	Embun tepung disease	<ul style="list-style-type: none"> • Using fungicide with active ingredient benomil

APPENDIX 5

BIODIVERSITY MANAGEMENT FRAMEWORK AND GENERAL GUIDELINE FOR HIGH CONSERVATION VALUE ASSESSMENTS

1. OBJECTIVES

The objective of this Biodiversity Management framework is to define the approach that will be adopted by the ERP in relation to the assessment, mitigation and management of potential biodiversity issues and impacts.

2. BIODIVERSITY GOALS

The ERP seeks to ensure that the biodiversity in East Kalimantan is not adversely impacted by the implementation of sub-project activities. This goal is aimed to be achieved over the life of the sub-project activities in the region.

To achieve this goal, the ERP commits to:

- Identify important biodiversity features through identification of **High Conservation Values (HCVs)** of relevance to the sub-project activities;
- Develop an **HCV management strategy and action plans** (i.e. **Biodiversity Action Plan**) to maintain and/or enhance biodiversity features/HCVs;
- Develop a **monitoring program on implementation of HCV management measures** capable of providing feedback and any required adjustments to the management strategy and biodiversity action plan; and
- Engage and consult with biodiversity stakeholders at all stages of the program and build cross-sector partnerships with local communities, various levels of national government, non-government organisations and academic institutions.

3. ENVIRONMENTAL ASSESSMENTS AND HIGH CONSERVATION VALUE

The ERP sub-project activities will undertake assessment of potential impacts on biodiversity features and ecosystem services to meet national permitting requirements, and the World Bank OP/BP 4.04 on Natural Habitats. All proposed sub-project activities will be subject to an appropriate level of environmental assessment commensurate with the nature and scope of the proposed activities. The guidance for the environmental assessment and permitting of sub-project activities will take account the requirements of the ERP ESMF and include the national requirements for environmental assessments.

Critical habitats are essentially those areas with high biodiversity values (HCVs) that are identified as government protected forest areas and those considered important for endangered and endemic species, migratory species, threatened and unique ecosystems and areas associated with key evolutionary processes. The HCV process will identify and assess the existence of any HCVs (critical habitats) at the sub-project sites and prepare the required HCV management strategy and action plans, and monitoring program.

4. GENERAL GUIDELINE FOR HIGH CONSERVATION VALUE (HCV) ASSESSMENTS

The HCV process essentially comprises of several phases: i) **HCV area identification phase**, ii) **development of management strategies and actions**, and iii) **monitoring impacts of operations**. The emissions reduction program should be oriented on the attempt to prevent or reduce declining rate of biodiversity conservation, by not causing interference to the sustainability which support the success of local community efforts and also to potential supporting values of successful value-added development, shapes, and usage patterns of sustainable biodiversity

1. HCV Area Identification Phase

The identification and determination of High Conservation Value (HCVs) areas aims at understanding the existence, condition, status, and policy management in each administrative district governments. Hence the policy on area utilization in the landscape management in each district is based on the values of the determining elements of environmental preservation. Elements include structure and function of the biodiversity conservation value in a landscape.

HCV identification processes include six (6) stages: (1) desk study, (2) preparation of field verification, (3) field verification, (4) analysis, evaluation, and delineation, (5) public consultation, and (6) socialization and the determination of management typology. In summary, the work flow process of defining and managing the valued areas is presented in the figure below

Stage 1: Desk study (data and information study)

This stage is the early identification, aims at determining the status of the region and the potential biodiversity, the data or information obtained from BAPPEDA, the related planning offices including BAPEDALDA, NGOs, universities, LIPI and other related parties. Outcomes of desk study stage are the draft of delineation areas of valued biodiversity conservation area. Activities at this stage include the following activities:

- 1) Interpreting satellite imagery map;
- 2) Overlaying the maps; interpretation of satellite imagery, zoning, land-use agreement, agro ecological zones, biodiversity hotspots, topography, climate, and other related maps;
- 3) Analysis of historical land cover and space usage;
- 4) Analysis of the stability of the region;
- 5) Data collecting from public in relation to biodiversity at ecosystems, species and genetic level.

If there is no indication of valued areas for biodiversity conservation in the jurisdiction of a district government, the identification will be stopped at this stage. Meanwhile if there is any indication of the valued region for biodiversity conservation in the work area, then the identification continues to the later stage. The results of this study become the first step. Furthermore, the results of this initial study are used as a reference by departments/agencies to prepare field verification.

Stage 2: Preparation of verification/field studies

This is the stage where in-depth studies were conducted based on the data or information from various sources, including data or reports from departments/agencies. Outcome of this stage is knowledge of the conditions of ecosystems, species and genetic resources in areas suspected to have valued biodiversity conservation. Then field verification methods are compiled as described in the table below and the preparation of tally sheet/data collection form.

Stage 3: Field Verification.

Field verification activity is performed by agencies in accordance with the scope of their work and the methods and tally sheet/form that has been designed on stage 2 activities.

Stage 4: Analysis, evaluation, and delineation.

This stage aims at delineating valued areas for biodiversity in the basis of data or information from field verification results collected from the departments/agencies.

Stage 5: Public Consultation.

Aiming to get input from the public in order to clarify and enrich the areas that have significant value for biodiversity conservation. The public consultation also aims at socializing the findings and delineation of the valued areas for biodiversity conservation hence the stakeholders in the associated areas will be actively involved so that the protection and conservation of biodiversity can be maintained in the long term. In addition, to optimize decision-making which based on data and information and to ensure the interests of the parties involved are accommodated. Public consultation is carried out by inviting interested parties where valued areas for biodiversity conservation located. These stakeholders include local governments, private sector, academia and the public and non-governmental organizations.

Stage 6: Determination of Delineation.

At this stage the results of the delineation process for valued areas for biodiversity conservation are being socialized to public, especially to stakeholders whose areas are included in the delineation, so that the delineation can be determined and agreed upon by all related parties.

Stage 7: Determination of Valuable Areas.

HCV areas that have been identified and disseminated to all stakeholders may need to be appointed by the district government based on law. The agreement on determining valued areas is used as input for the preparation and/or evaluation of provincial or district spatial planning. It is necessary to provide a legal basis for HCVs and provide direction for stakeholder management where HCVs are located. Thus, HCVs as protected areas and/or cultivated area has strong position in the context of biodiversity conservation and the preservation of supporting values on the success of sustainable development in the region. Determination of HCVs is an enabling policy for the realization of regional biodiversity objectives in long-term.

Framework for initial identification of the valued areas for biodiversity conservation

No.	Activity	Purpose	Output	Source
A	Identification of valued areas Status and Potential Biological diversity			
A.1	Area status			
1.1	Study of landscape and seascape	Analysis of land cover	Information on land cover conditions	<ul style="list-style-type: none"> The land cover map (Bappeda, the DFS); Agro-ecological zone map (MOA); Biodiversity hotspots map (Birdlife, CI, NC, WWF).
		Spatial Analysis	Land use information	Land use maps (Bappeda, the DFS, Ministry of Environment and Forestry)
1.2	Study of the history of the area and biodiversity	Analysis of the condition and status of the area (past and present)	Data or information on changing conditions and management of the area	<ul style="list-style-type: none"> Land use data according to time series Public information Research report
1.3	Study of the stability status of the area	Analysis of the legality of the area (de jure and de facto)	Data and information about the legal status of the area	Legislation (laws, government regulations, policies, etc.)
A.2	Biodiversity Potential			
2.1	Study of potential species	Analysis of the condition and status of the species (past and present)	Data or information on changing conditions management of the species	<ul style="list-style-type: none"> Agro-ecological zones (MOA) Public information Research report

No.	Activity	Purpose	Output	Source
2.2	Study of potential Genetic resources	Analysis of conditions and status of Genetic resource (past and present)	Data or information on changing conditions management of Genetic resource	<ul style="list-style-type: none"> • Agro-ecological zones (MOA) • Public information • Research report •
B	Identification of Biodiversity condition in Areas Identified as Valued Areas for Biodiversity Conservation			
B.1	Ecosystem	Knowing the type of ecosystem in the study area which has: <ul style="list-style-type: none"> • uniqueness or distinctiveness; and/or • high species diversity; and/or • Primary ecosystem which is the representation of the ecosystem that has been degraded. 	Data and information on ecosystem: <ul style="list-style-type: none"> • uniqueness or distinctiveness; and/or • high species diversity; and/or • Primary ecosystem which is the representation of the ecosystem that has been degraded. 	<ul style="list-style-type: none"> • Field verification • Check-list (Under Important Ecosystem Criteria).
B.2.	Species (Wild)	Knowing plant and wildlife species in the study area which have: <ul style="list-style-type: none"> • uniqueness or distinctiveness; and/or • extinction threat; and/or • specific habitat needs either partly or fully 	Data and information on the species: <ul style="list-style-type: none"> • uniqueness or distinctiveness; and/or • extinction threat; and/or • specific habitat needs either partly or fully 	<ul style="list-style-type: none"> • Field verification • Check-list (Under Important Species Criteria).

No.	Activity	Purpose	Output	Source
	Genetic Resources	<p>Knowing the varieties of plants, clumps of animals/livestock, and fish strains in the study area that have:</p> <ul style="list-style-type: none"> • uniqueness or distinctiveness of genetic resources; and/or • advantages in terms of resistance to pests and diseases, and/or • advantages in terms of resistance to abiotic stresses (extreme weather, soil acidity, etc.), and/or • advantages in terms of productivity; and/or • advantages in terms of beauty and nature relative to other species analyzed; and/or • high utilization potential in the future; and/or • socio-cultural and/or economy values for local communities and on wider levels; and/or • high thrat of extinction rate 	<p>Data and information on the varieties of plants, clumps of animals/livestock, and fish strains</p> <ul style="list-style-type: none"> • uniqueness or distinctiveness of genetic resources; and/or • advantages in terms of resistance to pests and diseases, and/or • advantages in terms of resistance to abiotic stresses (extreme weather, soil acidity, etc.), and/or • advantages in terms of productivity; and/or • advantages in terms of beauty and nature relative to other species analyzed; and/or • high utilization potential in the future; and/or • socio-cultural and/or economy values for local communities and/or • high threat of extinction rate 	<ul style="list-style-type: none"> • Field verification • Check-list (Under Important SDG Criteria).

