REPUBLIC OF INDONESIA

REDD+ READINESS SELF-ASSESSMENT FOR INDONESIA SUBMITTED TO THE FOREST CARBON PARTNERSHIP FACILITY (FCPF)



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REDD+ Readiness Self-Assessment for Indonesia submitted to the Forest Carbon Partnership Facility (FCPF)
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Executive Summary

The REDD+ Readiness Self-Assessment for Indonesia aims at (1) documenting the progress of REDD+ readiness activities in Indonesia, recording the lesson learned from the process, identifying and a nalyzing the gaps, and identifying further activities for the transition to IMPLEMENTING result-based payment, (2) evaluating the progress of REDD+ readiness activities, and (3) providing evidences of the Government of Indonesia's commitment on REDD+ implementation agenda.

The scope of REDD+ Readiness Self-Assessment for Indonesia is at a national level; which includes all main REDD+ readiness activities, e.g. including REDD+ organization and consultation, policy and strategy, REL, MRV, and safeguards. It also includes all activities funded by FCPF, Indonesia's development partners, as well as national budget, conducted by various institutions throughout Indonesia.

This document represents a self-assessment process refers to REDD+ Readiness Assessment Framework Guideline from the FCPF. The REDD+ Readiness Self-Assessment was conducted through participatory processes of stakeholders representing the REDD+ entities in Indonesia. Individuals representing the central government, provincial governments, district governments, communities, forest management units, academia, NGOs, private companies, donors, and other independent institutions involved to discuss and assess REDD+ readiness implementation in Indonesia. The assessment was facilitated through the national inception workshops, virtual surveys to the selected national experts, sub-national workshops in 2 selected provinces (East Kalimantan and South Sumatra), and the national validation workshop.

The result of the participatory self-assessment indicated that the REDD+ Readiness in Indonesia is significant, with a lot of major achievements in each component. Component 1 Readiness Organization and Consultation shows that DGCC has been conducting coordination and collaboration with other national and international related stakeholders, such as related ministries and other central government agencies, universities, NGOs, donors, local governments, private sectors, as well as communities. Ample information sharing has also been conducted by a number of institutions related to REDD+ programs, activities and projects, both for national and sub-national level, event for selected site level. Various channels were used to reach targeted entities, such as film, book, booklet, leaflet, magazine and newspaper, both in online and printed document, including seminar, workshop, awareness rising, and FGD. However, "further developments are required" which among others include intensification of coordination process, capacity building, and the development of feedback and grievance redress mechanism on REDD+ purpose.

Component 2 REDD+ Strategy Preparation is described as "progressing well, with further development required". REDD+ National Strategy is available, but a revision and particular adjustment are needed to incorporate recent progress in the international climate

agreement. There are also several ongoing policy reforms and enhancement of law enforcement; such as continuity of one map policy, FLEGT license, moratorium of new permits in peatlands, social forestry, land tenure reform, customary people recognition, forest fire management, and establishment of Forest Management Units. In funding instrument and benefit sharing mechanisms aspect, Indonesia has many initiatives and best practices for REDD+ benefit sharing mechanisms, vertically and horizontally. Indonesia is now developing a Government Regulation concerning economic incentive on environment to provide a legal aspect of REDD+ funding instrument. However, further development is still needed to support REDD+ strategy, among other: land rights assessment, data management system for emission reduction program, private sector involvement in low carbon development activities, acceleration of the Government Regulation development and other statutory laws and related minister technical decrees, as well as the adjustment and adoption of the existing mechanisms for REDD+ benefit sharing mechanism.

Component 3 REL has a "significant process". Indonesia has submitted the Indonesia's FREL and now is under technical assessment by UNFCCC. The next challenges are developing standard of national - sub-national correlation on determining sub-national FREL, and developing methodology or approach for synchronizing different based year for different purposes. Component 4 Forest Monitoring System and Safeguards has also a "significant process". National Forest Monitoring System (NFMS), Monitoring Reporting and Verification (MRV) system on forest and carbon, and REDD+ Registry System have been developed. However, the development of additional PSP's to reduce uncertainty, improvement of land cover data to detect forest regrowth and degradation, and the development REDD+ policy to cover leakage and non-permanence are still needed. Safeguards Information System (SIS) REDD+ has been developed in a highly participatory way, through a lot of meetings and public consultations by a multi-stakeholder process, cross-sectoral agencies, related institutions, and experts, as well as in collaboration with other international partners. In the aspect of social and environmental impact, although Indonesia has many country initiatives safeguards, due to the World Bank's environmental and social safeguard standards, there is urgent need to finalize the SESA and ESMF documents.

The achievement of REDD+ readiness in general is more advanced than MTR 2014. FCPF fund has been contributed to support REDD+ readiness activities. It was used to fill the gaps and allocated in the provinces that were not considered attractive to donors. The REDD+ readiness progress above has provided evidences that the Government of Indonesia committed to REDD+ implementation agenda. Nevertheless, many works still need to be done within various opportunities to collaborate with Indonesia; through facilitate and expedite technology development and transfer, payment for performance, technical cooperation, and access to financial resources to support Indonesia's climate mitigation and adaptation efforts towards a climate resilient future.

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Glossary of Abbreviations

AFOCO Asian Forest Cooperation Organization

AMAN Aliansi Masyarakat Adat Nusantara, Archipelago Indigenous People Alliance

AMDAL Analisis Mengenai Dampak Lingkungan, Environmental Impacts Assessment

APBN Anggaran Belanja dan Pendapatan Negara, State Budget and Expenditure System

APIK-Indonesia Ahli Perubahan Iklim dan Kehutanan Indonesia, Indonesian Researcher and Scientists on

Forest and Climate Change Network

Balai PPI dan Karhutla Balai Pengendalian Perubahan Iklim dan Kebakaran Hutan dan Lahan, Climate Change and

Forest and Land Fires Offices (DGCC Regional Office)

Bappenas Badan Perencanaan Pembangunan Nasional, National Development Planning Agency

BAU Business As Usual

BIG Badan Informasi Geospasial, Geospatial Information AgencyS

BKSDA Balai Konservasi Sumber Daya Alam, Natural Resources Conservation Office

BLI Badan Penelitian, Pengembangan, dan Inovasi Kehutanan, Forestry Research,

Development, and Innovation Agency

BLU Badan Layanan Umum, General Services Agency

BPKH Balai Pemantapan Kawasan Hutan, Forest Area Consolidation Office

BRG Badan Restorasi Gambut, Peatland Restoration Agency

BUR Biennial Update Reports

CIFOR Center for International Forestry Research

COP Conference of the Parties
DA Demonstration Activity

DAU Dana Alokasi Umum, General Allocation Funds
DAK Dana Aloksi Khusus, Specific Allocation Funds

DDPI Dewan Daerah Perubahan Iklim, Regional Council on Climate Change

DDPI Kaltim Dewan Daerah Perubahan Iklim Provinsi Kalimantan Timur, East Kalimantan Regional

Council on Climate Change

DFID Department for International Development

DGCC Directorate General Climate Change

DIAS Digital Image Analysis System

DKN Dewan Kehutanan Nasional, National Forestry Council

DNPI Dewan Nasional Perubahan Ikllim, Indonesian National Council on Climate Change

EIA Environmental Impact Assessment

ERPD Emission Reductions Program Document

ESMF Environmental and Social Management Framework

EU European Union

FAO Food and Agriculture Organization FCPF Forest Carbon Partnership Facility

FCPF-PC Forest Carbon Partnership Facility – Participants Committee

FIP Flora & Fauna International FIP Forest Investment Program

FLEGT Forest Law Enforcement, Governance and Trade

FMU Forest Management Unit

FOERDIA Forestry and Environment Research, Development, and Innovation Agency

FPIC Free Prior Informed Consent FRA Forest Resources Assessment

FRM Forest Resources [Change] Monitoring

FREL/FRL Forest Reference Emission Level/Forests Reference Level

FSC Forest Stewardship Council

GHG **Green House Gas**

GIS Geographic Information System

Deutsche Gesellschaft für Internationale Zusammenarbeit GIZ

Gesellschaft für Technische Zusammenarbeit GTZ

HCVF High Conservation Value Forest ICCTF Indonesia Climate Change Trust Fund

Instrumen Ekonomi Lingkungan Hidup, Environment Economics Instrument IELH

IFCA Indonesia Forest Carbon Alliance

INCAS Indonesia National Carbon Accounting System

IPB Institut Pertanian Bogor, Bogor Agricultural University ITTO The International Tropical Timber Organization

JICA Japan International Cooperation Agency

Kajian Lingkungan Hidup Strategi, Strategic Environmental Assessment **KLHS**

KOICA Korea International Cooperation Agency

LAMA-I Locally Appropriate Mitigation Actions in Indonesia

LAPAN Lembaga Penerbangan dan Antariksa Nasional, National Institute of Aeronautics and

Space

LEI Lembaga Ekolabel Indonesia, Indonesian Ecolabel Institute

LULUCF Land Use, Land-Use Change and Forestry MoFF Ministry of Environment and Forestry

MoF Ministry of Forestry MoFin Ministry of Finance

MRPP Merang REDD+ Pilot Project

MRV Monitoring, Reporting and Validation NDC **Nationally Determined Contribution**

NFI **National Forest Inventory**

NFMS National Forest Monitoring System

P3SEKPI Pusat Penelitian dan Pengembangan Sosial, Ekonomi, Kebijakan dan Perubahan Iklim,

Research Center for Social, Economy, Forest Policy and Climate Change Development

PCI Principles, Criteria and Indicators

PEP Pemantauan, Evaluasi dan Pelaporan, Monitoring, Evaluation and Reporting

PEP GRK Pemantauan, Evaluasi dan Pelaporan Gas Rumah Kaca, GHG Monitoring, Evaluation and

Reporting of GHG

PGI Partnership Governance Index

PHPL Pengelolaan Hutan Produksi Lestari, Sustainable Forest Management and Production **PNPM** Program Nasional Pemberdayaan Masyarakat, National Program of Community

Empowerment

PΡ Peraturan Pemerintah, Government Regulation

PRISAI Prinsip, Kriteria, Indikator Safeguards Indonesia, Indonesian Safeguards Principles, Criteria

and Indicators

PSIS NAS Pengelola Sistem Informasi Safeguards Nasional, National Safeguard Information System

Officer

PSKL Perhutanan Sosial dan Kemitraan Lingkungan, Social Forestry and Environmental

Partnership

PSP Permanent Sample Plot

Pustanling Pusat Standarisasi dan Lingkungan, Center for Standardization and Environment

RAD GRK Rencana Aksi Daerah Penurunan Emisi Gas Rumah Kaca, Provincial Action Plan of GHG

Emission Reduction

RAN GRK Rencana Aksi Nasional Penurunan Emisi Gas Rumah Kaca, National Action Plan of GHG

Emission Reduction

RBS Rights Based Standard

REDD+ Reduction Emissions from Deforestation and Forest Degradation Plus

REDD+ PGA REDD+ Participatory Governance Assessment
REDD+ SES REDD+ Social and Environmental Standards
REL/RL Reference Emission Level/Reference Level

SA Strategic Assessment
SDN Spatial Data Networking

SESA Strategic Environmental and Social Assessment

SFM Sustainable Forest Management

SIMONTANA Sistem Monitoring Hutan Nasional, National Forest monitoring System

SIS Safeguards Information System
SNI Indonesia National Standard

SPIP Sistem Pengendalian Internal Pemerintah, Government Internal Control System

SVLK System for Verification of Timber Legality

TNC The Nature Conservancy

UNDP United Nation Development Programme
UNEP United Nations Environment Programme

UNFCCC United Nations Framework Convention on Climate Change

UNREDD United Nations Programme on Reduction Emissions from Deforestation and Forest

Degradation

UPT Unit Pelaksana Teknis, Technical Implementation Unit

USGS United States Geological Survey

WRI World Resource Institute
WWF World Wildlife Fund

1. INTRODUCTION

Indonesia is the world's largest archipelago with massive tropical rainforest areas; rich in biodiversity, carbon stock values, and energy and mineral resources. Its geographic position in the equatorial belt with about 16,000 islands which spans more than 5,000 Km, has made Indonesia vulnerable to the inevitable impacts of climate change. Extreme climatic events and/or disasters, such as floods and droughts, have been more recently seen than they were decades ago. Meanwhile, the rise of sea level —which could inundate coastal areas— remain lurking as long-term impacts, endangering the lives of up to 42 million people living the areas. If not stopped immediately, deforestation and forest degradation will also pose threats against the coastal areas; as more forests are losing their environmental functions as water catchment areas to prevent floods and erosion.