Simple tool to identify whether an area has significance value for biodiversity conservation or not, use the following questions:

Table for Identification tool for HCVs

No	Question	Answer	Remarks
1	Is the area a conservation area?	Yes	All conservation areas are critically important for the preservation of Biodiversity, if not, proceed to question number 2.
		No	
2	Does the area have a unique ecosystem?	Yes	If yes, then the area has important value for Biodiversity Conservation, if not, proceed to question number 3.
		No	
3	Does the region have a particular typical species?	Yes	If yes, then the area has important value for Biodiversity Conservation, if not, proceed to question number 4.
		No	
4	Does the region have the typical SDG?	Yes No	If yes, then the area has an important value for the Conservation of Biodiversity, if not, then the region has no significant value for Biodiversity Conservation

2. Developing Management Strategies and Actions

Development of management strategies and actions has purpose to maintain and/or enhance the identified High Conservation Values and to maintain associated High Conservation Value Areas. These strategies and actions are developed to provide the appropriate measures commensurate to the scale of impacts by considering:

- Best Available Information;
- Consultations and solitations with Indigenous Peoples and/or interested and affected stakeholders and/or experts; (people and communities who might be affected by the management strategy and actions, such as indigenous peoples, forest dwellers, neighbouring landowners, local processors, local businesses, forest workers*, land use right holders, organizations acting on behalf of affected stakeholders, for example social and environmental NGOs, labour unions, academics etc); and
- Exploring opportunities for co-management of High Conservation Values.

When the strategy and action plan are completed, the engagement of experts is required to:

- Assess the effectiveness of the management strategies actions to maintain and enhance High Conservation Values and address identified threats. Effectiveness includes the concept that the strategies prevent damage and avoid risks to High Conservation Values, even when the scientific information is incomplete or inconclusive, and when the vulnerability and sensitivity of High Conservation Values are uncertain;
- Conduct field inspection and interview stakeholders to verify the management strategies actions to maintain and enhance High Conservation Values* and address threats; and

- Report the results of the review including recommending requirements for improvements where results are insufficient.

3. Monitoring the Impact of Operations

The monitoring program evaluates:

- The implementation of strategies;
- The implementation of the action plan;
- Compliance with agreements with Indigenous Peoples and local communities achieved through Free Prior and Informed Consent;
- The status of significant concentrations of biodiversity;
- The status of areas on which the concentrations of biological diversity depend; and
- The effectiveness of the management strategies and actions to fully maintain and/or enhance the High Conservation Values. This means that the key metric is not if a plan has been implemented, but if the plan has achieved the desired results.

The monitoring program should:

- Be conducted with appropriate frequency to detect change. Some elements, such as Intact Forest Landscapes, should be monitored annually to ensure there has been no change. Others, such as carbon sequestration will likely not need to be monitored as intensively, depending on the nature of management operations in the forest;
- Consider all High Conservation Values in planning;
- Include measurable targets;
- Describe appropriate action based on observations on High Conservation Values presented by Indigenous Peoples, affected and interested stakeholders, and experts;
- Have sufficient scope, scale and frequency to detect changes in the High Conservation Values relative to the initial baseline assessment;
- Record the results of the monitoring; and
- Provide analysis of the results.

APPENDIX 6

EXAMPLE TERMS OF REFERENCE FOR ENVIRONMENTAL ASSESSMENTS, MANAGEMENT AND MONITORING

The purpose of environmental assessments, management and monitoring is to establish a set of policies and guidelines that will help the PMU in screening, assessing, and monitoring the environmental and social aspects of all projects supported by ERP. The screening process will identify the degree of impact of each proposed sub-projects and types of mitigation measures required. ERP projects, especially those related to livelihood improvement may lead to possible environmental impacts that need to be managed, thus requiring environmental permits by developing the UKL-UPL (Environmental Management and Environmental Monitoring Measures) document or issuing SPPL. It should be noted that project locations must not directly share borders with conservation areas. Otherwise, the submission of an Environmental Impact Analysis Report (ANDAL) is required, in addition to the RKL/RPL (Environmental Management/Monitoring Plan), which must be ratified by the government in order to secure the necessary environmental permit.

It is expected that most key activities will not require specific mitigation measures for environmental impact. However, several key activities may need additional mitigation measures by preparing the UKL-UPL in order to obtain environmental permits. UKL and UPL contain mitigation plans and monitoring of standards to address the typical impacts of construction activities, including workers/community, health and safety, land-related work, and waste management, including hazardous and toxic waste. UKL-UPL must be prepared by competent institutions, and must meet the requirements laid out in Environment Ministerial Regulation No. 16/2012.

Activities that do not require a UKL/UPL document, but must develop the necessary environmental and monitoring measures should issue an SPPL in order to obtain environmental permits.

The following matrix provide the ToR for preparing the UKL-UPL acceptable to the Bank. The TOR builds upon the Gol requirements specified by the Ministry of Environment Regulation No. 16 Year 2012 regarding Guidelines for Preparing Environmental Assessment Documents (AMDALs and UKL-UPLs). The UKL-UPL report essentially contains a summary of the project activities and impacts, and environmental management and monitoring action plans.

UKL-UPL TOR (Gol requirements)	UKL-UPL Acceptable to the Bank
Identity of Initiator: Initiator name, business address, postal code, telephone number, fax number and email	Refer UKL-UPL, no additions required.
Project location and maps	Refer UKL-UPL, no additions required.
Project size and scale	Refer UKL-UPL, no additions required.
Project description/business activity plan: name of project/business activity, map that is built in accordance with cartography rules and/or an adequate illustration of the location, scale/size of	Refer UKL-UPL and add: <ul style="list-style-type: none"> - Description of environmental and social setting at the project site - Summary of alternatives: sites and technology considered - Summary of current and future developments - Basis of design for the project

project/business activity, outline of components of the project/business activity

Matrix on environmental and social impacts (source, type and scale of impact), environmental and social management and monitoring measures (activity, location, and duration/timing), institution/person in charge, remarks

Refer UKL-UPL and add:

- Identification of indirect and cumulative impacts
- Identification of impacts from associated facilities
- Identification of impacts on natural, modified and critical habitats
- Identification of impacts on labor, occupational health and safety and community health and safety
- Identification of impacts related to gender and violence
- Mitigation on creating grievance mechanism
- Cost estimates for management and monitoring actions and sources of funds
- Capacity building and training plans for project owner and contractors
- Institutional arrangements

Requirements for PPLH permits (environmental protection and management)

Refer UKL-UPL, no additions required.

Statement of assurance for UKL-UPL implementation

Refer UKL-UPL, no additions required.

Biblical references

Refer UKL-UPL, no additions required.

Appendices: principle permit, spatial conformity letter, maps, specification/standard sheets, and/or other supporting data

Refer UKL-UPL, no additions required.

Scope of Work:

1. Formulate Project Description. A succinct description of the project should be provided covering each of the project activities, the rationale of the proposed activities and listing of various project benefits. Maps of the project location should also be provided.
2. Review of previous studies. Review of previous studies for the project (conceptual design, FS or other studies) should be done to understand all related aspects, which will inform the identification of potential impacts for the UKL-UPL.
3. Legislative and regulatory review. A review of applicable legal and regulatory provisions should be carried out to understand the legal requirements in implementing the project.
4. Preparation of the environmental profile or environmental setting of the project area of influence based on secondary data. The objective of establishing the project area of influence is to establish the existing environmental conditions of the project area, airshed, watershed, and land features.

5. Determination of potential impact. Based on the environmental profile and project area of influence, and project activities, screening and identification of potential environmental impacts should be carried out and determine the nature of the impact.
6. Stakeholder consultations. Consultations with key stakeholders (experts, NGOs, forest department, government agencies, affected communities, etc.) should be carried out to: i) collect baseline information, ii) obtain a better understanding of the potential impact, iii) appreciated the perspectives of the stakeholders, and iv) secure their active involvement during the subsequent stages of the project. Consultations should be preceded by a systematic stakeholder analysis to identify the relevant stakeholders, include expert opinions and inputs, determine the nature and scope of the consultation, determine the tools to be used in contacting and consulting with each stakeholder.
7. Development of Environmental Management Plan (EMP). The EMP should provide action plans to mitigate the negative impacts of the project and preventive measures necessary. It should identify the means / agency responsible for implementation and recommend a suitable monitoring mechanism for the plan. The EMP should be in the form of contract covenants and should provide cost estimates and also recommend appropriate institutional mechanism.
8. Public disclosure. The UKL-UPL should be disclosed electronically on a website to provide access to the public and mechanism to raise concerns on the document.

Outputs and estimated time schedule:

The UKL-UPL study should be completed within a period of months from the date of contract and the schedule of deliverables specified as below:

1. Inception report – within months of date of award of contract and includes review of legislations and project description.
2. Interim report – within months of date of award of contract, and includes baseline conditions, project area of influence, and identification of potential impacts.
3. Draft report – within months of date of award of contract and includes full contents of UKL-UPL report that is acceptable to the bank and minutes of stakeholders consultation.

Minimum qualification requirements of experts preparing UKL-UPL acceptable to the Bank:

1. UKL-UPL Leader:
 - At least Bachelor's degree in relevant field: environmental and/or social sciences
 - Has training on AMDAL and/or UKL-UPL document preparation
 - At least 3 years of experience in preparing AMDAL and/or UKL-UPL documents
 - Experience working with the World Bank safeguards requirements
2. UKL-UPL member:
 - At least diploma degree in relevant field: environmental and/or social sciences
 - Has training on AMDAL and/or UKL-UPL document preparation
 - Has experience in preparing AMDAL and/or UKL-UPL documents

FORMAT STATEMENT OF UNDERTAKING FOR ENVIRONMENTAL MANAGEMENT AND MONITORING (SPPL)

(For activity plan not requiring any UKL/UPL – based on the Regulation of the Minister of Environment No.16/2012)

We, the undersigned below

Name :

Job position :

Address :

Ph Number :

As party in charge of the environmental management of: [Name of Company/Business :

Address company/Business :

Ph Number of the Company :

Type of Business :

Production Capacity :

Permit already obtained :

Purpose :

Amount of Capital :

Hereinafter, we confirm that we are capable and committed to **implementing the action plans on Environmental and Social Codes of Practices (ESCOPs) attached to this SPPL.**

This SPPL shall be effective from the date of its issuance, up to the completion of our business and/or project activity. If the project undergoes any change of location, design, process, type of raw materials and/or supporting materials, this SPPL must be revised.