The archipelago is facing multiple challenges where it must balance both ongoing and future development programs as well as priorities to tackle poverty; while coping with issues related with climate change. In 2010, the Indonesian government has stated the commitment to cut 26% emissions from Business As Usual scenario by 2020 (by national efforts) and to cut 41% emissions with the help of international supports. Comprehensive land and ocean-based climate change adaptation and mitigation efforts are implemented to fortify the commitment. The government has also set a more ambitious target — as inscribed in the first Nationally Determined Contribution (NDC) — that the unconditional emission reduction target after 2020 will be 29% and that the conditional emission reduction target under BAU scenario is raised to 50% by the year 2030. The NDC outlines the country's transition towards a low-carbon and more climate resilient future. REDD+ in Indonesia is deemed as an important component of the NDC target from land use sector, as the scheme includes activities with reducing deforestation, reducing forest degradation, enhancing forest carbon stock, conservation initiatives, and forests' sustainable management — approached by the Sustainable Forest Management (SFM) measures.

Indonesia has been intensively carrying out REDD+ related activities since 2007, aside from being actively involved in international climate change debates and forums. The country has also been conducting preparations for REDD+ scheme within national scope efforts and international supports in the aspects of finance, technology development and technology transfer, as well as capacity building. The country has several REDD+ financing mechanisms –via bilateral, adopted international cooperation schemes—including the FCPF; which has 2 separate-but-complementary funding mechanisms of the Readiness Fund and the Carbon Fund. The FCPF Readiness Fund supports participating countries to develop REDD+ strategies and policies, reference emission levels; measurement, reporting, and verification systems; and institutional capacity to manage REDD+ including environmental and social safeguards. Meanwhile, the FCPF Carbon Fund designed to pilot performancebased payments for emission reductions from REDD+ programs in FCPF countries.

REDD+ Readiness Self-Assessment on Indonesia became one of the requirements, for the country to take part in the FCPF Carbon Fund scheme. Objectives of REDD+ Readiness Self-Assessment are: (1) documenting the progress of REDD+ readiness activities in Indonesia, recording the lessons learned from the process, identifying and analyzing the challenges, and identifying further activities for the transition towards result-based payment schemes, (2) evaluating the progress of REDD+ readiness activities, and (3) providing evidences about the government's commitment on REDD+ implementation agenda.

The REDD+ Readiness Self-Assessment for Indonesia implemented throughout a national scope, with case studies taken from sub-national implementation. The scope includes main REDD+ readiness activities such as consultations and strategic preparations, the designing of reference level and monitoring system; as well as cross-sectors issues such as governance, environment, and social safeguards. The assessment also

includes records about activities funded by FCPF and Indonesia's development partners —as well as activities funded through the national budget—conducted nationwide.

This report divides into 5 chapters of Introduction, Descriptions of REDD+ Readiness in Indonesia, Descriptions of Gap Analysis and Steps Ahead, Methodology for Participatory Self-Assessment, and a Concluding Remark.

2. THE REDD+ READINESS IN INDONESIA

¹Paragraph 70 in Decision 1/CP.16 of the Conference of Parties (COP)-16 encouraged developing countries contributing to climate change mitigation actions in the forest and land-use sector (Land Use, Land-Use Change and Forestry/LULUCF), by national circumstances. Such mitigation actions are then better known as REDD+ (Reduction Emissions from Deforestation and Forest Degradation Plus), which includes the following activities: (a) reducing emissions from deforestation; (b) reducing emissions from forest degradation; (c) forest carbon stocks conservation; (d) sustainable forest management; and (e) enhancement of forest carbon stocks.

Paragraph 71 in Decision 1/CP.16 requested developing countries committed to REDD+ (hereinafter referred to as the REDD+ countries) to conduct REDD+ mechanism in accordance with the convention; to offer proper supports needed for the mechanism of payment for performance, including financial support and technology. Agreeing with the decision aforementioned, REDD+ countries need to prepare a series of the following elements:

- 1) REDD+ National Strategy or Action Plan.
- 2) Forest Reference Emission Levels/Forests Reference Levels (FRELs/FRLs).
- 3) National Forest Monitoring System that is robust and transparent.
- 4) Safeguards Information System.

As part of the commitment to implement REDD+ scheme as climate mitigation actions, Indonesia is on the process of completing the four aspects above, to make sure of implementation feasibility on the ground. Over the years, the country has shown positive achievements such as finalization of the REDD+ National Strategy in 2012, and the passing of National Forest Reference Emission Level/Forests Reference Level (FREL/FRL) by UNFCCC Secretariat in 2016. Looking back, the Indonesian government has decades earlier initiated a National Forest Inventory (NFI) program by pioneering the National Forest Monitoring System (NFMS) since 1986. Currently, the NFMS implementation managed by the Directorate General of Forest Planning and Environmental Administration, under the Ministry of Environment and Forestry (MoEF). Indonesia has also seen developments of Safeguards Information System (SIS) established in 2013, operated through an interactive web-based system (http://sisredd.dephut.go.id/) managed by the Directorate General of Climate Change (DGCC of MoEF). Yet, this system is still facing an implementation issue, because Indonesia is still limited on institutional aspect (human resources), the need of high commitment in provisioning information, and the system requires synergy with other REDD+ safeguards-related system.

In order to better comprehend the progress of REDD+ preparations, REDD+ Readiness Self-Assessment for Indonesia (hereinafter addressed as 'the Assessment') completed after the REDD+ Readiness Assessment Framework by the FCPF (hereinafter addressed as 'FCPF Guideline')[1]. The Assessment conducted through four workshops, a virtual survey, and a final assessment by the R-Package Assessment Team. The four workshops were; Inception Workshop (national level), East Kalimantan Workshop (sub-

^[1] FCPC. 2013. A Guide to the FCPF Readiness Assessment Framework. The World Bank. Washington DC.

national level), South Sumatra Workshop (sub-national level) and Validation Workshop (national level). The virtual survey completed by six experts in verifying results of Inception Workshop and assessing the REDD+ nationwide readiness condition; followed by REDD+ Readiness assessment by two of the experts in their respective provinces (at sub-national level). The final assessment by the R-Package Assessment Team conducted after analyzing results from Inception Workshop, Virtual Surveys, and Validation Workshop mentioned; where main considerations in assigning final progress indicators based on supporting reasons or findings in respective indicator (differentiated in colors).

Based on the self-assessment, the REDD+ Readiness in Indonesia has reached 81.25% at the component level (Figure 2.1); which reflects significance of REDD+ preparations. Achievements highlighted are the green indicator (representing 'significant progress') in Component 3 of Reference Emissions Level/Reference Levels; and Component 4 of Monitoring Systems for Forests, and Safeguards. Other yellow significant progresses are the indicator (representing 'progressing well, with further development required') in Component 2 of REDD+ Strategy Preparation; and orange indicator (signaling 'further development required') in Component 1 of Readiness Organization and Consultation.

The REDD+ Readiness saw a decrease in the lower level, because it refers to the real self-assessment results with details and specific questions derived from workshops. Meanwhile, the higher level shows higher percentage because of the re-assignment of progress indicator to each average of scores from the lower level - based on the range of scores (please refer to Section 4.3.3.1 and Figure 4.4). These results appreciate the efforts conducted in implementing REDD+ activities during the Readiness Phase, both at national and sub-national levels; completed or in progress. Meanwhile, East Kalimantan Province reached a remarkable progress (Figure 2.2) in the process; while South Sumatra Province reached slightly lower progress than the national REDD+ readiness (Figure 2.3).

Component	Sub- Component	Criteria	Diagnostic Question	
2	4	12	16	
1	4	16	31	
1	2	8	11	
0	0	0	1	
Percentage of REDD+ Readiness				
81.25%	80%	77.78%	76.27%	

Figure 2. 1 Results of REDD+ Readiness Self-Assessment for Indonesia.

Component	Sub- Component	Criteria	Diagnostic Question
4	6	15	21

0	3	14	28	
0	1	7	10	
0	0	0	0	
Percentage of REDD+ Readiness				
100%	87.5%	80.56%	79.66%	

Figure 2. 2 Results of REDD+ Readiness Self-Assessment for East Kalimantan Province.

Component	Sub- Component	Criteria	Diagnostic Question		
2	4	10	13		
1	4	12	28		
1	2	12	15		
0	0	2	3		
Percentage of REDD+ Readiness					
81.25%	80%	70.83%	71.61%		

Figure 2. 3 Results of REDD+ Readiness Self-Assessment for South Sumatra Province.

The following sub-sections will describe in more details about Indonesia's preparations, including the Assessment's results.

2.1 Readiness Organization and Consultation

2.1.1 National REDD+ Management Arrangement

There are two agencies in the Ministry of Environment and Forestry (MoEF) with mandates related to climate change; the Directorate General of Climate Change (DGCC), and the Center for Research and Development in Social, Economy, Policy, and Climate Change (Pusat Penelitian dan Pengembangan Sosial Ekonomi Kebijakan dan Perubahan Iklim, P3SEKPI).

DGCC leads national REDD+ management and/or arrangement in Indonesia, while P3SEKPI supports in carrying out its mandate. In addition, DGCC also gets support from other Directorate Generals under the MoEF (such as DG of Forest Planology and Environment, DG of Social Forestry and Environmental Partnership, DG of Sustainable Production Forest Management, DG of Natural Resources and Ecosystem Conservation, as well as Forestry and Environment Research Development and Innovation Agency).

DGCC has been conducting coordination and collaboration with other national and international related stakeholders such as Ministry of Agriculture, Ministry of Finance, National Development Planning Agency (Bappenas), National Forestry Council (Dewan Kehutanan Nasional/DKN), Indonesian National Council on Climate Change (Dewan Nasional Perubahan Ikllim/DNPI), universities, NGOs, donors, local governments, private sectors, as well as communities.In the sub-national level (provinces), its function is still in development process; of whether they will be lead by the technical implementation unit (Unit Pelaksana Teknis/UPT) of DGCC or will be lead by the provincial government entities (such as REDD+ Working Group) or other relevant institution established by the Governor. In East Kalimantan, this function led by the East Kalimantan Regional Council on Climate Change (Dewan Daerah Perubahan Iklim Provinsi Kalimantan Timur/DDPI Kaltim); while in South Sumatra, the REDD+ Working Group has taken the lead. Funding supports are also given from various donors (see chapter 2.2.5.). Achievements of the national supports in REDD+ management arrangements and the color-coded progress as presented in Figure 2.4.

Previously, national REDD+ management arrangement carried out by various institutions; DNPI (established on 2008), REDD+ task Force (2010), and REDD+ Agency (2013). The institutions have led coordination process to develop REDD+ infrastructures for Indonesia, along with related ministries, agencies, and institutions. Highlighted points of national REDD+ arrangement can be found in Table 2.1.

Table 2. 1 Milestone of National REDD+ Management Arrangement

Time	National Arrangement	Description
Nov 30, 2007	First initiative on development of the National Action Plan on Climate Change.	The document served as guidance for all parties in conducting integrated mitigation and adaptation efforts on climate change, initiated by the Ministry of National Development Planning (Bappenas). The document proposed to integrate with the Mid Term and Long Term National Development Plan.
July 4, 2008	Establishment of National Council on Climate Change (<i>Dewan</i> Nasional Perubahan Iklim/DNPI)	DNPI (under Presidential Regulation No. 46/2008) was responsible to coordinate climate change management programs, and to strengthen Indonesia's place in international climate change forums. DNPI initiated strategic programs promoting Skema Karbon Nusantara (domestic carbon scheme), carbon market, carbon footprint (<i>Jejak Karbon</i>), and the Pedaling Indonesia (<i>Indonesia Mengayuh</i>) movement.
2008	Mainstreaming Climate Change into Development Planning	The Yellow Book published by Bappenas (the National Planning Agency) served as a multi-sectoral guide for Indonesian governmental agencies in integrating climate change into its overall National Development Plan, by coordinating regulatory efforts to carry out both long and short-term efforts.
May 26, 2009	Indonesia-Norway REDD+ Partnership	The purpose of the Partnership was to give significant reductions in GHG from deforestation, forest degradation and peatland conversion; where Norway supported REDD+ readiness and implementation (selecting pilot province, developing REDD+ National Strategy, establishing REDD+ Agency, developing MRV, funding institution and distribution mechanism).
Sept 3, 2009	Indonesia Climate Change Trust Fund (ICCTF)	ICCTF establishment under the Minister of National Development Planning Decree No. 44/MPPN/HK/09/2009; aimed to enhance national coordination on climate change-related grands/funds management.

Time	National Arrangement	Description
Sept 25, 2009	Indonesia's commitment on Emission Reduction	Indonesia devised an energy mix policy including LULUCF (Land Use, Land-Use Change, and Forestry) that will reduce emissions by 26% by 2020 from BAU (Business As Usual), and 41% with international support. President Susilo Bambang Yudhoyono stated the commitment at G20 meeting in Pittsburg on September 2009.
Sept 20, 2010	REDD+ Task Force	REDD+ Task Force (established under Presidential Decree No. 19/2010) developed REDD+ National Strategy, prompting issuance Presidential Instruction No. 10/2011 about new logging permits moratorium and forest governance improvement in primary forest and peatland, and selected as also prepared Central Kalimantan Province as a REDD+ pilot province.
2011	Forest Carbon Partnership Facility (FCPF)	FCPF established to support a select subset of strategic analytic inputs and a consultative process. The FCPF grant has four main components of analytic work, support of readiness process, REL and MRV, and Regional data collection and capacity building.
Sept 20, 2011	National Action Plan of GHG Emission Reduction (Rencana Aksi Nasional Penurunan Emisi Gas Rumah Kaca/RAN GRK)	RAN-GRK was an established guidance for Ministries, Agencies, local government, private companies, and communities; to plan, conduct, and evaluate their action plans of emission reduction. RAN-GRK proposed mitigation actions on five priority sectors of agriculture, forestry and peatland, energy and transportation, industry, and waste management.
Dec 20, 2012	Natural resources and environment law enforcement by "Multidoor approach"	"Multidoor approach" is a law enforcement method on integrated violations of environment and natural resources in forest and peatland - by abusing various regulations in fields such as environment, forestry, spatial planning, estate, mining, tax, corruption, and money laundring.
Aug 31, 2013	Development of REDD+ Agency	REDD+ Agency set under Presidential Regulation No. 62/2013. The mandate was to conduct management, implementation, monitoring, and control of REDD+ mechanism in Indonesia. FREL for Indonesia was one of the result of coordination process led by REDD+ Agency.
2015	Directorate General of Climate Change (DGCC) under the Ministry of Environment and Forestry	DGCC (established under Presidential Regulation No. 16/2015) has continued REDD+ Agency to lead cross sectoral/ministries coordination, such as Ministry of Agriculture, DNPI, Planning Agency, Ministry of Finance, BRG, etc. At sub-national level, REDD+ co-ordinated by provincial government entity (REDD+ Working Group or other relevant institutions established by the Governor) or DGCC local office.

Furthermore, Indonesia REDD+ readiness progress until 2016 can be classified on five aspects of policy and regulation, REL, MRV, funding and benefit sharing, and safeguard. Main achievements of each aspect is presented in Table 2.2.

Table 2. 2 Current progress of REDD+ Readiness in Indonesia

Aspect	Main achievement
Policy and regulation	 * REDD+ National Strategy is available * Ongoing policy reforms and enhancement of law enforcement: continuity of one map policy, FLEGT license, moratorium of new permits in peatlands, social forestry (12.7 million ha target) for communities, land reallocation/land tenure reform (9.2 million ha target), legal recognition to the rights of indigenous people, transformation in forest and land fire management from focusing on suppression to prevention, budget tagging policy, new vision of the government (nawa cita) to reform environmental governance, establishment of Local REDD+ Agency, Forest Management Units (FMU) will be the main intervention for REDD+ implementation
REL	 Submission of Indonesia's FREL (currently under technical assessment) Establishment of REL Province in SRAP (<i>Strategi dan Rencana Aksi Provinsi</i>, Provincial Strategic and Action Plan) document
MRV	 NFMS developed Ministry Regulation on MRV (design for a national MRV system) SIGN (Sistem Inventarisasi Gas Rumah Kaca Nasional, National Green House Gases Inventory System) Registry system launched
Funding and benefit sharing	 Fund for REDD+ in Indonesia (FREDDI) designed Funding for result based is available through carbon fund Initiative of regional incentives mechanism Development of the Government Regulation concerning economic incentive on environment Best practices as a benchmark for REDD+ benefit sharing mechanism are available
Safeguard	 Principles, Criteria and Indicators for REDD+ Safeguards in Indonesia (PRISAI) has been developed and adopted in a highly participatory way, through a lot of meetings and public consultations by multi-stakeholders process, cross-sectoral agencies, related institutions, and experts, as well as in collaboration with other international partners. Safeguards Information System have been developed and operated
	 The initiative of Strategic Environmental and Social Assessment (SESA) has developed by National Forestry Council (DKN), but it should be completed together with ESMF as soon as possible.

Table 2.3 shows that only criteria 2 (Operating mandate and budget) has reached a 'significant progress' - as marked with the color green. Under a clear mandate, DGCC obtains its own budget from the National Budget and Expenditure System Anggaran Belanja dan Pendapatan Negara / APBN); where for transparency, DGCC also provides online platform accountability and an http://ditjenppi.menlhk.go.id/. DGCC has launched a Registry System in 1 November 2016. Meanwhile, the feedback and grievance mechanism in Indonesia still need further development as the system is still in its early stage of development; as evidence on the mechanism implementation is still considered insufficient, especially about communities affected. Currently, the Directorate of Conflict Management, Directorate General of Social Forestry and Environmental (Perhutanan Sosial dan Kemitraan Lingkungan/PSKL) under MoEF responsible in conflict resolution and grievance mechanism. It is the only existing division to handle feedback and grievance on certain topics, but not for other issues like forest and land fire, land conflict, etc. A further development of feedback and grievance mechanism is prepared to complete by 2019.

Several actions and networks have been set to help the consultation and participation of various stakeholders in the REDD+ readiness process for both national and sub-national networks. As an example, the Indonesian Researcher and Scientists on Forest and Climate Change Network (APIK-Indonesia) has been established as a scientific network which provides scientific support for Indonesia's climate change issues including development of REDD+. A network of implementers in district level has also been built at several areas in Indonesia.

Table 2. 3 Results of Sub-component 1a. National REDD+ Management Arrangements

1a. National REDD+ Management Arrangement.			
Criteria Diagnostic Question		Diagnostic Question	Evidence
	ntability and parency.	How do national REDD+ institutions and management arrangements demonstrate they are operating in an open, accountable and transparent manner?	Directorate General of Climate Change (DGCC) was established under the Ministry of Environment and Forestry, and the institutional mechanisms, planning, monitoring, and evaluation mechanisms were developed since 2014. DGCC has been regularly issuing annual report, and regularly audited by internal and external independent auditors. The website is available, but still need improvements where the contents need to stay updated regularly. Registry system (monitoring and evaluation) for REDD+ related with accountability is under development. To operate in open, accountable and transparent manners in performing its duties and functions related to REDD+, DGCC communicates and co-ordinates with various parties by referring to the mandate (MoEF Regulation No. P.18/2015).
2. Operat	ing mandate udget.	How to measure that national REDD+ institutions operate under mutually supportive mandates with adequate, predictable, and sustainable budgets?	As a national REDD+ institution, DGCC operates under clear mutually supportive mandates under the Presidential Regulation No. 16/2015. There is predictable and sustainable budget provided from National Budget and Expenditure System (Anggaran Pendapatan dan Belanja Negara/APBN) of US\$ 67.61 billion for 2015-2019, along with donor fundings (bilateral and multinational partners, including FCPF) of US\$ 1,2 billion. Notes: DGCC Strategic Plan 2015-2019, available at http://ditjenppi.menlhk.go.id. Presidential Regulation No. 16/2015 concerning the Ministry of Environment and Forestry. Available at http://ditjenppi.menlhk.go.id/reddplus/images/resources/peraturan/Perpres 16 Tahun 2015-KLHK.pdf. http://ditjenppi.menlhk.go.id/index.php/unit-pelaksana-teknis/pengantar-upt

1a. National REDD+ Management Arrangement.			
Criteria	Diagnostic Question	Evidence	
3. Multisector coordination mechanisms and cross-sector collaboration.	How do national REDD+ institutions and management arrangements ensure REDD+ activities are being coordinated, integrated into and influencing the broader national or sector policy frameworks (e.g. agriculture, environment, natural resources management, infrastructure development and land-use planning)?	DGCC is a national institution set to deal with climate change, including REDD+ activities. Since 2015, DGCC Has been conducting coordinating activities, integrating and influencing broader national or sector policy frameworks (e.g. agriculture, natural resources management, infrastructure development and land-use planning). However, constant improvements of coordination in both national and sub-national levels are expected.	
4. Technical supervision capacity.	How effective and efficient are national REDD+ institutions and management arrangements in leading and supervising multisector readines s activities, including the regular supervision of technical preparations?	DGCC consists of 218 officers in national and local offices to lead and supervise REDD+ readiness activities. However, more officers are still needed to reach the ideal number of DGCC personnel; 81 officers for national office, and 226 officers for local offices. In addition, there are also 1,755 personnel of Manggala Agni (Fire Rescue team) across Indonesia who support forest fire management. To improve their technical capacities, further capacity building developments are needed. http://ditjenppi.menlhk.go.id/index.php/unit-pelaksana-teknis/pengantar-upt	
5. Funds management capacity.	How do institutions and arrangements demonstrate effective, efficient and transparent fiscal management, including coordination with other development partner-funded activities?	DGCC has an internal finance division which manages allocated national budgets for REDD+, as well as donor funds. The finance division has had extensive experiences with development partners such as bilateral or multilateral partners. Under the Ministry of Finance, the government implements an auditing system which includes internal and external independent auditors to ensure control on effective and efficient fiscal management. Notes: http://ditjenppi.menlhk.go.id/program	
6. Feedback and grievance redress mechanism.	a. What are the evidence to show that the mechanism operating at the national, sub-national and local levels, is transparent, impartial, and portrays a clearly defined mandate with proper ability and resources?	Ministry of Forestry houses a division to deal with feedback and grievance, with focuses related with forest and land fire, land conflict, etc. The specific system of feedback and handling complaints, as well as tools and mechanisms for REDD+ throughout the country is under development. DGCC is currently designing the Government Internal Control System (Sistem Pengendalian Internal Pemerintah/SPIP) which serves as an ongoing compliance for quality management standard (ISO 9001). In addition, all projects and REDD+ Demonstration Activities in Indonesia provide feedback and grievance and/or compensation mechanism in respective area/region.	

1a. National REDD+ Management Arrangement.		
Criteria	Diagnostic Question	Evidence
	b. What are the evidence that potentially impacted communities are aware of, have access to, and the mechanism is responsive to feedback and grievances?	 Notes: Link for complaint on hot spot and forest fire: http://sipongi.menlhk.go.id/home/main Link for complains on land tenure conflict: http://pskl.menlhk.go.id/pktha/pengaduan/fronten d/web/index.php?r=site%2Ftatacara There have been very little feedbacks and grievance and/or compensation proposal/s from impacted communities. But, some evidences showed that the impacted communities are aware of and have access to the system, and the mechanism is responsive to feedback and grievance. The Forest Fire Community Forum (Masyarakat Peduli Api) stands as an example on how villagers surrounding production forest and conservation forest areas are aware about forest fire reporting and management system. Another example is the monitoring and evacuation system developed by TNC and Forclime for villages under the Berau Forest Carbon Program in Berau District, East Kalimantan Province.

Various consultation processes have contributed to developing REDD+ policies. A national consultation protocol developed by National Forestry Council (*Dewan Kehutanan Nasional*/DKN) has served as an information base for all consultation processes. One of the examples of stakeholder engagement in decision-making process is the development process of SIS-REDD+ as one of the elements required for full implementation of REDD+. The SIS-REDD+ development aims to translate safeguards for REDD+ as agreed in COP 16 Decisions- into national context. The SIS-REDD+ developed through an analytic process on policy instruments and other instruments related to safeguards for REDD+. The development process of the SIS-REDD+ also includes developments of most suitable structure and mechanism for safeguards information provision system of REDD+ for Indonesia.

2.1.2. Consultation, Participation, and Outreach

Before 2014, information sharing took place by DNPI, REDD+ Task Force, REDD+ Agency, as well as related government institutions such as Bappenas, Ministry of Forestry (including Pustanling, FORDA), and Ministry of Environment. Afterwards, an information-sharing scheme then conducted by a number of institutions related to REDD+ programs, activities and projects. Local governments have also involved in REDD+ information sharing together with central government, NGOs, and Indonesia's development partners. After 2014, information sharing has been mainly conducted by DGCC, and other related entities at national level, as well as NGO, support by a number of development partners and donors.

During REDD+ preparation phase, Indonesia has involved many stakeholders in its process. The stakeholders' involvement of some key REDD+ activities is presented in Table 2.4.

Table 2. 4 Major REDD+ activities and stakeholder involvement

Activity	Periode of consultation and participation process	Stakeholders involved	Provinces involved
REDD+ Strategy Development	2011-2012	REDD+ Agency, NGO, academicians, local governments,	34 Provinces
FREL development	2014-2016	REDD+ Agency, DGCC, DG Plan, NGO (WWF, TNC, FFI, WRI, CI), Ministry of Agriculture, CIFOR, ICRAF, FORDA, IPB, UNDP,	National only
SIS-REDD+ development	2011-2016	Pustanling, DGCC, KSDAE, Satgas REDD+, DNPI, FOERDIA, NGO (AMAN, Daemeter Consulting), Ministry of Agriculture, CIFOR, ICRAF, IPB, CCROM	East Kalimantan, South Sumatera, West Kalimantan
NDC development	2015-now	National Planning Agency, MoEF, NGO's, ITB, 34 provinces, all ministries,	34 provinces

An information sharing system applied both for national and sub-national levels, and even for selected site level. Information shared consists of general information about REDD+ and climate change, policy and strategy, REL and MRV, funding and benefit sharing, and social and environmental safeguards. Various channels have been used to reach targeted entities, such as in the forms of film, book, booklet, leaflet, magazine and newspaper, both in online and printed document. Other means of information sharing used are seminar, workshop, awareness rising, and FGD. Active REDD+ projects in Indonesia that contributed to useful information sharing and consultative process are listed at Annex 5.