Date, Month, Year

Stamp duty of Rp, 6.000, - Signature Company seal

(Name/NIP)

Registry number from the local environment agency	
Date	
Receiver	

[Attached to the SPPL: select the relevant **Environmental and Social Codes of Practices (ESCOP)**]

**APPENDIX 7
FEEDBACK GRIEVANCE AND
REDRESS MECHANISM (FGRM)**

Separate document

**APPENDIX 8
INDIGENOUS PEOPLES PLANNING FRAMEWORK (IPPF)**

Separate document

**APPENDIX 9
RESETTLEMENT PLANNING FRAMEWORK (RPF) AND
PROCESS FRAMEWORK (PF)**

Separate document

APPENDIX 10

PHYSICAL CULTURAL RESOURCES – CHANCE FIND PROCEDURE (PCR-CFP)

A PCR Management Plan is a requirement of Bank OP4.11 when an investment may affect PCR – i.e., resources of archaeological, paleontological, historical, architectural, and religious (including graveyards and burial sites), aesthetic, or other cultural significance. There is no corresponding requirement in Indonesian regulations. If a PCR Management Plan is required, it will be prepared as part of the investment's ESMP, i.e. the UKL or RKL.

The scope of management physical cultural resources includes:

- Conservation: preservation, restoration, reconstruction, adaptation, maintenance, protection; and
- Utilization: publication/presentation, exhibition, revitalization/productive function.

This PCR management approach may be relevant for activities which can potentially affect PCRs or community access to such resources. These may include HCV management, forest protection, and eco-tourism.

Management program follows the conservation procedure that includes inventory, identification, and plan prior to program implementation. Inventory is expected to include:

- PCR profile in the form of list on various PCRs (if any);
- Map of PCR distribution in the appropriate scale.
- Socio-cultural attachment and practices with regards to PCRs

E&S strengthening under the PCR management measures include:

- Village planning should include the PCR management; and
- Allocation of sufficient resources for PCR management
- Community participatory planning processes
- Design preparation:

When there is no known PCR that would be affected by ERP activities, but the work involves site clearing or excavation that could expose PCRs that was not foreseen, a Chance Finds Procedure must be prepared. The chance finds procedure is presented below.

CHANCE FINDS PROCEDURES

Definition

A chance find is archaeological, historical, cultural, and/or remain material encountered unexpectedly during physical investment construction or operation. A chance find procedure is a physical investment-specific procedure which will be followed if previously unknown cultural heritage is encountered during physical investment activities. Such a procedure generally includes a requirement to notify relevant authorities of found objects or sites by cultural heritage experts; to fence off the area of finds or sites to avoid further disturbance; to conduct an assessment of found objects or sites by cultural heritage experts; to identify and implement actions consistent with the requirements of the World Bank and Indonesian law; and to train physical investment personnel and physical investment workers on chance find procedures.

Objectives

To protect physical cultural resources from the adverse impacts of physical investment activities and support their preservation.

To promote the equitable sharing of benefits from the use of Physical Cultural Resources (PCRs).

Procedure

If the proposed activity discovers archeological sites, historical sites, remains, and/or objects, including graveyards and/or individual graves during excavation or construction, the activity shall:

- Halt the construction activities in the area of the chance find;
- Delineate and fence the discovered site or area;
- Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be arranged until the responsible local authorities or the district/provincial Culture and Education Agency, or the local Institute of Archaeology, if available, to take over;
- Forbid any removal of the objects by the workers or other parties;
- Notify all physical investment personnel of the finding and take the preliminary precaution of protection;
- Record the chance find objects and the preliminary actions;
- Notify the responsible local authorities and the relevant Institute of Archeology immediately (within 24 hours or less);

Responsible local authorities would be in charge of protecting and preserving the site before deciding on subsequent appropriate procedures. This would require a preliminary evaluation of the findings to be performed by the local Institute of Archaeology. The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage; these include the aesthetic, historic, scientific or research, social, and economic values;

Decisions on how to handle the finding shall be taken by the responsible authorities. This could include changes in the physical investment layout (such as when finding an irremovable remain of cultural or archeological importance) conservation, preservation, restoration, and/or salvage;

Implementation for the authority decision concerning the management of the finding shall be communicated in writing by relevant local authorities;

The mitigation measures could include the change of proposed project design/layout, protection, conservation, restoration, and/or preservation of the sites and/or objects;

Construction work at the site could resume only after permission is given from the responsible local authorities concerning safeguard of the heritage. The physical investment proponent is responsible for cooperating with the relevant local authorities to monitor all construction activities and ensure that the adequate preservation actions are taken and hence the heritage sites protected.

APPENDIX 11

ASSESSMENT OF ENVIRONMENTAL AND SOCIAL RISKS AND MITIGATION MEASURES FOR ERP SUB COMPONENTS

Appendix 11.1: A summary matrix of Environmental and Social Risks for Each Component under the ERP

Sub-components	Activities	Expected Outcomes	E& S Risks	Proposed Mitigation Measures	Responsible Agency
Component 1: Forest and Land Governance					
1.1 Strengthening the licensing regime	<ul style="list-style-type: none"> • Monitor the enforcement of the moratorium (regulation covers mining, forest, and estate crops); • Strengthen transparency in licensing • Support the review and revocation of existing licenses • Support the expansion of area under social forestry licenses; • Rollout of policies for the protection of remaining forests within licensed areas (intersect with C. 3) 	<ul style="list-style-type: none"> • Strengthened and more transparent Information Management and Documentation related to land-use licensing process; • Permits for forestry, mining, and estate crops are reviewed and revoked where applicable, leading to clearer land-use boundaries; • Land use boundaries are clarified as the forest area demarcation process is completed; • The moratorium on licensing (Governor Regulation 1/2018) continues to be enforced, protecting forested areas potentially at risk of conversion; 	<p>Environment:</p> <ul style="list-style-type: none"> • Improved quality of forest governance will be generally positive contributing to the overall reduction of carbon emissions • Strengthening protection forest potentially reduced level of illegal logging, HCV area, and biodiversity preservation and maintain carbon stock • Clear and clean of land used boundaries <p>Social:</p> <ul style="list-style-type: none"> • Clarification of land used boundaries should be consider the land right of local/indigenous people. • Clear and clean of land used boundaries will reduce social conflict • Sometimes, moratorium regulation also pointed to land with no land management, it will invited illegal activities. 	<ul style="list-style-type: none"> • Establish one map program in East Kalimantan Province • Development of a management framework (guideline) for HCV area management and protection including moratorium area. • Promote development of unit management of moratorium area that was established with no land management, with community-based unit management 	<p>BAPPEDA Economic biro of provincial secretariat Forestry agency Estate crops agency East Kalimantan Mining agency Information and communication agency</p>

Sub-components	Activities	Expected Outcomes	E& S Risks	Proposed Mitigation Measures	Responsible Agency
1.2 Dispute Settlement	<ul style="list-style-type: none"> Support participatory assessments, involving <i>Adat</i> communities to a) map existing and potential conflicts, b) identify existing mechanisms for settling land disputes between the government and adat communities, and c) assess indigenous traditions and knowledge for conflict handling and dispute resolution; Development of community-based conflict handling and resolution mechanism guidelines; Support forest conservation partnerships (for areas with concessions/conservation areas) Development of regulations by the Governor to settle disputes (to address any overlapping areas between forestry and mining or estate crops). Provide option of dispute settlement through RSPO mechanism <p>In addition, conflicts will be further addressed through a number of mitigation actions, such as:</p> <ul style="list-style-type: none"> the development of joint decrees supporting and refining existing local conflict handling protocols 	<ul style="list-style-type: none"> Strengthened conflict resolution mechanisms contribute to improved land governance 	<p>The ER program is expected to accelerate the settlement of land tenure disputes involving communities in state forest areas.</p> <p>Environment:</p> <p>(+) Increased management and protection of forests and biodiversity (+) reduction and or negative impact on the environment can be anticipated or minimized. (+) Deforestation and forest degradation are decreasing (+) Increased population and habitat quality (+) Animal and human conflicts decrease (+) Prevent and or reduce excessive exploitation of SDH and KEHATI (-) Forest degradation and biodiversity and deforestation increase due to management uncertainties during the period of preparation of the status quo mechanism. (+) Improvement of environmental and health management, especially protected populations and wildlife habitats (+) Decreased human conflict and wildlife</p> <p>Social</p>	<ul style="list-style-type: none"> Imaginary boundaries need to be considered within limits that transcend administrative boundaries within the framework of managing natural habitats and living population It is necessary to accelerate the inventory of traditional community areas in developing and managing regional boundaries Regional Strategies and Action Plans (Provinces) need to be developed in terms of conflict resolution / dispute resolution Form an ad hoc regional monitoring team with the status quo when conflict handling mechanisms are being developed If necessary, develop a reward & punishment mechanism for management practices that have an impact (positive / negative) on forests and health Need to develop guidelines for resolving human and wildlife 	<ol style="list-style-type: none"> Forest Management Unit either licence holders of forest area and its resources management or government related authorities (i.e KPH, UPt taman nasional) Land Management Unit mainly oil palm and mining Villages governments Members of forest and land dependent community groups Other relevant agencies (i.e. DPMPD, BPKH, BKSDA Estate Agency, environmental Agency, Energy and Mineral resource Agency, Community empowerment groups/NGOs)).