Figure 2. 4 FCPF Publications for 2011 and 2015.

FCPF has also published outreach materials in digital and print media (Figure 2.4). For instance, to develop PSP, FCPF has published books, booklets, leaflets, training, and developed the database system. This contribution has increase the understanding of REDD+ at all levels. Indonesia is an archipelago country consisting of 34 provinces and 514 districts or municipalities. The communication and outreach processes have been conducted by Indonesia – supported by FCPF and other funding sources – but it needed to be continued to reach more layer of communities, groups, sectors, and stakeholders, by conducting multilayers participation and outreach strategy. Improving advocacy approach on dissemination strategy has become the challenge to enhance the implementation of policy.

Although several efforts have been conducted for consultation, participation, and outreach, it is revealed in the Assessment that participation of multi-stakeholders has limited number with less growth (Table 2.5). Participation, engagement, and consultation processes have been done, both in national and Subnational levels. However, due to the limitations of technology, the width of the area, and the complexity of the stakeholders, it required a more effective communication strategy. Meanwhile, guidelines for conducting such processes are needed. In term of information sharing, accessibility of information, as well as implementation and publication and/or dissemination of consultation outcomes are 'progressing with further development needed'. Transparency, consistency, frequent exchange, and dissemination of information are in place, but have not reached all levels of entities. Due to limited infrastructure and technology throughout Indonesia, the number of participants who can access such information are limited.

 Table 2. 5 Results of Sub-component 1b. Consultation, Participation, and Outreach

	Sub-component 1b. Consultation, Participation, and Outreach.			
	Criteria	Diagnostic Questions	Evidence	
1.	Participation and engagement of key stakeholders.	a. How is the full, effective and on-going participation of key stakeholders demonstrated through institutional mechanisms, including extra efforts to engage marginalized groups, such as forest-dependent women, youth, Indigenous Peoples and local communities?	Multi-stakeholders—such as villagers, forest management units, logging companies, district forestry offices, and other groups—are participating in many REDD+ readiness, mitigation measures, and SFM activities conducted by central and local governments, as well as NGOs. REDD+ Task Forces in sub-national level accommodate this participation mechanism. However, wider participation by specific groups and multilayers of community, such as woman, youth, and local communities, is still needed.	
		b. What are the participatory mechanisms being used to ensure Indigenous People and forest-dependent communities have the capacity to effectively participate in REDD+ readiness and implementation?	There are many initiatives of formal and informal participatory mechanism at the central and local government, such as public consultations, REDD+ task forces, parties network, forums, etc. There are also participatory mechanisms conducted with projects and REDD+ Demonstration Activities at local level. But more innovative method to cover all relevant entities throughout Indonesia is still needed. To promote inclusive and transparent consultation involving vulnerable groups, including indigenous people, forest dependent communities, women, and youth, Indonesia has developed strategies: - Coordinating with local government agencies and NGOs	
			 Establish provincial and district REDD+ working groups Establish of climate change network at local level 	
2.	Consultation processes.	a. What evidences that demonstrate the consultation processes at the national and local levels are clear, inclusive, transparent, and facilitate timely access to information in a culturally appropriate form?	There are many consultation processes on national and local levels in various REDD+ readiness activities, such as developing REDD+ National/Sub-National Strategy, FREL development process, MRV system, environment and social safeguards identification, etc. The consultation processes involving the key and relevant stakeholders on national and Sub-national levels. FCPF's guidance for conducting public consultation is also available. Note:	

	Sub-component 1b. Consultation, Participation, and Outreach.		
Criteria	Diagnostic Questions	Evidence	
		REDD+ National Strategy, issued by REDD+ Task Force on 2012. Available at http://www.satgasreddplus.org/	
	b. What evidence that showed the country has used a self-selection process to identify rights holders and stakeholders during consultations?	The MoEF coordinates with other ministries and agencies to conduct a self-selection process at national level, in order to determine the relevant stakeholders for consultation process. While self-selection process at Sub-national level conducted by the MoEF, assisted by District or Provincial Forestry Service and other local agencies. Note:	
		- The Minister of Forestry Regulation No. P.30/Menhut-II/200930 /Menhut-II/20092009 regarding the Procedure for REDD (<i>Tata Cara Pengurangan Emisi dari Deforestasi dan Degradasi Hutan</i> (REDD).	
		 The Minister of Forestry Regulation No. P.36/Menhut-II/2009 regarding the Procedure of Carbon Sink and Removal of Business Permit in the Protection and Production Forests. 	
	c. What evidence supports Indigenous People institutions and decision- making processes are utilized to enhance consultations and engagement?	There were some initiatives of indigenous people engagement in consultation process. Archipelago Indigenous People Alliance (<i>Aliansi Masyarakat Adat Nusantara</i> /AMAN), as a formal institution at national and some provincial levels, as well as informal indigenous people institution at village level, have participate and engaged in REDD+ consultation processes. In order to enhance the quality of consultation and engagement process, the national and Sub-national mechanisms need to be improved.	
	d. What evidence is there that consultation processes are gender sensitive and inclusive?	MoEF has implemented a process of gender mainstreaming in forestry sector. Since 2014, the Gender Mainstreaming Working Group of MoEF is cooperating with Forclime regarding the integration of gender mainstreaming into the Forestry Strategic Plan 2015-2019, developing responsive gender forestry and climate change program, implementing and documenting the data from the gender mainstreaming model in the pilot areas in Kalimantan and Sumatra. However, the expansion of gender inclusive consultation process to reach a wide range of entities in Indonesia is still needed. Specific reports and dissemination on gender inclusive consultation process are also needed.	
. Information sharing and	a. How have national REDD+ institutions and management	DGCC Strategic Plan has provided an information sharing mechanism from national to Sub-national and	

	Sub-component 1b. Consultation, Participation, and Outreach.		
Criteria	Diagnostic Questions	Evidence	
accessibility of information.	arrangements demonstrated transparent, consistent, comprehensive and timely sharing and dissemination of information related to all readiness activities, including the development of REDD+ strategy, reference levels, and monitoring systems, in a culturally appropriate form?	local level. There is a transparent, consistent and publication and/or dissemination of information including all readiness activities, such as the development of national/Sub-national REDD+ strategy, reference levels, and monitoring systems. The expansion of publication strategy is needed in order to cover all levels of entities and multilayers of communities.	
	b. What evidence is there that information is accessible to stakeholders (e.g. in a format and language understandable to them) and is being	Even though there are many publication and/or dissemination activities are being used, the stakeholders in some regions in Indonesian can not access all the information. Explaining REDD+ activities to diverse groups with with	
	c. What channels of communications are being used to ensure that stakeholders are well informed, especially those who have limited or no access to relevant information?	Several channels of communications are being used to ensure the stakeholders are well informed, including counseling and community awareness raising programs, public consultations, booklets, leaflets, brochures, national and local newspapers and magazines, radio and television programs, and internet. Making sure that certain communication media can reach the right type of stakeholders has become the real challenge. Notes: Web based such as: http://ditjenppi.menlhk.go.id/ ; http://www.satgasreddplus.org/ ; Indonesia also used the structural mechanism through REDD+ Task Force at national and Sub-national (provincials and districts) levels.	
4. Implementation and public disclosure of consultation outcomes.	How are the outcomes of consultations integrated in management arrangements, strategy development and technical activities related to reference level and monitoring and information systems development?	There are quite outcomes of consultations integrated in management arrangements, strategy development and technical activities related to Reference Level and monitoring information system development. For instance, Indonesia's FREL was a result of long run consultation integration process involving key and relevant stakeholders throughout the country led by REDD+ Agency. Another example is the NFMS as a result of long run consultation and improvement process involving many stakeholders led by MoEF.	

The progress explained above can also be seen in the Assessment conclusion, which showed that 'further developments are required' (orange) for Readiness Organization and Consultation (Table 2.6). The subcomponent of National REDD+ Management Arrangements has been progressing well (yellow). However,

the sub-component of Consultation, Participation and Outreach is still facing some challenges, especially with the participation and engagement of key stakeholders and consultation processes.

Table 2. 6 Results of Component 1. Readiness Organization and Consultation

Component	Sub-component
1. Readiness Organization and	a. National REDD+ Management Arrangements
Consultation	b. Consultation, Participation, and Outreach

Meanwhile on the Sub-national level, self-assessment conducted by stakeholders in East Kalimantan Province resulted in 'significant progress' (green) for Component 1, with 'significant progress' (green) progress for sub-component 1a and 'progressing with further development needed' (yellow) progress for sub-component 1b (Annex 2). South Sumatra Province has reached 'require further development' (orange) for component 1 and both sub-components (Annex 3).

2.2 REDD+ Strategy Preparation

REDD+ National Strategy was established through several processes, with the involvement of various stakeholders and relevant institutions. The efforts of building a National REDD+ Strategy in Indonesia started with the domestic initiative for bolstering REDD+ program after COP 13 in Bali in 2007. The Indonesia Forest Carbon Alliance (IFCA) Project pioneered the early report on formulating a REDD+ Readiness Phase, including the need for REDD+ National Strategy (FORDA, 2008). The process then continued within the Ministry of Forestry, with support from UN-REDD+ Project. Ministry of Planning was also involved in the REDD+ National Strategy establishment. In 2010, the REDD+ Task Force was established, with integrate these two documents into one document that accepted by each party as one of their missions. The process of establishing the REDD+ National Strategy was continued with forming a small team in the REDD+ Task Force to assess and integrate the existing document. Some of the team members were supported and financed by WB-managed budget. Consultation processes were conducted from February to April 2011, before the National REDD+ Strategy was published in June 2012 at national and Sub-national levels.

The implementation of National REDD+ Strategy started in 2013, with the establishment of Badan Pengelola REDD+ (BPREDD+/REDD+ Agency), an independent government body that exclusively manage REDD+. Most of the action plan and strategic approach, including mainstreaming the Forest Management Unit for better forest management at site level, written within the applied National Strategy. Due to the change in government administration, REDD+ Agency had to integrate with the Directorate General Climate Change (DGCC), under the Ministry of Environment and Forestry (MoEF). DGCC has become the key institution that deals with climate change in Indonesia, and all aspects related with climate change—including REDD+ scheme—fall under the jurisdiction of this institution. All preparation and products related to REDD+, during Readiness Phase under the REDD+ Agency and the National Council of Climate Change (Dewan Nasional Perubahan Iklim/DNPI), were transferred into this institution for further progress. As the

successor of the REDD+ Agency, the DGCC became the key institution in Indonesia that coordinates the planning, monitoring, and reporting of all climate change issues and obligations to international forum, as National Focal Point for climate change issue for Indonesia.

Table 2. 7 Results of Component 2. REDD+ Strategy Preparation

Component	Sub-component
	a. Assessment of Land Use, Land-Use Change Drivers, Forest Law, Policy and Governance
2. REDD+ Strategy Preparation	b. REDD+ Strategy Options
2. KEDD+ Strategy Freparation	c. Implementation Framework
	d. Social and Environmental Impacts
	e. Funding Instrument and Benefit Sharing Mechanism

The Assessment concluded that Component 2 of REDD+ Strategy Preparation is 'progressing with further development needed' (Table 2.7), as the result from 'significant progress' on sub-component 2a regarding Assessment of Land Use, Land-Use Change Drivers, Forest Law, Policy and Governance and sub-component 2b regarding REDD+ Strategy Options. Sub-component 2c regarding Implementation Framework 'require further development', while sub-component 2d about Social and Environmental Impacts, and 2e about Funding Instrument and Benefit Sharing Mechanism are 'progressing with further development needed'. This Assessment result also supported by the progress in selected subnational levels, e.g. East Kalimantan Province (Annex 2) and South Sumatra Province (Annex 3). The following subsections will briefly describe the progress from each sub-component under the Component 2 of REDD+ Strategy Preparation.

2.2.1 Assessment of Land Use, Land-Use Change Drivers, Forest Law, Policy and Governance

Work related with land use, drivers of changes in land-use, reference level, forest carbon stock calculation, enhancement, and monitoring–including assessment and analysis–are the most among all REDD+ instrument. But here are still some limitations in the progress related with forest law, policy and governance (Table 2.8).

There are ample analysis and assessment on land use, drivers of changes in land-use, policy and governance. The first official comprehensive analysis was provided by IFCA 2007 Consolidation Report (MoF, 2008). The IFCA report was led by the Ministry of Forestry, who coordinated the contribution from national and international experts, such as the Ministry of Forestry itself, the World Bank, DFID, APCO, Australian Department of Climate Change, CERINDO, CIFOR, ODI, Ecosecurities, GTZ, ICRAFT, Max Planck Institute, South Dakota State University, TNC, URS, Wetland International, World Resources Institute, and WWF. the infrastructure for REDD in Indonesia, deforestation and forest degradation analysis, land-use change, as well as forest governance.

To follow up IFCA Consolidation Report and update the information for REDD+ readiness in Indonesia, both central and local governments, NGOs and private institutions have conducted various assessments and analysis. Demonstration Activities and REDD+ related projects in Indonesia also conducted

assessment regarding land-use changes, forest laws, policy and governance for the purpose of their project implementation, as well as to support broader purposes beyond projects. FCPF has also contributed to several analytic works since 2011 (although the FCPF Indonesia stated since 2010, in practice it run effectively end of 2011 due to administration arrangement), e.g. analysis of deforestation drivers from a development perspective, land use demands, and demographics development; identification of priority investments required to reduce deforestation and forest degradation; identification of activities resulted in reducing emission and increasing removals, etc. The results of these analytic works are accessible on digital and printing media, have been disseminated to relevant stakeholders analysis (the result, among other, available on: http://puspijak.org/uploads/buku/Dynamic.pdf). FCPF funded analysis support the REDD+ implementation in several provinces, such as East Kalimantan, South Sumatera, and Papua. In recent years, new information for Indonesia has been produced by the Ministry of Forestry, that enables improvements in estimation of emissions levels throughout the country. Systematic monitoring of change in forest cover over longer time frame and updated land cover mapping are included in the new information. Based on this information and relevant published data, a first-order calculation of the emissions from loss of forest cover in 2000-2005 was performed to develop an improved basis for setting a REL for REDD.

The analysis results were mostly used to prioritize the key direct and indirect drivers, to be addressed by the programs and policies in the REDD+ Strategy. For the most part, the analysis considered the major barriers to forest carbon stock enhancement activities to be addressed by the programs and policies that are included in the REDD+ Strategy. There are identification results of systematic links between key drivers and/or barriers to the appropriate forest carbon stock enhancement activities and REDD+ activities, that already integrated in the REDD+ Strategy.

Table 2. 8 Results of Sub-component 2a. Assessment of Land Use, Land-Use Change Drivers, Forest Law, Policy and Governance

Sub-component 2a. Assessment of Land Use, Land-Use Change Drivers, Forest Law,			
Policy and Governance.			
Criteria	Diagnostic Questions	Evidence	
11. Assessment and analysis.	Does the summary of the work conducted during R-PP formulation and preparation present an analysis of recent historical land-use trends, assessment of relevant land tenure and titling, natural resource rights, livelihoods, forest law, policy and governance issues?	There are ample analysis and assessment on land use, drivers of changes on land-use, policy and governance. IFCA 2007 Consolidation Report was the first comprehensive analysis for REDD+ policy, followed by other analysis conducted by the government, NGOs, and private institutions, as well as Indonesia's development partners both collaboratively or separately. Note: http://www.unredd.net/documents/un-redd-partner-countries-181/asia-the-pacific-333/a-p-partner-countries/indonesia-187/national-un-redd-programme-management-including-tors-2778/studies-publications-resources-by-other-initiatives-1543/studies-and-	

Sub-component 2a. Assessment of Land Use, Land-Use Change Drivers, Forest Law,				
	Policy and Governance.			
Criteria	Diagnostic Questions	Evidence		
		publications-on-redd-1676/1027-indonesia-2008-ifca-consolidation-report-1027.html MoF, 2008. Reducing Emission from Deforestation and Forest Degradation in Indonesia. IFCA 2007 Consolidation Report. Ministry of Forestry. Jakarta. Submission by Indonesia, National FREL for Deforestation and Forest Degradation. Available at http://ditjenppi.menlhk.go.id/pustaka-djppi http://www.redd-indonesia.org/index.php/publikasi/daftar-publikasi/12914-forest-and-land-use-governance-in-a-decentralized-indonesia-a-legal-and-policy-review		
12. Prioritization of direct and indirect drivers/barriers to forest carbon stock enhancement.	a. How was the analysis used to prioritize key direct and indirect drivers, to be addressed by the programs and policies included in the REDD+ strategy?	The results of analysis from central government, local governments, research agencies, NGOs, and other institutions—both published and unpublished analytic works—were mostly used to prioritize key direct and indirect drivers to be addressed by the programs and policies in the REDD+ strategy. Public consultations, workshops, seminars, Focus Group Discussions, and other techniques were used to ensure the priority programs. Note: - REDD+ National Strategy, issued by REDD+ Task Force on 2012. Available at http://bpredd.reddplusid.org/program/strateginasional-redd - Submission by Indonesia, National FREL for Deforestation and Forest Degradation. Available at http://ditjenppi.menlhk.go.id/pustaka-djppi .		
	b. Did the analysis consider the major barriers to forest carbon stock enhancement activities to be addressed by the programs and policies in the REDD+ strategy?	The analysis mostly considered the major barriers to forest carbon stock enhancement activities to be addressed by the programs and policies included in the REDD+ strategy. The opportunity cost or abatement cost are included in the considerations.		
13. Links between drivers/barriers and REDD+ activities.	What evidence demonstrates that systematic links between key drivers, barriers to forest carbon stock enhancement activities, and REDD+ activities were identified?	There are identification results of systematic links between key drivers, barriers to forest carbon stock enhancement activities (as appropriate), and REDD+ activities are already integrated in the REDD+ Strategy, and some of them have been implemented. One of the examples is deforestation on peatland forest, which is key driver, links to the peatland restoration program. Another example is forest fire, which also a key driver, links to improvement program on forest fire management system.		

Sub-component 2a. Assessment of Land Use, Land-Use Change Drivers, Forest Law, Policy and Governance.			
Criteria	Diagnostic Questions	Evidence	
14. Action plans to address natural resource rights, land tenure, governance.	Do action plans to make progress in short, medium and long-term towards addressing relevant issues, land-use, land tenure and titling, natural resource rights, livelihoods, and governance issues in priority regions related to specific REDD+ programs, outline further steps and identify required resources?	Yes, REDD+ National and Sub-national Strategy is a basic instrument of national and provincial action plan. For further implementation agenda, there are detailed action plans to make progress in the short, medium and longterm, related to Ministries and Agencies at national level, and related to Local Government Agencies at Sub-national level. They outline further steps and identifies required resources, such as human resource, technology, and fund. REDD+ National Strategy needed to be adjusted due to institutional changes, and the ratification made by the Gol in relation to NDC. Some of REDD+ Sub-national Strategies also needed to be improved, as it happens in West Kalimantan Province. Note: REDD+ National Strategy, issued by REDD+ Task Force on 2012. Available at http://www.satgasreddplus.org/	
15. Implications for forest law and policy.	Does the assessment identify implications for forest or other relevant law and policy in the long-term?	The assessment identified implications for forest or other relevant law and policy in the short and medium-term periods. The extension of logging ban in peatland forest and the one map policy are the policy implications, due to driver identification and assessment. In the past year, the government issued Minister Regulations No. P.32/Menlhk/Setjen/Kum.1/3/2016 concerning the Management of Forest and Land Fire, as well as No. P.84/Menlhk/Setjen/Kum.1/11/2016 concerning Climate Village Program.	

The Assessment identified a number of implications for forest or other relevant laws and policies in the short- and medium-term periods only. The extension of logging ban in peatland forest and the one map policy are the policy implications due to driver identification and assessment. In past year, the Ministry of Environment and Forestry issued the Minister Regulations No. P.32/Menlhk/Setjen/Kum.1/3/2016 concerning the Management of Forest and Land Fire, and Minister Regulation No. P.84/Menlhk/Setjen/Kum.1/11/2016 concerning Climate Village Program that urge villages to care and be responsible for climate change mitigation and adaptation actions.

Action plans to address natural resource rights, land tenure, and governance are available in REDD+ National and Provincial Strategy document, in order to achieve progress in the short, medium and long-term. The action plans also outline further steps and identifies required resources. The provinces with relevantly vast forests and peatland areas have been facilitated to develop their Provincial Strategy for REDD+. National Strategy for REDD+ is available at the national level. Due to the current situation in

Indonesia, the government will do the necessary adjustments with REDD+ National Strategy to incorporate the progress that was reached by Indonesia and planned in the NDC. However, there are challenges needed to be resolved. Tenure rights is enabling condition to support implementation of land use regulation, such One Map Policy, etc. One map policy is one of the instruments to make a clear and clean of forest and land property rights for REDD+ implementation by providing single legal recognition on forest and land rights. Consequently, tenure rights have become a very critical issue in the implementation of REDD+. Data management system is another enabling condition for spatial and statistical information, related to emission reduction program at national and sub-national level. Robust data management system is a crucial matter, due to its function to provide a basic element for REDD+ investment analysis. The government of Indonesia plans to address these issues and get the best condition for REDD+ readiness.

2.2.2 REDD+ Strategy Options

The strategic framework for REDD+ has been developed to facilitate the achievement of the following long-term goals: (i) a reduction of greenhouse gas emissions originating from Land Use, Land-Use Change, and Forestry (LULUCF); (ii) an increased in carbon stocks; (iii) improvement of the preservation of biodiversity; and (iv) an increased in the value and sustainability of the forest's economic functions. The REDD+ program framework consists of five strategic pillars as illustrated in Figure 2.5, as follows:

- Development of an Institutional System for REDD+
- 2) Policies and Regulations Reviewed and Strengthened
- 3) Strategic Programs
- Changes to Work Paradigms and Culture 4)
- Stakeholder Participation.

These interrelated pillars have been designed to facilitate the achievement of the REDD+ strategic goals based on the above Assessment of Land Use, Land-Use Change Drivers, Forest Law, Policy and Governance.

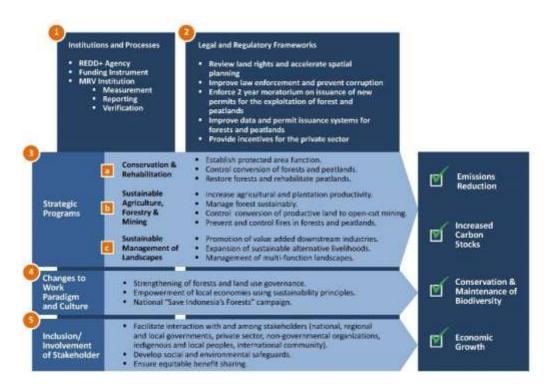


Figure 2. 5 The REDD+ Strategy Framework (Source: REDD+ Task Force Indonesia 2012).

The Assessment concluded that sub-component 2b of the REDD+ Strategy Options has significant progress (green). As shown in Table 2.9, two of three criteria are 'progressing with further development needed' (yellow), because the expected emission reduction potentials of interventions were not directly estimated, the REDD+ Strategy requires full support from local politics, and there are minor inconsistencies between options and policies/programs. The 'significant progress' might be an overestimate calculation, due to reassignment of progress indicator based on the results of calculating the average of the scores. However, the 'green' progress is relevant, because the evidences showed that Indonesia actually has fulfilled all the diagnostic questions, with limited shortcomings. REDD+ Strategy Options were selected via transparent and participatory processes. It is important to have a full support from the local politics to do feasibility assessment for REDD+ Strategy Options. The result of identification showed minor inconsistencies between the priority REDD+ Strategy Options, policies and programs. The agreed timeline and process to resolve the inconsistencies is in place, but not operational. This process also requires support from broader community.

Table 2. 9 Results of Sub-component 2b. REDD+ Strategy Options

Sub-component 2b. REDD+ Strategy Options.			
Criteria	Diagnostic Questions	Evidence	
16. Selection and prioritization of	a. Were REDD+ strategy options–prioritized based on	REDD+ strategy options were selected via a transparent and participatory processes, such as public consultations,	
REDD+ strategy options.	comprehensive assessment of direct and indirect drivers of	workshops, seminars, Focus Group Discussions, and any other techniques at national level involving national and	
	deforestation, barriers to	sub-national entities throughout the country. REDD+	

Sub-component 2b. REDD+ Strategy Options.		
Criteria	Diagnostic Questions	Evidence
	forest enhancement activities and/or informed by other factors—selected via a transparent and participatory process?	strategy options are also open to be reviewed in order to adjust with the current situations. Note: REDD+ National Strategy, issued by REDD+ Task Force on 2012. Available at http://bpredd.reddplusid.org/program/strategi-nasional-redd . http://ditjenppi.menlhk.go.id/index.php/peraturan-perundangan
	b. Was it possible to estimate the expected emissions reduction potentials of interventions, and how did they inform the design of the REDD+ Strategy?	The expected emissions reduction potentials of interventions were not directly estimated because it was difficult to assess. The designs of the REDD+ strategy were publicized via public consultations and various media outlets in limited manner.
17. Feasibility assessment.	Were REDD+ strategy options assessed and prioritized for their social, environmental and political feasibility, risks and opportunities, and analysis of costs and benefit?	The REDD+ strategy options have been assessed and prioritized for social, economic, environmental, and political feasibility. However, the REDD+ strategy options still requires the full support from the local politics.
18. Implications of strategy options on existing sectoral policies.	a. Have major inconsistencies between the priority REDD+ strategy options and policies or programs in other sectors related to the forest sector (e.g. transport, agriculture) been identified?	Yes, there were minor inconsistencies between the priority REDD+ strategy options and policies or programs in other sectors related to the forest sector (e.g. transportation, mining, agriculture and plantation expansion) have been identified.
	b. Is an agreed timeline and process in place to resolve inconsistencies, and integrate REDD+ strategy options with relevant development policies?	Yes, there are coordination and integration programs between forestry sectors with other related sectors upon agreed timeline and process, to resolve inconsistencies and integrate REDD+ strategy options with relevant development policies. The integration programs needed to be strengthened by high political agenda in order to support the operational level.
	c. Are they supportive of broader development objectives and supported by broad community?	Yes, they are. The REDD+ Strategy has been fairly supportive of broader development objectives, but need more support from broader community. Note: REDD+ National Strategy, issued by REDD+ Task Force on 2012. Available at http://bpredd.reddplusid.org/program/strategi-nasional-redd .