Sub-components	Activities	Expected Outcomes	E& S Risks	Proposed Mitigation Measures	Responsible Agency
	<ul style="list-style-type: none"> • developing the FGRM which will include a mediation mechanism • identification of tenurial conflicts by FMUs • identification and assessment of existing conflict resolution mechanisms • enhancement of communication between community/customary leaders with company representatives related to the management of HCV areas • capacity building of stakeholders including training for paralegals for community-based conflict handling mechanisms 		<p>(+) Equality of bargaining positions between actors in the management of SDH and Kehati</p> <p>(+) Increasing the understanding of the parties to their rights and responsibilities as well as the risks that might occur as a result of SDH management</p> <p>(+) Increasing community participation in SDH management and awareness</p> <p>(+) Potential social impacts can be anticipated / minimized</p> <p>(+) the dispute resolution process is faster with results that can be accepted by the parties</p> <p>(+) The certainty of environmental management rights and the use of SDH especially for vulnerable and marginalized groups</p> <p>(+) Certainty of the person in charge of environmental management and health</p> <p>(+) Certainty of recipients and benefit sharing of environmental products and services produced</p> <p>(+) Increased responsibility and participation of the parties to regional management</p> <p>(-) Potential uncertainties in handling conflict during the process of developing conflict</p>	<p>conflicts, not limited to orangutans</p> <ul style="list-style-type: none"> • Policy advocacy related to the recognition of MHA in districts / cities • Consider the existence of imaginary boundaries in regional boundaries that exceed administrative limits in the context of natural habitat management and wildlife populations 	

Sub-components	Activities	Expected Outcomes	E& S Risks	Proposed Mitigation Measures	Responsible Agency
			<p>resolution mechanisms (status quo)</p> <p>(-) The potential for dissatisfaction with certain groups has traditionally played a key role in resolving conflicts.</p> <p>(-) Potential loss of rights and access to forest in certain groups</p> <p>(-) The potential for increased burden and management responsibilities in certain groups is mainly related to regional delineation</p>		
1.3 Support for the recognition of adat land	<ul style="list-style-type: none"> Acceleration of the recognition of customary rights and control of land inside forest areas, in accordance with the mechanism stipulated in East Kalimantan Provincial Regulation No. 1/2015; Identification of Adat territories through participatory mapping (participatory mapping for 150 villages); 	<ul style="list-style-type: none"> Customary forest and lands are identified through participatory mappings Adat law communities and their territories are recognized; 	<p>Environment:</p> <p>(+) Reducing Encroachment</p> <p>Social:</p> <p>(+) Reducing Encroachment.</p> <p>(+) Reducing tenure conflicts</p> <p>(+) Increasing certainty of tenure rights</p> <p>(-) Conflict with the unit management</p>	<p>Identification of forestry conflicts based on circular letter Number: SE.1 / Menlhk-II / 2015 concerning Handling of Environmental and Forestry Cases</p> <p>Establishment of Committee for Customary Law Communities in the Regency</p>	<ul style="list-style-type: none"> District DPMPD; Forestry agency of East Kalimantan Assistant I of the Regional Secretariat of East Kalimantan Province
1.4 Strengthening village spatial planning	<ul style="list-style-type: none"> Development of guidelines and regulations for integrating REDD+ activities into village spatial planning; Support to the integration of emission reduction activities into village development plans. which will support communities in integrating REDD+ activities into village spatial and development plans; 	<ul style="list-style-type: none"> Clear guidelines and regulations are in place for integrating REDD+ activities into village spatial planning; Key villages implement Forest Fire Management Plans leading to a reduction of fires 	<p>Environment:</p> <p>(+) Certainty of direction of management of village areas</p> <p>Social</p> <p>(+) village boundary certainty</p> <p>(+) regional certainty and management program</p> <p>(-) village boundary conflicts</p>	<p>Compilation of General Guidelines and Technical Guidelines for Preparation of Village spatial planning</p>	<ul style="list-style-type: none"> East Kalimantan Regional Spatial Planning Coordinating Board (BKPRD) District DPMPD;

Sub-components	Activities	Expected Outcomes	E& S Risks	Proposed Mitigation Measures	Responsible Agency
	<ul style="list-style-type: none"> Establishment of Green Villages, or <i>Kampung Iklim</i> aims to reduce emissions based on village development plan (150 priority villages) 	<ul style="list-style-type: none"> villages incorporate ER activities into their spatial and village development plans (target 150 villages in 7 districts) 			
Component 2: Improving forest supervision and administration					
2.1 Strengthening management capacity within the State Forest Area: FMU development	<ul style="list-style-type: none"> Capacity strengthening for FMUs to manage forest areas and supervise concession companies; Development of (FMUs) planning documents (RPHJP), knowledge exchange, and business development (up to 21 FMUs) Development of guidelines and approaches for monitoring and supporting concessions in the implementation of HCV and RIL policies; Capacity strengthening for FMUs to support and implement Social Forestry programs, supervising, facilitating, and monitoring the implementation of Fire Prevention and Control activities carried out by concessions and local communities; Determination of FMU boundaries and Forest Utilization Blocks; Fire prevention and control through collaboration with concession holders and communities; 	<ul style="list-style-type: none"> FMUs are strengthened by being partially self-financed through sustainable forest-related businesses; FMUs supervise district-level forest concessions and timber plantations for compliance with RIL and HCV policies; 	<p>Environment</p> <ul style="list-style-type: none"> (+) Increased quality of forests and animal habitats due to good management (+) Improving environmental services because of better management practices (+) Clear (Boundary) boundaries between forest management units <p>Social</p> <ul style="list-style-type: none"> (+) efficiency of forest management (+) Institutions of Forestry Management Units are authorized and adequate funding support (+) Decreasing conflict in forest management (+) Protection of the rights of the local (Indigineous) community is considered 	<ul style="list-style-type: none"> Training on sustainable forest management practices for Forest Management Unit staff Share Learning about the role of Forest Management Units in sustainable forest management through the Center Forest Management Unit 	<ul style="list-style-type: none"> Forestry agency of East Kalimantan Environmental and Forestry Education and Training Center (BDLHK)

Sub-components	Activities	Expected Outcomes	E& S Risks	Proposed Mitigation Measures	Responsible Agency
	<ul style="list-style-type: none"> Supporting coordination and learning across FMUs by supporting the FMU Centre, which was established in early 2017 				
2.2 Strengthening provincial and district governments to supervise and monitor the implementation of sustainable Estate Crops	<ul style="list-style-type: none"> Strengthening the capacity of regencies and cities to undertake and achieve the above declaration commitment. Support and develop programs for estate crop concessions to implement ISPO Provisions of technical assistance (and training) to the government agencies for the implementation of the above commitments 	<ul style="list-style-type: none"> The declaration on sustainable estate crops is signed by seven districts and by key companies; Local government agencies have the capacity to oversee and implement the commitment, leading to protection of HCV forests within estate crop areas. 	<p>Environment:</p> <ul style="list-style-type: none"> (+) Reduced emissions from the practice of plantation activities (+) Decreased rate of deforestation from plantation opening (+) Protection of HCV Regions and wildlife habitat (+) Reduced or burning of land in activities - opening - plantations <p>Social</p> <ul style="list-style-type: none"> (+) Decreased conflict between communities and plantation companies (+) Protection of community rights (Indigenous / local) permits (+) Increased economy of the community around the plantation 	<ul style="list-style-type: none"> Training on Sustainable Plantation integration of HCV & Amdal tools, as well as integration in proper valuation Management of HCV areas on plantations 	<ul style="list-style-type: none"> The Provincial Government (Governor) The East Kalimantan Estate Crops Service MoEF's Forestry Education and Training Center (Pusdiklat)
Component 3: Reducing deforestation and forest degradation within licensed areas					
3.1. Implementation of HCV policies for Oil Palm Estates	<ul style="list-style-type: none"> Achieve to maintaining 640,000 ha of natural forests and 50,000 ha of peat land inside estate crop concessions by 2030, in line with the commitment of local governments through the signing of a declaration on the subject. 	<ul style="list-style-type: none"> A substantial increase in the number of estate crop companies implementing sustainable plantation policies (including ISPO, RSPO, and HCV) leads to improved protection of 	<p>Environment:</p> <ul style="list-style-type: none"> (+) improving land management in other use areas and synchronizing provincial and district spatial data (+) protecting forest areas in APL, biodiversity, protected and endangered animals 	<ul style="list-style-type: none"> The concession holder identifies HCV together with the community and related agencies. The concession holder prepares the management and monitoring of HCV 	<ul style="list-style-type: none"> government agencies at the district level; Provincial Forestry Service; Provincial Estate Crop Service; Academics from local universities

Sub-components	Activities	Expected Outcomes	E& S Risks	Proposed Mitigation Measures	Responsible Agency
	<ul style="list-style-type: none"> Mapping for the identification and inventory of HCV areas at existing estate crops and other concessions not yet holding a plantation permit Acceleration of Governor's regulation on HCV guidelines and implementation with regards to sustainable estate crops. Provide guidance and supervision of estate crops in implementing HCV Technical assistance to the companies and to the government agencies for the implementation of HCV commitments. Technical assistance to companies to improve plantation productivity and for fire prevention. Facilitate government supervision on the implementation of HCV management by plantation companies (target set for 150 estate crop companies by 2024) 	<ul style="list-style-type: none"> remaining forests within areas allocated to estate crops; Estate crop companies commit to and implement more sustainable practices; Reduced deforestation through improved management and protection of remaining forests within areas allocated for estate crops; 	<p>(+) maintaining environmental services provided from forested areas including carbon stocks.</p> <p>(+) reduces pollution in other areas of use.</p> <p>Social</p> <p>(+) protect areas that have economic, social and cultural values for the community.</p> <p>(-) has the potential to limit access and community activities to utilize land, timber and non-timber forest products on HCV land and potential conflict with the companies.</p> <p>(-) Communities living around and inside oil palm concessions have the potential to regard HCV areas as land that is not used by concessions, which encourages them to carry out land clearing, illegal logging and mining.</p>	<p>areas involving parties and the community.</p> <ul style="list-style-type: none"> The concession holder disseminates the results of HCV identification to the community and related parties. The concessionaire and the community agree to the existence of the HCV, steps to manage and monitor HCV assets. 	<p>and by specialists from NGOs.</p>
3.2 Support for smallholders and Community Based Fire Management and Monitoring Systems (CBFMMS)	<ul style="list-style-type: none"> Facilitate partnerships between large estate crop companies and local communities in controlling forest and land fires; Facilitate the development of community groups for fire prevention; Provisions of capacity building for the groups (CBFMMS); 	<ul style="list-style-type: none"> Improved management practices by smallholder oil palm farmers leads to reduced deforestation in and around smallholder plantations. 	<p>Environment:</p> <p>(+) Benefits of sustainability for communities and the environment</p> <p>(+) Reduced forest and land fires</p> <p>(+) Reduce conversion of forest to new plantations</p> <p>(+) Increased understanding in the management of sustainable plantations</p>	<ul style="list-style-type: none"> Waste Management Training is an organic fertilizer for the community preparation of technical instructions or guidelines for managing sustainable plantations for small farmers 	<ul style="list-style-type: none"> District Estate crop services; The East Kalimantan Estate Crop Service; Private companies;

Sub-components	Activities	Expected Outcomes	E& S Risks	Proposed Mitigation Measures	Responsible Agency
Target: 150 estate crop companies will develop and implement this initiative model partnership with 180 local farmer groups in controlling forest and land fires.	<ul style="list-style-type: none"> Provisions of technical assistance and training for fire prevention and control by smallholders and relevant equipment for smallholders. Consider to develop early warning system for fire incidents Development of fire protection system through efforts or response to provide fire line of fire breaks, introduction of plantations that can better withhold fires, installation of fire towers, and construction of fire ponds. 		(+) Increased protection of forest and natural habitats Social (+) Increased community awareness for sustainable plantation management (+) Increased Cooperation between Companies and the communities in areal management (+) recognition towards land ownership by communities (+) Increased understanding of the practice of land clearing without burning or controlling combustion on agriculture (-) Increased financial capital requirements for purchasing fire equipment (-) Changes in the culture and technology of land clearing systems	<ul style="list-style-type: none"> Support for the use of intercropping methods for small farmers. Development of standard operation procedures (SOP) for CBFMMS, facilitation for capacity building, monitoring during implementation 	
3.3 Implementation of HCV and RIL policies for Forestry Concessions	<ul style="list-style-type: none"> Support the finalization of the RIL policy; Support concessions in the implementation of RIL and HCV policies; Strengthen HCV monitoring Training on RIL, PHPL, and HCV management (26 trainings on HCV management will be provided by 2024) 	<ul style="list-style-type: none"> The area of sustainably managed forest is increased; Forest concessionaires adopt Sustainable Forest Management practices; Forest management concessions carry out improved forest management practices (Reduced Impact Logging); Timber plantations implement policies to 	Environment: (+) Reduced forest canopy openness (+) Reduced soil erosion (+) Preserve natural seedling at forest floor (+) Enhance forest biomass/carbon stock (+) Preserve non-timber forest products (+) Reduced forest fragmentation (+) Increase intact forest (+) Reduced stream and river muddiness	<ul style="list-style-type: none"> Assuring The DG of Sustainable Production Forest Management, MoEF Reg. No. P.9/2018 concerning RIL Implementation Guidance for forest concession is well implemented and gradually shifted from voluntary to mandatory; Enforcing MoE Reg No. 5/2012 concerning on Environmental Impact 	<ul style="list-style-type: none"> MoEF (DG Sustainable Production Forest Management, DG Forest Planology) MoEF regional/provincial offices under DG Sustainable Production Forest Management and DG Forest Planology Private forest concessions

Sub-components	Activities	Expected Outcomes	E& S Risks	Proposed Mitigation Measures	Responsible Agency
		<p>protect remaining High Conservation Value (HCV) Forests within their concessions</p>	<p>(-) Increased soil compactness at skidding trails</p> <p>(-) Waste from equipment and vehicle operations during RIL practise</p> <p>Social</p> <p>(+) Supply of non-timber forest products for community need remains safe</p> <p>(+) Giant trees are expected remaining safe as host for honey bee</p> <p>(+) Local communities will be exposed by good forestry practise direct or in-direct</p> <p>(+) Sources of fresh water for locals remains safe</p> <p>(-) Local un-skill workers may be replaced by skilled workers from outside the group</p> <p>(-) For locals associated with illegal logging activities may lose their job and income</p>	<ul style="list-style-type: none"> • Assessment;Assuring re-planting as part of silviculture activities are well implemented; • Biodiversity management under HCV through various research, monitoring and publication • Enhancing community capacity through various training related to non timber forest product (access, culture technique, management, production and market); • Strengthening the management of social issues at the program level, including screening of risks as guided by the ESMF; • Tailoring delivery and approach for training based on local contexts; • Strengthening community engagement and consultations, including participatory HCV monitoring; • Ensuring accessibility of the FGSM as well as other appropriate/trusted local channels for filing complaints and/or grievances 	<ul style="list-style-type: none"> • Forest Management Unit • NGO's (TNC, GIZ, GGGI, WWF, etc) • Provincial and district Environmental Offices • Provincial Forestry Offices • National/Regional Forestry Research Institution • Universities

Sub-components	Activities	Expected Outcomes	E& S Risks	Proposed Mitigation Measures	Responsible Agency
Component 4: Sustainable Alternatives for Communities					
4.1 Sustainable livelihoods	<ul style="list-style-type: none"> Facilitate village development planning to integrate sustainable swidden agriculture, paludiculture, mangrove management, smallholder oil palm cultivation, and other sustainable livelihoods. Support and encourage the development of non-palm oil commodities, including the development of the processing and marketing of the non-palm oil produce Provisions of training, workshops, and demonstration plots for non-burning alternatives, sustainable livelihoods options (eco-tourism, friendly pond management, and nipah sugar production), access to financing; Raising awareness of the ecological and social impacts of mangrove conversion, small-holder palm oil plantation; 	<ul style="list-style-type: none"> Reduced conflict in and around conservation forest areas Improved community capacity to respond to forest fires and reduced fire incidence in conservation forest areas Villages implement community-focused investments that lead to emissions reductions and sustainable land use; 	<p>Environment:</p> <ul style="list-style-type: none"> (+) Improved quality and extent of mangroves and coastal management in the program area (+) Increased area of land cover in the cultivation area (+) improved the quality of soil / soil fertility <p>Social</p> <ul style="list-style-type: none"> (+) Increasing the income of the community or the economy of the community that is obtained from the sale of intercropped timber in the fields (+) Strengthening community involvement and empowerment to be involved in natural resource management. (+) Increasing pond fisheries production capacity (-) Gently eliminate the values of traditional wisdom of the Dayak people (-) Decreasing pond production (-) Culture changes and aquaculture system technology 	<ul style="list-style-type: none"> Strengthening BUMDES in the form of management training (Financial / Capital Management, Business Reporting and Development) Development of superior village or community products. Recognition of Indigenous Peoples and Customary Forests Strengthening village innovation programs 	<ul style="list-style-type: none"> East Kalimantan Coastal and Fisheries Service; DPMPD; the provincial forestry service; Forestry agency of East Kalimantan Forest Management Unit
4.2 Conservation partnerships	<ul style="list-style-type: none"> Facilitate conservation partnership in or near conservation areas, which will 	<ul style="list-style-type: none"> Sustainable mangrove and peat practices 	<p>Environment:</p> <ul style="list-style-type: none"> (+) Reduced public pressure on conservation areas 	<ul style="list-style-type: none"> Minimize the opening of the area for 	<ul style="list-style-type: none"> MoEF's DG of Forest Conservation

Sub-components	Activities	Expected Outcomes	E& S Risks	Proposed Mitigation Measures	Responsible Agency
<p>The program will target six conservation areas (Kutai National Park, Muarakaman/Sedulang Natural Reserve, Teluk Adang Natural Reserve, Teluk Apar Natural Reserve, Padang Luway Natural Reserve, Tahura Soeharto) and will provide training for 18 village communities on alternative livelihoods.</p>	<ul style="list-style-type: none"> include support for sustainable livelihoods (NTFP); Community training in four conservation areas (forest protection and sustainable utilization of areas surrounding conservation areas, sustainable aquaculture/fish ponds (<i>tambak</i>)) Identification of potential sustainable business opportunities (NTFP + ecological services) Undertake emergency decisions to enter nature reserves/sanctuaries (<i>cagar alam</i>) to put out fires. Develop and conduct awareness raising programs to include new settlers to the area (urban and non-urban settlers) and also the local community to support protection of forest areas. 	<ul style="list-style-type: none"> declared and adopted by stakeholders Number of small-scale commercial producers and other parts of the value chain provided capital as a result of carbon and non-carbon benefit sharing mechanisms 	<ul style="list-style-type: none"> (+) Reduced threat of forest fires (-) The opening of the area on a small scale due to the construction of supporting facilities / infrastructure <p>Social</p> <ul style="list-style-type: none"> (+) Open employment opportunities for the community (+) Increased income of the community (+) Increased community human resource capacity (+) Increased sense of ownership of the community towards conservation areas so that community participation will be more active 	<ul style="list-style-type: none"> construction of facilities / infrastructure Making customized technical designs with the characteristics of a conservation area 	<ul style="list-style-type: none"> Forestry agency of East Kalimantan Conservation Of FMU
<p>4.3 Social forestry</p> <p>It is expected that by 2024 there will be 341 licenses issued by MoEF on social forestry. The ER program will target 85 villages.</p>	<ul style="list-style-type: none"> Empowerment of village institutions (village forest management agencies) and capacity building of community businesses (70 business plans developed by 2024); Formulation and facilitation of the community and village program and training (in 50 villages); 	<ul style="list-style-type: none"> Increased establishment of social forestry groups (RKU) leading to sustainable livelihood options and reduced deforestation from encroachment in forested areas. An increase in social forestry licenses promotes sustainable forestry and provides 	<p>Environment:</p> <ul style="list-style-type: none"> (+) Improved biodiversity value (+) improved water catchment area (+) Reduced forest degradation and deforestation (+) Better protection of conservation forest (+) Better protection and improved mangrove ecosystem 	<ul style="list-style-type: none"> Strengthening FGRM for the project level and link to the national FGRM (under the MOEF, DG of PSKL) Transparent information on social forestry licensing process to enable effective monitoring for any violation of permit and concession boundary 	<ul style="list-style-type: none"> Director General of PSKL as the person in charge, Regional BPSKL Kalimantan and East Kalimantan Provincial Forest Service as monitors of the implementation of activities in the field