2.2.3 Implementation Framework

The implementation framework includes adoption and implementation of legislation/regulation, guidance for implementation, and national registry. Some legislations and/or regulations related to REDD+ programs and activities have been enacted, adopted and implemented in Indonesia. Among others are the moratorium of new license in primary forest and peatland for improving forest governance (http://kerincitime.co.id/efektivitas-moratorium-pembalakan-hutan-dan-lahan-gambutperspektif-provinsi-jambi.html), regulated by Presidential Instruction No. 10/2011 on Moratorium of the New Licenses and Improving Forest Governance of Primary Forest and Peatland, forest fire management (http://www.menlhk.go.id/berita-211-pengendalian-kebakaran-hutan-dan-lahan-oleh-tim-terpadukarhutla-kementerian-lingkungan-hidup-dan-ke.html), peatland rehabilitation program (focused on the large peatland area only, such as Riau, South Sumatera, Jambi, West Kalimantan, South Kalimantan, Central Kalimantan, and Papua, see at http://brg.go.id/files/RENSTRA%20BRG%202016- 2020%20(November%202016).pdf; or

http://sains.kompas.com/read/2013/10/31/1204460/Restorasi.Ekosistem.Potensi.REDD), and One Map Policy as stated at the Act No. 4/2011 on Geospatial Information (particular case study available in https://www.opengovpartnership.org/sites/default/files/case-study Indonesia One-Map-Policy.pdf). In short, the peatland restoration will support carbon enhancement, forest fire management will reduce an emission and avoid deforestation and forest degradation, while one map policy is a an enabling condition for sustainable forest management. However, there is a lack of adoption and implementation of laws and regulations by private sectors, in relation to low carbon development due to incentive policy that is not available yet.

As an important institution, Forest Management Unit (FMU) is expected to help improving forests management at site level, and will become the base for the implementation of REDD+ framework. FMU is responsible for developing, implementing, and/or overseeing site level forest governance and management; including preparing participatory plans, enforcing forest regulations such as forest fire control and other illegal practices, and negotiating with local communities on issues, such as land use rights and forest access. FMUs are decentralized in structure for forest management, adapted to local conditions, and supporting the National REDD+ Strategy. By the end of 2014, 120 FMUs were developed under the authority of Ministry of Forestry and Sub-national governments, to increase the accountability to local stakeholders. 600 FMUs are expected to operate in 2019. For operationals, some challenges remain to be addressed are: (i) develop long-term forest management plan as a guidance for sustainable management of forest, (ii) skilled human resources, (iii) operational budget for forest management, (iv) self sufficient, and (v) develop "Knowledge Base" and FMU networking². This ambitious target requires commitment and supports. To administrate and manage the FMUs, several institutions needed to be created and/or strengthened, technical and practical capacity needed to be improved and on-the-ground operational experience with multi-stakeholder sustainable forest management needed to be built. FMU development is supported by a number of donor programs, including GIZ and the Forest Investment Program (FIP).

² Further detail information on FMU is available in http://www.kph.dephut.go.id

For REDD+ implementation guidance, the infrastructure mechanism for implementation framework is being developed and almost ready, e.g. defining carbon rights, benefit sharing mechanisms, REDD+ financing modalities, procedures for official approvals for pilots or REDD+ projects, and grievance mechanisms. There are several regulations have been issued by the government in the past, for example the Minister of Forestry Regulation No. P.30/Menhut-II/2009 which regulates the Procedure for REDD Demonstration Activities, and Minister of Forestry Regulation No. P.36/Menhut-II/2009 on the Procedure of Carbon Sink and Removal Bussiness Permits in the Protection and Production Forest Areas. Unfortunately, institution, authority, and procedure in issuing carbon sink and removal business permit at protection forest needed to be strengthened and improved. Permits regarding forestry business are issued by the Directorate General of Production Forest, whereas carbon sink and removal business conducted in protected forest area is under the jurisdiction of Directorate General of Protection Forest and Natural Conservation. The implication suggested that carbon business is not ready to be implemented within Protection and Conservation Forest area. Coordination between the two DGs are needed for smooth implementation of REDD+ under the carbon sink and removal business.

The latest relevant instrument for REDD+ implementation framework—particularly related to MRV—is National Registry System, where registry system for REDD+ is included and launched by the MoEF in November 2016. This will be followed by the operation system. Therefore, it will take time to disseminate the information before the system is adopted and implemented. Capacity building is being conducted to operate the registry for Sub-national levels, as well as developing, testing, and adopting the registry activities, especially in East Kalimantan as a targeted province to implement FCPF Carbon Fund.

Table 2.10 Results of Sub-component 2c. Implementation Framework

Sub-component 2c. Implementation Framework.		
Criteria	Diagnostic Questions	Evidence
a. Have legislation and/or regulations related to REDD+ programs and activities been adopted?	Some of legislation and/or regulations related to REDD+ programs and activities have been adopted and implemented, for example: moratorium of new license in primary forest and peatland for improving forest governance, and One Map Policy. Others legislation and/or regulations are in on-going process, including RIL-C (Reduce Impact Logging-Carbon). Notes: - Presidential Instruction No. 10/2011 concerning Moratorium of the New Licenses and Improving Forest Governance of Primary Forest and Peatland. - Act No. 4/2011 concerning Geospatial Information.	
	b. What evidence is there that these relevant REDD+ laws and policies are being implemented?	Moratorium of new license in primary forest and peatland for improving forest governance & One Map Policy, licenses on ecosystem restoration, and licenses on carbon stocking and sequestration. Note:

Sub-component 2c. Implementation Framework.		
Criteria	Diagnostic Questions	Evidence
		 Presidential Instruction No. 10/2011 concerning Moratorium of the New Licenses and Improving Forest Governance of Primary Forest and Peatland. Act No. 4/2011 concerning Geospatial Information.
20. Guidelines for implementation.	What evidence is there that the implementation framework defines carbon rights, benefit sharing mechanisms, REDD+ financing modalities, procedures for official approvals (e.g. for pilots or REDD+ projects), and grievance mechanisms?	The infrastructure mechanism for implementation framework is being developed. Funding instrument (Government Regulation on General Service Agency), benefit sharing mechanisms, procedures for official approvals (e.g. for pilots or REDD+ projects), and grievance mechanisms (Government Internal Control System or Sistem Pengendalian Internal Pemerintah/SPIP) are included in the framework. Note: - The Minister of Forestry Regulation (Peraturan Menteri Kehutanan) No. P.30/Menhut-II/2009 regarding the Procedure for REDD (Tata Cara Pengurangan Emisi dari Deforestasi dan Degradasi Hutan (REDD)). - The Minister of Forestry Regulation No. P.36/Menhut-II/2009 regarding the Procedure for Carbon Sink and Removal Business Permits in the Protection and Production Forests.
21. National REDD+ registry and system monitoring REDD+ activities.	Is a national geo-referenced REDD+ information system or registry operational comprehensive of all relevant information—such as information regarding the location, ownership, carbon accounting and financial flows for Subnational and national REDD+ programs and projects—and ensure public access to REDD+ information?	The REDD+ information system or registry has been developed and launched, followed by the operational of registry system. Note: http://ditjenppi.menlhk.go.id/berita-ppi/2774 , and http://ditjenppi.menlhk.go.id/index.php/peraturan-perundangan http://ditjenppi.menlhk.go.id/reddplus/images/resources/srn/manual_proponen_srn.pdf

Therefore, it is understandable that implementation framework progress is in the 'orange' state or 'further development needed' (Table 2.9). The guidelines for implementation and registry system are still in the being constructed, or only constructing the guideline that requires time for implementation trial. On the other hand, some of adoption and implementation of legislation/regulation have been progressing quite well, but need more supports.

2.2.4 Social and Environmental Impacts

To respond the mandate from the Conference of the Parties (COP) decisions on REDD+ safeguards, Indonesia started the development process of Safeguard Information System for REDD+ (SIS-REDD+) in early 2011, by translating the seven REDD+ safeguards from COP-16 Decision into the national context. During the translation process, it became clear that Indonesia's sustainable forest management is familiar with REDD+ safeguards.

A web-based SIS-REDD+ or "a SIS-REDD+ web platform" (http://sisredd.dephut.go.id) was developed, and it marked the start of the early version of SIS-REDD+ Indonesia operation. The web-platform consists of two parts: (1) SIS-REDD+ database to collect, compile and manage the data and information on REDD+ safeguards implementation; and (2) SIS-REDD+ web platform for displaying the information.

A country-led development of the system through multi-stakeholder processes, has provided a valuable opportunity to understand the progress of REDD+ implementation in the country, and were proven to be valuable for capacity building through "learning by doing" processes. The multi-stakeholder processes, supported by experts and in collaboration with international partners, has proven to be an effective and acceptable approach for broader groups of REDD+ actors in Indonesia. The SIS-REDD+ is designed in such way to allow synergy and integration with any other parallel safeguards-related initiatives, including the following safeguards systems: **PRISAI** (*Prinsip, Kriteria, Indikator Safeguards Indonesia*), **REDD+ SES** (Social and Environmental Safeguards), and **REDD+ PGA** (Participatory Governance Assessment) focusing on transparent and effective forest governance.

PRISAI, developed by REDD+ Task Force, is a jurisdiction and project-based safeguards as an early initiative to form a national REDD+ safeguards. PRISAI was developed for two main purposes: (1) to prevent the implementation of REDD+ from social and environmental risks that may damage the spirit of REDD+ as a mechanism with potential to protect the environment and community; (2) to endorse changes in policies concerning natural resources, specifically forests and peat lands, in order to execute the principles a of good governance, principles of human rights, and the spirit of democracy.

REDD+ SES, a REDD+ safeguards initiative that was developed in a participatory and multi-stakeholder approach, to support SIS development in 13 countries since 2009. In Indonesia, REDD+ SES pilots have been conducted in Central Kalimantan and East Kalimantan. The content of safeguards was based on the key forest governance issues that the provincial government has been facing. In East Kalimantan, for example, the SES was developed based on 11 significant and urgent issues on natural resource management. The issues were derived from stakeholder consultations in the province and districts. Monitoring assessment for REDD+ program in both provinces have been conducted, and the result of the assessment then published to the public.

PGA for REDD+ is another safeguards-related initiative in the country. To inform policy-making by providing regularly updated and robust governance information accompanied by recommendations; to serve as a basis to inform and link with Indonesia's REDD+ safeguard information system; and to demonstrate—over time and when properly addressed—that there is a positive correlation between good forest governance, in structures and practices, and the efforts to reduce Indonesia's emissions from forest degradation or deforestation are the main purposes of PGA.

The three safeguards systems are currently implemented or tested with different purposes, at different levels and jurisdictions. Further steps are needed to ensure coherence between criteria and indicators in the three safeguards systems (PRISAI, REDD+ SES, and REDD+ PGA), and PCI in SIS-REDD+, in order to link the three safeguards systems with SIS-REDD+.

On the other hand, FCPF promoted Strategic Environmental and Social Assessment (SESA) as a safeguard for REDD+. SESA was developed by the World Bank as an instrument to ensure that social and environmental issues are integrated into the preparation of the REDD+. SESA and ESMF are mandatory requirements under FCPF. SESA is based on analytic work to identify potential risks and impacts, and recommendations for risk and impact mitigation. The ESMF serves as an overarching framework for the management of environmental and social risks and impacts from REDD+ activities. Both SESA and ESMF are standalone instruments but related to each other.