Sub-components	Activities	Expected Outcomes	E& S Risks	Proposed Mitigation Measures	Responsible Agency
	<ul style="list-style-type: none"> • Coaching and mentoring for the implementation of work plans and business plans. • Support through facilitators and/or field coordinators to obtain access to permitting process for social forestry programs at 85 targeted villages (note: task force for social forestry has already been established). • 	<p>alternative livelihoods to local communities</p>	<p>(+) Improved the quality of forest management (+) Increased protection of forested areas and biodiversity (+) Maintaining carbon stocks and reducing illegal logging</p> <p>Social (+) Improved access to forest resources and improved community livelihood (+) Improved capacity of community group related to social forestry (+) Improved capacity on forest conservation (+) Improved access to forest by the forest conservation partnership scheme (+) Sustainable income generation for local communities (+) More benefit for local community (environmental services, e.g., ecotourism, and economic activities) (+) implementation at the district level will be more clear</p>	<ul style="list-style-type: none"> • Development of IPPF with clear definition of Indigenous peoples, and contribution of adat in social forestry schemes • Enforcing East Kalimantan Perda No 2/2016 and MoEF Regulation No P.31/2017 • Development of BMF for the Project, or inclusion of biodiversity management under HCV or non-carbon benefit 	<ul style="list-style-type: none"> • UPT BPSKL Regional Kalimantan, in terms of KLHK regulation enforcement, also ESMF, FGRM, IPPF, GAP. and the BMF about PS • UPT BDLHK in terms of training and capacity building

Sub-components	Activities	Expected Outcomes	E& S Risks	Proposed Mitigation Measures	Responsible Agency
			<p>because the District will form a team of inventory and verification of customary forest communities and the Bupati will determine the MHA, articles 9-11</p> <p>(+) the public has clearer administrative boundaries</p> <p>(+) assistance to access to community managed areas can be programmed</p> <p>(+) Financing/Funding the development of business plans and implementation can be implemented programmed</p> <p>(-) Potential conflict due to not all community members have a chance to participate and lack of awareness on forest conservation</p> <p>(-) customary (adat) is not properly recognised, as adat involvement is not limited to only customary forest (Hutan Adat).</p> <p>(-) communities with limited forest areas find it difficult to obtain this program</p>		
Component 5: Project Management and Monitoring					
5.1 Project coordination and management	<p>5.1.1. Management and coordination of ER program implementation across levels:</p> <ul style="list-style-type: none"> Strengthening institutions for ER project management and coordination across sectors Developing coordination mechanism 	<ul style="list-style-type: none"> ER project management and coordination across sectors strengthen coordination mechanism 	No social and environmental risks envisaged.	This component is intended to strengthen safeguards management for the Program	National and Provincial Governments

Sub-components	Activities	Expected Outcomes	E& S Risks	Proposed Mitigation Measures	Responsible Agency
	5.1.2. Provision of operating costs for ER program implementation: <ul style="list-style-type: none"> Developing financial management system for ER program Providing training on Financial management 	<ul style="list-style-type: none"> financial management system for ER program establish 	No social and environmental risks envisaged.	This component is intended to strengthen safeguards management for the Program	National and Provincial Governments
5.2 Monitoring and evaluation	5.2.1. Implementation of monitoring and evaluation for ER program implementation: <ul style="list-style-type: none"> Training on SESA and ESMF; Monitoring and evaluation of SESA and ESMF implementation; Training on monitoring (incl. safeguards); Monitoring and evaluation of ER Program implementation; Development and implementation of HCV monitoring system 	<ul style="list-style-type: none"> SESA, ESMF, ERP Implemented 	No social and environmental risks envisaged.	This component is intended to strengthen safeguards management for the Program	National and Provincial Governments
	5.2.2. Measurement and Reporting: <ul style="list-style-type: none"> Improving activity data through ground truthing; Improving emission factor data through Permanent Sampling Plots; Developing capacity on ER Measurement; Updating satellite imagery on ER Accounting Area; Developing and implementing the sub-national MMR System (including SIS) 	<ul style="list-style-type: none"> ER Reported 	No social and environmental risks envisaged.	This component is intended to strengthen safeguards management for the Program	Provincial Government
5.3 Program communication	5.3.1 Knowledge management: <ul style="list-style-type: none"> Knowledge management database development and maintenance 	<ul style="list-style-type: none"> Data managed and public informed 	No social and environmental risks envisaged.	This component is intended to strengthen safeguards management for the Program	National and Provincial Governments

Sub-components	Activities	Expected Outcomes	E& S Risks	Proposed Mitigation Measures	Responsible Agency
	<ul style="list-style-type: none"> Developing information, education and communication materials for shared learning 				
	5.3.2 Information dissemination: <ul style="list-style-type: none"> Establishing and maintaining ER program website; Dissemination of information, education and communication materials 	<ul style="list-style-type: none"> TBD 	No social and environmental risks envisaged.	This component is intended to strengthen safeguards management for the Program	National and Provincial Governments

Appendix 11.2: Social Risk Summary

A Indigenous Peoples and Land Tenure

East Kalimantan Province has a population of 3.5 million (2016) and is home to a large variety of ethnic groups. The majority of these are classified under the common banner of Dayak, a broad term referring to the various indigenous tribal societies inhabiting the upstream areas of Kalimantan. There are broadly four main Dayak ethnic groups in East Kalimantan – the Apo Kayan, Punan, Ot Danum and Basap. Each of these can be divided into a number of sub-groups, which are spread across the province. Most Dayak groups still maintain their distinct collective identities, preserve their own language (besides Bahasa Indonesia), and depend on agricultural subsistence for livelihoods. (e.g. shifting cultivation). In addition to Dayak groups, East Kalimantan is also home to several Malay communities (Kutai, Berau, Paser) that would likely qualify as *Masyarakat Hukum Adat*. There are also large groups of Javanese, Chinese, Banjar, Bugis, and other ethnics groups from outside Kalimantan. Bugis and Malays, who are mostly Muslims, dominate the south and most of the coastal areas; the north and northwest are home to Christian minorities and indigenous peoples.

Dayak groups were traditionally shifting cultivators or hunting societies governed by customary institutions. Shifting cultivation occurred predominantly in secondary forests with a long history of land use, hence these farming methods were relatively sustainable. For centuries Dayak communities have engaged in complex systems of sustainable forest management, deploying traditional knowledge to cultivate a high number of resources on relatively small plots of land (Crevello, 2003; 2004).

Cropping systems and rotational cycles on land plots varied per group. For many Dayak communities - for example the Benuaq - hunting in natural forests was a primary source of livelihood. Other groups like the Kenyah have a long tradition of growing taro and non-irrigated rice in swamp areas. However, in recent decades, many Dayak communities have adopted other farming methods and have moved to more permanent settlements, due to demographic shifts as a result of previous government programs, population mobility and growth. Irreversible change caused by the mining and logging industries left a permanent mark on Dayak traditions. In addition, the rapid conversion of forests into large rubber and oil palm plantations has made traditional farming practices impossible in many areas.

A number of Dayak communities in East Kalimantan nevertheless still practice traditional farming methods in forest areas. At present, *umaq* (non-irrigated rice) is still grown by some Dayak communities, while hunting and the collection of non-timber forest products (NTFP's) – i.e. honey, wax, nuts and bird nests - also persist (worldagroforestry, 2004). Moreover, *simpukng* (indigenous forest gardens) are still of importance in traditional farming systems, although the mining and logging industries threaten their existence. *Simpukng* are collectively managed secondary forests where Dayak communities plant fruits, rattan, bamboo and timber. They are either owned by families or communally owned by larger communities. The use of these forests is subject to customary rules. These rules regulate the gender division of labour and also serve to prevent over-exploitation of forests (Mulyoutami et al, 2009).

The existence of *Masyarakat Hukum Adat* is recognized by the Constitution, namely in Article 18 and its explanatory memorandum. It states that with regard to regulating self-governing regions and *Masyarakat Hukum Adat*, the government needs to respect the ancestral rights of those polities. After the 2002 amendment of the Constitution, recognition of the existence of *Masyarakat Hukum Adat* was provided in Article 18 B Para. 2 and Article 28 I Para. 3. The criteria for identification of *Masyarakat Hukum Adat* and adat land rights are stipulated in Indonesian legislation such as the Forestry Law (Law No. 41/1999), the

Village Law (Law No. 6/2014) and several ministerial regulations, most notably Minister of Home Affairs Regulation No. 54/2014.

A major land reform program related to the State Forest is the planned process of formally recognizing *Hutan Adat* throughout the archipelago. In May 2013, the Constitutional Court issued a landmark ruling (No. 35/2012) deciding that *Hutan Adat* would no longer be administered as state forests (*hutan negara*) but were to become collectively owned by *Masyarakat Adat* as private forest (*hutan hak*). The MoEF has established a working group to follow up on this decision and enacted several implementing ministerial regulations to clarify the procedure of *Hutan Adat* recognition. In practice however, the realization of *Hutan Adat* rights is far from an easy, clear-cut process. Only those communities formally recognized as *Masyarakat Hukum Adat* can obtain *Hutan Adat* rights. In order to qualify as such, communities must meet a number of defining characteristics, which include the existence of a traditional communal territory, well-functioning traditional institutions and the existence of a clear leadership hierarchy.¹⁵ Before the MoEF can transfer *Hutan Adat* rights to communities, *Masyarakat Hukum Adat* need to be recognized by their regional governments, either at the level of district or province.¹⁶

The ER Program is located in East Kalimantan Province area, which consists of seven districts, three cities, 103 sub-districts, 1,026 villages, 20 Forest Management Units (FMU), and six conservation forest areas. It includes concessions for plantations, monoculture timber plantations, mining, logging, ecosystem restoration, and social forestry. The East Kalimantan Province is the third largest province in Indonesia, covering 6.6% of the total territory of the country.