SESA initiative development in Indonesia was facilitated by National Forestry Council (Dewan Kehutanan Nasional/DKN), an independent body with institutionalized representatives of different stakeholder groups, and mainly supported by the FCPF since 2012, through multi-stakeholders meeting and public consultations involving multisectors and entities. Currently, the SESA document and conceptual framework of ESMF have not established yet. It is because Indonesia had another national priority that focused on SIS REDD+ development as a mandat from Cancun Agreement 2010. There was also found ambiguity within the TOR of SESA and ESMF, and interpreted differently by many parties (tool, process, or product). In addition, Indonesia now has Strategic Environmental Assessment (Kajian Lingkungan Hidup Strategis, KLHS) as a country initiative that inline with the need of SESA and ESMF. There is also ongoing discussion on how to make the best use of the outcomes out of SESA process in REDD+ readiness activities, including in its relation to SIS-REDD+ operation. Due to the FCPF PC (FPCF - Participants Committee) calls for ERPD to meet the World Bank's environmental and social safeguard standards, the existing safeguards initiatives in Indonesia needed to be analyzed. There is an urgent need to continue the SESA and ESMF development, and then conducting pilot testing in East Kalimantan Province. Indonesia has many instruments to provide social and environmental analysis in order to support the development of the safeguards initiatives. Unfortunately it is still separated in different activities, programmes, or projects. As reported by Soekmadi and Yudiarti (2016), in 2016, with FCPF's support, the MoE produced a compilation of background information for the development of SESA Final Report and initiated the preparation for ESMF. The report stated that more than 400 activities related Assessing potential impacts from national REDD+ programs and policies, formulate alternative and mitigation strategies, and enhance the decisionmaking process around the design of the national REDD+ framework are included in the activities

In line with these progress, the results of self-assessment process concluded that Sub-component 2d of Social and Environmental Impacts are 'progressing well with further development needed' (yellow) for the SESA and 'further development needed' (orange) for the ESMF (Table 2.10).

Table 2.11 Results of Sub-component 2d. Social and Environmental Impacts

Sub-component 2d. Social and Environmental Impacts.		
Criteria	Diagnostic Questions	Evidence
22. Analysis of social and environmental safeguard issues.	What evidence is there that applicable SESA issues relevant to the country's context have been fully identified/analyzed via relevant studies or diagnostic and in consultation process?	Other mechanism, such as KLHS, EIA, HCVF are available and functioning as complementary instruments for SESA. National Forestry Council (<i>Dewan Kehutanan Nasional</i> /DKN), representing multi-stakeholders on forestry sector, has been facilitating SESA & ESMF development. Indonesia also has REDD+ safeguard related-initiatives, such as SIS-REDD, PRISAI, REDD-SES, etc. The next challenge is how to integrate the initiatives within the country, related to social and environmental safeguards, to be a SESA and ESMF document. Note: Indonesia has established the Safeguards Information System (SIS). Available at: http://sisredd.menIhk.go.id/ .
23. REDD+ strategy design with respect to impact.	How did SESA result and identification of social and environment impacts—both positive and negative—used for prioritizing and designing REDD+strategy options?	Indonesia used the existing mechanisms, such as KLHS, EIA, HCVF, etc., to make sure REDD+ strategy options are considering social and environmental impacts. The result was used to develop REDD+ National Strategy. Hence, the REDD+ National Strategy has accommodated the lessons learned from REDD+ safeguards related-initiatives. Many abstracts related to safeguards have been compiled by Soekmadi and Yudiarti (2016) Note: Soekmadi, R., and Yudiarti, Y. 2016. Compile Background Information for the Development of a Strategic Environment and Social Assessment (SESA) Final Report for Indonesia's REDD+ Readiness Preparation. Research and Development Center for Social Economy Policy and Climate Change in collaboration with the Forest Carbon Partnership Facility (FCPF). Bogor, Indonesia. [http://puspijak.org/upload_files/Safeguard-Laporan-Yun-Bibliografi_Safeguard_REDD_layout_20161123R.docx]
24. Environmental and social management framework.	What evidence is there that the ESMF is in place and managing environmental and social risk or potential impacts related to REDD+ activities?	Indonesia has social and environmental impact assessment and guidance. Indonesia has also established the Safeguards Information System for REDD+. Yet, a conceptual framework of ESMF needed to be developed. Note: Note: Note: There are various references and regulations, among other: - The Safeguards Information System for REDD+ (SIS- REDD+) available at: http://sisredd.menIhk.go.id/ Principles, Criteria, and Indicators for REDD+ Safeguards Indonesia (PRISAI) - Participatory Governance Assessment: Indonesia Forest, Land and REDD+ Governance Index

Sub-component 2d. Social and Environmental Impacts.		
Criteria	Diagnostic Questions	Evidence
		 AMDAL (Analisis Mengenai Dampak Lingkungan, Environmental Impact Assessment) KLHS (Strategic Environmental Assessment) PHPL (Pengelolaan Hutan Produksi Lestari, Sustainable Production Forest Management) SVLK (Sistem Verifikasi Legalitas Kayu, System for Verification on Timber Legality) SFM (Sustainable Forest Management) Sertification by the SFC and LEI (Lembaga Ecolabel Indonesia, Indonesia Ecolable Agency)

2.2.5 Funding Instruments and Benefit Sharing Mechanism

2.2.5.1 Funding Instruments

One of the strategic roles for funding REDD+ preparation and implementation in Indonesia is to improve Indonesia's efforts in reaching targeted achievement on reducing emission. Directorate General for Climate Change (DGCC), under the Ministry of Environment and Forestry (MoEF), has developed a Strategic Plan on how climate change mitigation and adaptation can be funded. Climate change financing framework can be funded by two main sources (DJPPI, 2015):

a. National Budget System (Anggaran Pendapatan dan Belanja Negara/APBN).

MoEF 2015-2019 allocated budget for climate change related programs of IDR 905.99 billion (approximately US\$ 67.6 million, when exchange rate used is IDR 13,400 for US\$ 1). However, the total budget needed for climate change related activities during 2015-2019 is IDR 2.223 trillion (approximately US\$ 165.9 billion). Hence, it still needs additional budget IDR 1.317 trillion (approximately US\$ 98.3 billion) from other sources. Currently, there are grants from Indonesia's development partners, such as Government of Indonesia-Norway partnership, AusAID, GIZ, FIP, TNC, FCPF, UNREDD, ITTO, EU, JICA, KOICA, Japan, WWF, and others, with total amount US\$ 1.2 billion. Mobilization of funding from various sources of fund is a crucial stage, in order to achieve the target of climate change programs, to enhance the targeted locations, and to improve the programs quality.

b. Partners

Funding from partners will be allocated to fill the gaps of IDR 1.317 trillion. The potential of partners' collaboration are:

- National : Cooperation with the local and national partners, national and multinational companies, on climate change-related activities.
- Bilateral : Norway, European Union, Denmark, United Kingdom, Australia, South Korea, Mexico, USA, the Netherlands, Germany, Swiss, Sweden, Japan.

Multilateral: UNFCCC, UNEP, UNDP, Multilateral Development Bank, FAO, GEF, GCF, FCPF, and other Multilateral Funds.

There are a significant amount of REDD+-related donor funding schemes available for readiness activities and REDD+ implementation. However, DGCC of the MoEF has noted that budget allocated for REDD+ of US\$ 1.2 billion (readiness, transition phase, as well as those who are committed for results based payment) through bilateral and multilateral schemes (such as Government of Indonesia-Norway partnership, AusAID, GIZ, FIP, TNC, FCPF, UNREDD, ITTO, EU, JICA, KOICA, Japan, WWF, and others). It is only around 1.2% from the gap of budget needed. Hence, the Government of Indonesia still has to fill the remaining budget gap progressively.

Since 2011, FCPF has been contributing to fill the gaps at national and sub-national levels for REDD+ readiness activities. The contribution was grouped at four main components of analytic work, management of readiness process, REL and MRV, and regional data collection and capacity building. Table 2.12 shows the roles of FCPF on REDD+ readiness process in Indonesia.

Table 2. 12 The role of FCPF on REDD+ readiness in Indonesia

Component	Actual activity 20011-2016	Planned activity 2017-2019
1 analytic Work	 Identifying national activities which resulted in reducing emision Stakeholders' coordination on comprehensive mitigation actions for REDD+. 	 Application of methodical approach conducted in East Kalimantan to national approach Unified National Carbon Accounting System, operational and sustained PSP management Integration of sub-national data into national data management system Data management (reporting, data entry, QA/QC, data documentation), Development of national benefit sharing mechanism Positioning of REDD+ in current commitments of Indonesia's NDC The role of private sector in low carbon development process.
2 Management of readiness process	 A process for stakeholders to review existing regulatory frameworks and formulate an integrated REDD Regulation Develop a guidance for effective engagement with indigenous people Capacity building on carbon accounting and monitoring Dissemination of FCPF REDD+ readiness preparations Workshops/consultations on various topics Establishment of a sub-national REDD Working Group Establishing an institutional setting and legal framework to work on the causes of deforestation, land use and demands, 	 Focusing on REDD+ provincial program in East Kalimantan: Development of a provincial investment and implementation plan Building capacities in district governments to develop and implement low carbon development plans Application of Land and Resource Tenure Assessment Implementing SIS-REDD+ to mitigate negative potential of social environmental impacts and applying National ESMF to activities anticipated for first year of project implementation Finalization of SESA report

Component	Actual activity 20011-2016	Planned activity 2017-2019
	demographic development, activities resulting emissions reduction, and the increase of relocations - PSP maintenance, MRV, and DA. - Establishment of Safeguard Information System - Improvement in management of data, lessons, and funding partner coordination - Development of SESA Encourage and strengthening the implementation of safeguards national policies and framework	 Developing and adopting a Grievance Redress Mechanism Developing an agreed benefit sharing plan Identifying opportunities to implement and eventually scale-up REDD+ and landscape interventions at the sub-national level.
3 REL and MRV	 Development of a timeline analysis of primary social economic and policy aspects of land use change Listing of the new PSPs and re-listing of the existing PSPs Development of suistanable monitoring forest carbon application system Forest Carbon Monitoring Database to Support National Forest carbon Monitoring System 	Focuses on implementation of REL-MRV approach and data management system in East Kalimantan: Development and adoption of REL Designing and establishing a sub-national MRV system Establishing PSP to enhance quality observations Developing data management system for critical spatial and statistical data to track and manage information of Emission Reduction program Assessment of leakage and reversals, and develop its mitigation programme
4 Regional data collection and capacity building	 Developing and improving REDD+ framework at selected areas (mainstreaming/combining climate change adaptation and mitigation) Developing socio-economic and biophysical baseline data Finalizing the ER-PIN and preparing the ERPD Public consultation on establishment of sub national REDD+ Working Group Readiness Package development. 	Enhancing the capacity for program management and strategic policy analysis which will be focused on Project Management Unit, Training & Learning, and Contingency.
Expenditure/ Budget	US\$ 3.6 million	US\$ 5 million The agreement available on: (https://www.forestcarbonpartnership.org/sites/fc p/files/2016/Oct/FCPF%20Indonesia%20- %20Amendement%20November%202016.pdf).

Indonesia needs to prepare a main instrument of a regulation on how to arrange sources of REDD+ funding development, REDD+ funding mechanism, and REDD+ funding institution. The hierarchy of regulations is as follow (Widjaksono, 2016):

- Government Regulation (Peraturan Pemerintah/PP) on Environment Economics Instrument (Instrumen Ekonomi Lingkungan Hidup/IELH); which serves as an umbrella (basic law) on environment based fund.
- President Regulation on environmental funding; serves as the basic law of climate change fund (protection of atmosphere function), which regulates environmental financing management, including climate change fund (among others, REDD+).
- Ministry Regulation on Climate Change Fund; the technical regulation on how to regulate technical criteria of climate change fund utilization (mitigation REDD+, adaptation, ozone protection).
- Mobilization Strategies on climate change fund; conceptual strategic and technical directions on moving within the areas and sectoral based climate change fund

Indonesia is still implementing a process on drafting the Government Regulation on Environment Economics Instrument (*Rancangan PP-IELH*). The formal basic/foundation for this RPP-IELH is Law No. 23/2009 about Protection and Environment Management (Widjaksono, 2016). Until now it is still under discussion with various parties (MoEF, Bappenas, and Ministry of Finance), neverthelles the final result and its resolution are beyond the control of MoEF.

Several Demonstration Activities and REDD+-related pilot projects existed and have contributed lessons learned for Indonesian REDD+ readiness preparations. In order to scale up these project/site level activities, further preparations will be done and subject for financing/subject to fund. National (domestic) funding mechanisms still need more explorations to complement the roles of government and its partners; where the role of private sector is facing new challenges.

An initiative set on the usage of CSR fund for REDD+ scheme (and other environmental service schemes), and CER (Corporate Environmental Responsibility). The implementation later found that there is lack of REDD+ regulations considered easy to understand by private sectors, as the initiative also came to rejection by local communities due to tenure rights issues (double claims, unclear property rights, and lack of rights enforcement measures). Another initiative of private sector involvement in carbon sink and sequestration business also got stuck in this phase; as experienced by (PT Global Alam Lestari, the first company with Carbon Sink and Removal Business License in production forest area in South Sumatra). Other initiatives developed on protection forest area faced another obstacle on the carbon sink and removal business licensing. Based the findings, MoEF seems still not ready yet to implement the MoEF Regulation No. P.36/Menhut-II/2009 (about licensing procedures on carbon sink and business isolation).