Project affected communities are located in rural areas, both inside and outside of forest area. Based on the recent study conducted by Sulistioadi, *et.al.* (2017), the lands claimed by the *communities* are around 1 million hectares. These communities managed the land for settlements, planting, and social facilities and worship.

The analysis provided in the SESA also identified overlapping areas between *Adat* land and forest and plantation concessions (Palm Oil), which suggests potential risks (e.g., tenurial conflicts and access restrictions following improved forest management).

Land use in Kalimantan involves collection of non-timber forest products such as resin and rattan resin and various forms of Agroforestry practices. Such land use is believed to preserve important forest functions, including biodiversity and carbon sequestration. In addition, there are also areas that are culturally important for forest communities such as burial grounds, springs, and ancestral territories.

Specific measures to address indigenous peoples provisions are defined in the IPPF that has been developed in conjunction with the overall ERP (Appendix 9).

B Involuntary Resettlement and Access Restrictions

ERP does not cause risks and impacts of resettlement and access restrictions, but for the fulfillment of the precautionary principle, this section is included in this document. The governing framework for the handling of tenure settlements in the Forest Areas (PPTKH) is set out in the Presidential Regulation No. 88/2017. The regulation sets out several measures to address forest occupation and/or encroachments

¹⁵ Stipulated in the elucidation of Article 67 of Forestry Law No. 41/1999

¹⁶ Article 6 of Ministerial Regulation no. 32/2015 of the Minister of MoEF on Private Forest Rights (*Hutan Hak*).

depending on the functions of the forest estates concerned (i.e. conservation, protection and production), as outlined in **Error! Reference source not found.**

Options for Land Tenure Settlements within the Forest Estates

Options	Conditions/requirements
Occupation and/or encroachment before the designation of forest estates (<i>penunjukan</i>)	
Land parcels/part of parcels to be enclaved and excised from the forest estates	Land in question has been occupied and/or titles have been granted prior to the designation of forest estates;
Occupation and/or encroachment following the designation of forest estates (<i>penunjukan</i>)	
Land parcels/part of parcels to be enclaved and excised from the forest estates	Occupation for settlement purposes and/or establishment of public and social facilities in areas no longer classified as protection or conservation zones. Land in question has been utilized for agricultural purposes for more than 20 consecutive years Note: Enclaved land parcels could be subject to the Land Distribution Schemes (TORA) and registration, including titling is to be processed through PTSL.
Land swap	Occupation for settlement purposes and/or establishment of public and social facilities in areas no longer classified as protection or conservation zones (applies to provinces whose forest cover equals to or is less than 30% of the total size of watersheds and/or land masses within provincial administrative5 jurisdictions)
Social forestry schemes	Land in question has been utilized for agricultural purposes for less than 20 years. These schemes apply to provinces whose size of the forest estates equal to or are less than 30% of the total size of watersheds and/or land masses within provincial administrative jurisdictions regardless of the length of occupation.
Resettlement	Land in question is classified within the conservation zone regardless of the use (e.g. settlements, agricultural purposes and other land uses); Occupation for settlement purposes and/or establishment of public facilities in protection forests. Note: In provinces whose size of forest estates equals to or is less than 30% of the total size of watersheds and/or land masses within provincial administrative jurisdictions, resettlement options can also be applied to forest occupation for settlement purposes and/or establishment of public and social facilities in production forests under the discretion of MOEF.

Unlawful resettlement for informal settlements on State Lands is prohibited under the current laws. Under the PPTKH scheme described in **Error! Reference source not found.**, land in question must be free from any encumbrances and/or disputes with other parties. The schemes offered for tenure settlements can only be enforceable when land disputes have been settled through a separate process (e.g. mediation and/or court resolution). Government agencies involved are prohibited from enforcing evictions, criminalizing land claimants, closing access to land, and/or imposing any forms of access restrictions during the implementation of forest tenure settlements. These requirements would enable investments in community facilitation and engagement, to which the Gol is committed to providing further support and facilitation under the ERP. The ESMF will ensure that resettlement will only be enforced when other options have been exhausted, and the ERP will ensure that action plans satisfying key requirements of OP 4.12 as well as OP 4.10 for indigenous peoples are in place and consulted broadly

with affected parties before any action with resettlement and/or access restriction impacts can be carried out.

On concerns related to access restrictions, under the Agrarian Reform Program, the GoI is committed to protecting the rights of the poor, including informal occupants within the forest estates (*Kawasan Hutan*). Under the current PPTKH regulation, social forestry schemes are considered as preferable options to address tenure issues within the forest estates. Social Forestry can therefore be considered as the GoI's Process Framework to provide forest dependent communities access to land and natural resources for livelihoods. The types of social forestry schemes are presented in the following table (**Error! Reference source not found.**):

Social Forestry Schemes

State Forest

Hutan Kemasyarakatan/HKm (community forests)

The legal basis for HKm includes the Forestry Law No. 41/1999, further elaborated in MOEF regulations No.6/2007 and No. 88/2014. HKm is aimed at enabling community empowerment through community groups. Permits are valid for 35 years and are renewable. Permit holders/community groups are only allowed to harvest Non-Timber Forest Products (NTFPs) if permits are issued in the protection forest zone. Timber extraction is only allowed in the production forest zone.

Hutan Tanaman Rakyat/HTR (community timber plantations)

The legal basis for HTR is the Government Regulation No. 6/2007 (amended through the Government Regulation No. 3/2008 and MOEF Regulation No. 23/2007 (amended through MOEF Regulation No. 83/2016). HTR is aimed at supporting community groups who work in the timber-based industries. Community groups who have received a HTR license can develop forest plantations and can harvest the timber.

Hutan Desa/HD (village forests)

The legal basis for a village forest is the Forestry Law 41/1999, followed by a ministerial regulation of MOEF No. 89/2014 to elaborate the process and institutional arrangements. This scheme enables state-sponsored community empowerment through village-based institutions. Permits for village forests can be issued for forest estates classified as production and protection forests and are valid for 35 years. If permits are issued in the protection forest zone, use of forest resources is limited to NTFPs and other environmental services, such as ecotourism. Timber harvesting is allowed in the production forest zone.

Kemitraan Kehutanan (forestry partnership)

The legal basis for a forestry partnership is the Forestry Law 41/1999, Government Regulation No 6/2007, MOEF Regulation No. 83/2016 about social forestry and DG Regulation P.18/PSKL/SET/PSL.0/11/2016 concerning the preparation of partnership agreement. Forestry partnership enable community who live in and around the forest area cooperates with the forest concession holder and with the forest management unit to manage forest area and to utilize the timber and non-timber forest products.

Title Forests (*Hutan Hak*)

Hutan Adat (customary forests)

Constitutional Court Ruling No. 35/2013 and MoEF Regulation No.21/2019 on adat forest and title forests enable ownership rights of forestland to customary communities and other local communities under adat forest and title forest schemes (outside the state forest estates). The latter regulation divides Forest Areas into three separate categories: state forest, titled forest and customary forest (*hutan adat*) These communities are eligible for this scheme if they have been utilizing the land for 20 consecutive years or more.

Customary forest (Hutan Adat) is the most significant forest scheme as it recognizes customary territory and offers the most expansive rights over land and forest resources to Adat communities and represents land ownership within Forest Areas. Land rights are held by the communities in perpetuity. The other social forestry

APPENDIX 12

TERMS OF REFERENCE FOR ENVIRONMENTAL AND SOCIAL SAFEGUARDS TEAM FOR THE ERP IMPLEMENTATION

A EAST KALIMANTAN JURISDICTIONAL EMISSION REDUCTION PROGRAM

The East Kalimantan Jurisdictional Emission Reductions Program (ER Program) is a globally important project for addressing deforestation and climate change. The ER Program aims to reduce deforestation and forest degradation in an area that covers the entire 12.7 million hectares that comprise the Province of East Kalimantan. Around half of that area is covered by tropical rainforests which are home to a wealth of globally significant biodiversity, and that support indigenous and other local communities. In the ten-year period from 2006 to 2016 around 15% of that forest was lost mainly due to the expansion of oil palm areas, timber plantations and mining. In addition to reducing emissions from deforestation and forest degradation, the ER Program will support improved land governance, improve the livelihoods of local communities, and protect the habitat of numerous vulnerable and endangered species. The ER Program is also an important step toward the establishment of a national REDD+ mechanism in Indonesia, which will provide incentives for protecting one of the world's largest and most biodiverse tropical rainforests.

The ER Program is part of significant efforts by the national and provincial governments to reduce deforestation and degradation, and to set Indonesia and East Kalimantan on a path of green development. Indonesia has committed to a reduction of up to 41% of its greenhouse gas emissions by 2030 with international support, and the country recognizes that a significant share of emission reductions will have to come from reducing deforestation and degradation. Gol and East Kalimantan's Government have launched a number of important reforms including a moratorium on new licenses in primary and peatland forests, policies for more sustainable plantation and forest management, revocation of mining licenses, and improved recognition of the land rights of Indigenous Peoples. The ER Program is an important catalyst for further implementation of reforms and is fully integrated into East Kalimantan's development planning processes.

The ER Program will address deforestation by addressing underlying governance issues through policy reforms, by engaging with oil palm and forestry companies, and by engaging with local communities. The ER program will support a combination of enabling conditions and promotion of sustainable management practices that will directly address the underlying drivers of emissions. The program design considers the distribution of remaining forests, the threats to those forests, and the key stakeholders involved. The program has four main components:

- Components 1 and 2 address weak land governance and weak forest administration respectively. Component 1 addresses weakness in the licensing regime, seeks to accelerate the recognition of indigenous land claims, and addresses conflict over land access. Component 2 strengthens the capacity of the government to protect remaining forests by strengthening Forest Management Units to oversee State Forest Areas, strengthening sustainable development planning at the village level, and strengthening the role of government agencies in supporting sustainable estate crop plantations.
- Component 3 will support more sustainable management practices of oil palm and forestry companies and will protect remaining High Conservation Value Forests (HCVF) within their licensed areas. The ER Program will work with key actors to support them in adopting and implementing sustainability approaches, centered around the recently developed HCV and SFM

policies. In addition, the component will address the underlying drivers of fire through technical assistance for fire prevention and support for Community Based Fire Management and Monitoring Systems.

- Component 4 addresses deforestation linked to encroachment and agriculture mainly by providing alternative livelihood opportunities. The component will support the government's social forestry programs, as well as partnerships around conservation areas, and will provide sustainable livelihood opportunities to local communities, including through village development programs.

The ER Program is expected to lead to (gross) emission reductions of 86.3 million tCO₂e over a five-year period (2020-2024). Close to half of this is expected to come from reduced deforestation within areas allocated to estate crops. All emission reductions will be registered with the National Registry System which is managed together with the national MRV system by the Climate Change DG of the MoEF. In addition to emission reductions, the Monitoring Measuring and Reporting system will also cover the key non-carbon benefits generated by the program.

Gol has mainstreamed environmental and social risk mitigation measures into the ER program development. The advanced drafts of a SESA, ESMF, IPPF, RPF, and PF as well as FGRM have been prepared in line with the World Bank's safeguards policy requirements. Using the available information and consensus generated through the SESA and earlier safeguards processes, MoEF in close collaboration with the East Kalimantan Government has developed an ESMF to manage environmental and social risks under the ER Program. The safeguards instruments, supported with analytical processes through the SESA, are expected to enhance the existing country systems for the management of environmental and social aspects of the ER Program.

B PRINCIPLES AND OBJECTIVES OF THE SESA AND ESMF

The ERP should ensure that implementation of REDD+ programs and activities will not cause adverse social and environmental impacts, while striving to enhance benefits for local communities and the environment.

A Strategic Environmental and Social Assessment (SESA) was developed as part of the ERP preparation. The SESA enabled extensive consultations with a broad range of national and sub-national stakeholders, including potentially affected communities to integrate social and environmental concerns into the upstream policy-making process. The SESA serves the basis for an Integrated Environmental and Social Management Framework (ESMF), which will guide potential investments in the proposed emission reduction programs toward compliance with World Bank safeguards policies.

The ESMF provides an analysis of potential risks and impacts associated with future REDD+ initiatives and will include adequate safeguard measures based on relevant typologies of activities and ER strategic options. The ESMF sets out the principles, guidelines, and procedures to assess environmental and social risks and proposes measures to reduce, mitigate, and/or offset potential adverse environmental and social impacts and enhance positive impacts and opportunities of said projects, activities, or policies/regulations. The following World Bank safeguard policies have been triggered by the ERP:

- Environmental Assessment (OP/BP 4.01)
- Natural Habitats (OP/BP 4.04)
- Forests (OP/BP 4.36)
- Pest Management (OP 4.09)
- Physical Cultural Resources (OP/BP 4.11)
- Indigenous Peoples (OP/BP 4.10)
- Involuntary Resettlement (OP/BP 4.12)

The Environmental and Social Safeguards team shall ensure that the provisions of the safeguards policies and procedures above are adequately accommodated in the ESMF to ensure that the ERP initiatives achieve objectives materially consistent with the OPs/BPs triggered.

C THE SCOPE OF THE ASSIGNMENT

The environmental and social team will work under coordination and supervision of DGCC and SEKDA to support safeguards implementation and supervision, including grievance management as well as mobilization of technical support and capacity building as necessary to enable effective safeguards and FGRM implementation. The team will be guided by the ESMF and the Project Operation Manual (POM) to ensure compliance with the Gol's policies and the World Bank Safeguard Policies relevant to the Program. The team are expected to participate in WB missions and provide up to date information related to social safeguards and grievance management at the implementation level. On a regular basis, the expert is also expected to provide workplans and activity reports.

The environmental and social safeguards team is required to facilitate assessment and technical assistance to implementing agencies and consultation processes to ensure that key provisions in the ESMF are met. Each of these responsibilities is further elaborated as follows:

1. Preparation of Environmental and Social Safeguards Plans

- a. Provide technical advice and operational support to implementing agencies in the preparation of safeguards plans relevant to sub-project activities in line with the ESMF and update environmental and social risks as the ER program is being implemented. References of relevant frameworks of such plans can be found in Appendix 6 (TOR for Environmental Assessment, Management and Monitoring), Appendix 8 IPPF, and Appendix 9 RPF and PF.
- b. Facilitate stakeholder engagement, including public consultations for the preparation of the relevant safeguards plans as relevant to the Program;
- c. Support DGCC/SEKDA through the Program Coordinator, in particular coordinating, reviewing, supervising implementation of the required safeguards plans under the ER Program's Environmental and Social Management Framework (ESMF);
- d. Liaise with Provincial and District Environmental Services in ensuring effective oversight of environmental and social aspects of the Program, including troubleshooting as required.

2. Safeguards Management

- a. Prepare a capacity building strategy for the roll-out of the ESMF and its associated frameworks as well as the FGRM, including safeguards training plans and mentoring support to relevant implementing agencies;
- b. In collaboration with the Provincial and District Environmental Services, supervise the overall implementation of the Environmental and Social Management Framework (ESMF) and FGRM and document lessons-learnt;
- c. Provide technical support to DGCC, SEKDA and relevant sub-national government agencies implementing ERP activities in overseeing risks and identifying opportunities associated with ER activities including but not limited to: land tenure, conflict and dispute settlements, community participation, social inclusion, gender, access to benefits and access to FGRM under the program;
- d. Coordinate and oversee the implementation of the FGRM system for the Program, identify areas for improvements and/or strengthening as well as identify bottlenecks and provide recommendations as the system is being tested and/or implemented;
- e. Contribute to documentation of good practices and lessons-learnt including knowledge-exchange initiatives related to the ER Program;

3. Communication and Coordination

- a. Provide technical support in developing an operational strategy for community engagement in low emission development activities, particularly overseeing FPIC implementation to ensure consistency of principles as outlined in the IPPF;
- b. Support stakeholder engagement and community consultations to ensure that the Program is broadly communicated, including the BSP for the program and there are feedback loops for any concerns, grievances and suggestions during preparation and implementation of the ER activities;
- c. Build and maintain strong cooperation and coordination with project implementing agencies and stakeholders both at national and sub national levels;

- d. Collaborate with relevant stakeholders to improve safeguards management and establish networks and maintain contacts with appropriate government officials in MoEF, FMU, sub national governments, including village governments;
- e. In collaboration with relevant team members, assess the implementation of the Program's BSP, particularly at the community level and identify if there are access gaps or social inclusion issues that need to be addressed;

4. Monitoring and Reporting

- a. Supervise management of environmental and social risks that may emerge and are triggered by project initiatives and provide mitigation strategies;
- b. Report and provide recommendations to DGCC, SEKDA, Provincial and District Environmental Services and relevant PICs at the provincial and district levels if there are emerging safeguards risks and escalate to the relevant agencies as necessary;
- c. Monitor any emerging social risks, including changes in political economy situations that may affect risk levels and provide recommendations in due time to DGCC, SEKDA and Provincial and District Environmental Services as well as relevant agencies as necessary;
- d. Document and provide review of the overall safeguards implementation;
- e. Periodically review and evaluate the effectiveness the FGRM system (twice a year) in consultation with project implementers, affected stakeholders, including communities and recommend action plans to strengthen the system;

D DELIVERABLES

- a. Periodic reports (quarterly) on social safeguards implementation (management, communication, coordination, monitoring and evaluation);
- b. Workplan for technical support for social safeguards, including preparation of relevant action plans and their implementation;
- c. Safeguards capacity building strategy and workplan under the Program;
- d. Reports on technical assistance to implementing agencies in the preparation of relevant environmental and social management plans (i.e. ESMP/UKL-UPL, SPPL, PoA, IPP, as applicable)

E TEAM QUALIFICATIONS

The consultant team will at least consist of:

- a. **Safeguards Coordinator** preferably with a graduate degree in environmental or social science (particularly social management in the forestry or natural resource sector) and at least 8 years of international experience and/or experience in East Kalimantan and significant experience in leading environmental and social impact assessment and mitigation, long term impact planning, cumulative impact assessment, institutional strengthening and research methodologies. At least 5 years of professional experience in REDD+. Detailed knowledge of existing and past Indonesian REDD+ safeguard activities (including SIS-REDD+, PRISAI / BP REDD+, and UN-REDD) would be considered a strong asset.
- b. **Environmental Specialist** preferably with a graduate degree in environmental science and at least 5 years of experience in environmental aspects of natural resource and forestry projects; Strategic Environmental Assessments; developing environmental management plans (EMPs), and monitoring and evaluation of EMPs, environmental management frameworks (EMFs). Experience working in East Kalimantan and/or with the World Bank, including knowledge of the Bank Operational Policies and REDD+ safeguards related experience will be highly preferred.
- c. **Social Specialist/Community Development Specialist** preferably with a graduate degree in social science and at least 5 years of experience working with rural, indigenous and/or ethnic minority communities, participatory community planning and natural resource management, undertaking Social Impact Assessments and developing social management plans including

Indigenous Peoples Plans (IPPs), Land Acquisition and Resettlement Plans (LARAPs) and have familiarity with government systems. The specialist must be knowledgeable about the local institutional and social structures. Experience working in East Kalimantan and/or with the World Bank, including knowledge of the Bank Operational Policies and REDD+ safeguards related experience will be highly preferred.

- d. **FGRM officer** preferably with a graduate degree in social science and at least 5 operational experience in handling land and natural-resource related conflicts and grievances. The specialist must be knowledgeable about the local institutional and social structures. Experience working in East Kalimantan and/or with the World Bank, including knowledge of the Bank Operational Policies and REDD+ safeguards related experience will be highly preferred.

In addition, the team may need to solicit additional support from senior, mid-level and junior technical professionals with the following expertise as needed:

- Agriculture development/policy;
- Indigenous Peoples
- Environmental Impact Assessment;
- Benefit sharing;
- Conflict resolution
- Participatory planning;
- Community-driven development;

As part of selection processes, the consultant team is required to share proposed key personnel's Curriculum Vitae to the contracting authority (DGCC and SEKDA). It is expected that the Safeguards Coordinator is costed full time for the duration of the Program