Therefore, it is necessary to formulate measures to ensure legal framework, businesses, and an area for private sectors involvement in the REDD+ implementation. In addition, the green investment approaches and policies by Bank Indonesia will greatly help to offer incentives for private companies which work accordingly with the principles of sustainability and the environment.

2.2.5.2 REDD+ Benefit Sharing Mechanism

The Government of Indonesia (GoI) has used many of its experiences in approaches toward benefit sharing design. At national level, Indonesia has promoted MP3EI as an approach in national development. The payment used in this program among other National Budget System (APBN) and international fund, while the incentives will be distributed through input-based/compliance, and performance based schemes.

Indonesia has identified the beneficiaries of REDD+ scheme, roles or contributions, and benefits that they can get. The benefit sharing rules developed for REDD+ in Indonesia have been contentious and are still

under ongoing discussion. The main challenge faced is the fact that MoEF does not have the legal authority to set up such regulations, which are under the purview of the Ministry of Finance. As an alternative or complementary system in the context, Indonesia has provided several channels as options of vertical REDD+ benefits sharing mechanism (in that REDD+ benefits are shared among entities vertically, national to sub national)such as Fiscal Transfer, Trust Fund, National Program of Community Empowerment (Program Nasional Pemberdayaan Masyarakat/PNPM), and General Services Agency (Badan Layanan Umum/BLU).

As the latest initiative, the BLU of Environmental Financing is an agency under the Ministry of Finance (MoFin), but operates under the co-operation between MoFin and MoEF. Indonesia is now at the stage of drafting the Presidential Regulation on Environmental Fund, which arranges two main issues of environment fund management and environment fund institution (as BLU is part of this institution). The BLU mechanism is shown in Figure 2.6.

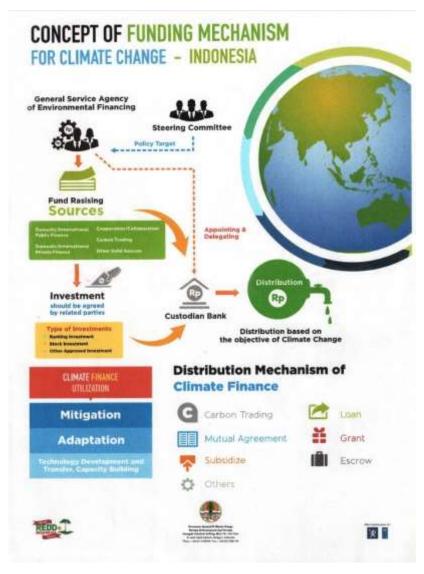


Figure 2. 6 A meta concept of BLU mechanism

(Source: DJPPI (2016), presentation on August 3rd, 2016)

Another discourse is about horizontal REDD+ benefit sharing mechanism, in that REDD+ benefits are shared among entities horizontally involved in the programme (such as within communities, households, or between communities). With the experience on regulating a benefit sharing mechanism horizontally, Indonesia has implemented the pilots or DA-REDD+ in the site level. The implementations played an important role as learning processes and knowledge transfers, as they provided advice for national and sub-national policies, provided ideas for national instruments or standards, as well as showing benefits for result-based action readiness at the sub-national level (province/district/site) in the transition process towards REDD+ full implementation.

The DA-REDD+ provided lessons learned from the exercise of benefit sharing mechanisms (Widjaksono, 2016) such as (1) UN-REDD, conducted benefit analysis and constraints of the existing distribution system, and provided options for REDD+ payment system, (2) GIZ- FORCLIME Financial Module, developed a sustainable payment system in Malinau, Berau, and Kapuas Hulu District, (3) IAFCP – KFCP, developed a payment system in the community level, (4) Berau Forest Carbon Programme (by TNC), developed payment system at the district level, and (5) FFI, Community Based REDD+ developed in three locations at Kalimantan, Jambi and Nusa Tenggara Barat. The DA-REDD+ experiences on benefit sharing mentioned are still in their conceptual frameworks, although the FCPF Carbon Fund in East Kalimantan province poses a significant role on how benefit sharing mechanism applied in practices. FCPF Carbon Fund can choose a vertical and/or horizontal mechanism from options mentioned above. As a next step, the central government and local governments, including all parties involved in the East Kalimantan Carbon Fund scheme should decide a relevant benefit sharing mechanism through multi-stakeholder discussion and multi-discipline study, as well as cross-sectoral approach.

The progress mentioned above also described during the Assessment and concluded that Sub-component 2e of Funding Instrument and Benefit Sharing Mechanism is 'progressing well, but further development is still required' (Table 2.13).

Table 2. 13 Results of Sub-component 2e. Funding Instrument and Benefit Sharing Mechanism

Sub-component 2e. Funding Instrument and Benefit Sharing Mechanism.		
Criteria	Diagnostic Questions	Evidence
25. Funds management capacity.	How are institutions and arrangements demonstrating effective, efficient and transparent fiscal management, including coordination with other development partner-funded activities?	The fund institution has not been established yet. The concept of funding mechanism arrangement has been developed, and now it is an on going process to be legalized by Government Regulation. Funding mechanism will be in the form of General Service Agency (<i>Badan Layanan Umum</i> /BLU) of Environmental Financing. Note: Government Regulation Bill on the Environment Economics Instrument is based on the Act No. 23/2009 concerning Protection and Environment Management.
26. Availability of fund.	How is it shown that national and international REDD+ institutions are providing committed funds for REDD+ under clear mutually supportive mandates with	There are funding sources committed for REDD+ payment in Indonesia, e.g. through billateral and multilateral agreements, joint creditting mechanism, national budget, and others. Note:

Sub-component 2e. Funding Instrument and Benefit Sharing Mechanism.		
Criteria	Diagnostic Questions	Evidence
	adequate, predictable and sustainable budgets?	http://www.redd- indonesia.org/index.php/publikasi/daftar-publikasi/12919- kepastian-pembiayaan-dalam-keberhasilan-implementasi- redd-di-indonesia
27. Benefit sharing mechanism.	Transparent and equitable existing mechanism.	Several existing options of benefit sharing mechanism in Indonesia are: fiscal transfer, Specific Allocation Funds (Dana Aloksi Khusus/DAK), General Allocation Funds (Dana Alokasi Umum/DAU), National Community Empowerment Program (Program Nasional Pemberdayaan Masyarakat/PNPM), etc. These mechanisms offer a transparent and fair mechanism through periodic reporting and auditing, link to the national budget system, as they are controlled by internal and external supervision body. These mechanisms are adjusted for REDD+ benefit sharing mechanism. Notes: - Minister of Forestry Regulation No. 30/2009 about the Procedures of Reducing Emission from Deforestation and Forest Degradation - REDD+. - Presidential Regulation No. 80/2011 on Trust Fund.

2.3 Reference Levels/Emission Reference Levels

One of the 'significant' progresses of the four components in the REDD+ Readiness Self-Assessment framework is Component 3 of Reference Emission Levels/Reference Levels (RELs/RLs) (Table 2.14 and 2.15). Reference level is one of development works that shows an advance progress and is proven by this instrument after the UNFCCC requirement.

Table 2. 14 Results of Component 3. Reference Emissions Levels/Reference Levels

Component	Sub-component
3. Reference Emissions Levels/ Reference Levels	-

Decision 12/CP.17 provides guidance for developing country party aiming to commit on REDD+ to include in its FREL/FRL submission transparent, complete, consistent with guidance agreed by the COP, and with accurate information for allowing a technical assessment of the data, methodologies and procedures used constructig the FREL/FRL. Decision 12/CP.17 also allows series of approach under the control of forest reference emission level and/or forest reference level (FREL/FRL), which enables Parties to improve the FREL/FRL by incorporating better data, improve methodologies and; where punctual and additional pools mark the adequate and predictable support as referenced by decision 1/CP.16, paragraph 71.

Indonesia accepted the invitation as in Dec. 12/CP.17 by voluntarily submitting proposed national FREL for deforestation and forest degradation in the context of results-based payments for activities related to REDD+ under the United Nations Framework Convention on Climate Change (UNFCCC) in the COP 21 Paris. The submitted FREL declared as consistent with COP-guidance for FREL/FRL construction (Dec. 12/CP.17) and technical assessment (Dec. 13/CP.19), as well as taking into account relevant COP decisions - especially on modalities for MRV (Decision 14/CP.19) which include national policies and plans.

The submitted FREL covered an area of 113.2 million ha of natural forests in 1990, which accounted for about 78.6 % of the total designated forest areas. It could be explained that Indonesia focuses on protecting only the remaining tropical rainforest. The forest areas equal to 60% of the total country land area. Two REDD+ activities under decision 1/CP.16 paragraph 70 included in FREL construction were deforestation and forest degradation. The submission also included CO2 emissions from tree above ground biomass and degraded peat land.

The FREL completed by a national team that formed under the Minister of Environment and Forestry Decree No. 134/2015. The team consists of two groups focusing on policy and technical aspects. The policy team addressed key issues significant for FREL development, including policy consideration and substantial national circumstances. The technical team focused on translating policy implication into quantitative calculation and qualitative explanation, including setting and approving assumptions and important adjustment, as well as establishing the document. In addition, the role of technical team was to assure scientific background on this submission. The FREL document has provided the way to improve the FREL in the future, namely: improving NFMS using appropriate technology, improving emission factors by employing a database system, and improving peatland map.

Table 2. 15 Results of Criteria in Component 3. Reference Emissions Levels/Reference Levels

Component 3. Reference Emission Levels/Reference Levels.		
Criteria	Diagnostic Questions	Evidence
28. Demonstration of methodology.	a. Does the preliminary subnational or national forest REL or RL presented (as part of the R-Package) properly use a clearly documented methodology, based on a step-wise approach?	Significant progress. FREL has been under technical assessment by UNFCCC and almost completed with no significant correction, land use data and peat land need to be synchronize. Note: MoEF. 2015. National Forest Reference Emission Level for Deforestation and Forest Degradation: In the Context of Decision 1/CP.16 para 70 UNFCCC (Encourages developing country Parties to contribute to mitigation actions in the forest sector), published by DGCC of MoEF Indonesia. Available at http://redd.unfccc.int/files/national_frel_for_reddin_ind_onesia_2015.pdf

Component 3. Reference Emission Levels/Reference Levels.		
Criteria	Diagnostic Questions	Evidence
	b. Are plans for additional steps and data needs provided? Is the relationship between the sub-national and the evolving national reference level properly demonstrated?	Additional steps and data provided, but the relationship between the sub-national and national RL is in the process of development.
29. Use of historical data, and adjusted for national circumstances.	a. How does the REL/RL establishment take into account historical data? If adjustments made for national circumstance, what is the rationale and supportive data demonstrating that the proposed adjustments are credible and defendable?	The FREL is credible and defendable, as measured through TA FREL by UNFCCC). Note: MoEF. 2015. National Forest Reference Emission Level for Deforestation and Forest Degradation: In the Context of Decision 1/CP.16 para 70 UNFCCC (Encourages developing country Parties to contribute to mitigation actions in the forest sector), published by DGCC of MoEF Indonesia. Available at http://redd.unfccc.int/files/national frel for redd in ind onesia 2015.pdf
	b. Is sufficient data and documentation provided in a transparent manner to allow reconstruction or independent cross-examination of the REL/RL?	The data and documentation of deforestation and forest degradation has been completed, but data and information of forest and peat fire need to be verified. Note: Indonesia's forest monitoring system is known as SIMONTANA (Sistem Monitoring Hutan Nasional). Available online at http://geoportal.menlhk.go.id/arcgis/home/ , and http://webgis.dephut.go.id/ for display and viewing, and.
30. Technical feasibility of the methodological approach, and consistency with UNFCCC/IPCC guidance and guidelines.	Is the REL/RL (presented as part of the R-Package) based on transparent, complete and accurate information, consistent with UNFCCC guidance and the most recent IPCC guidance and guidelines, and allowing for technical assessment of the data sets, approaches, methods, models (if applicable) and assumptions used in the construction of the REL/RL?	Yes. FREL development used IPCC 2006 Guidelines and IPCC 2013 Wetlands Supplement, as FREL Indonesia was already undergone TA FREL by UNFCCC. Note: MoEF. 2015. National Forest Reference Emission Level for Deforestation and Forest Degradation: In the Context of Decision 1/CP.16 para 70 UNFCCC (Encourages developing country Parties to contribute to mitigation actions in the forest sector), published by DGCC of MoEF Indonesia. Available at http://ditjenppi.menlhk.go.id/pustaka-djppi .

In accordance with the Assessment at national level, activities on this Component in East Kalimantan and South Sumatra Provinces also reached 'significant' progress for both provinces (Annex 2 and 3). Yet, there is a need to work on the RELs/RLs between the national and sub-national levels, to show more of the

relationship between the two levels; as synchronization and aggregation mechanism set to develop further.

2.4 **Forest Monitoring System and Safeguard**

Component 4 of Monitoring Systems for Forests and Safeguards is the last component in the Assessment that reached 'significant' progress, although it was resulted from 'yellow' and 'green' progresses in its subcomponents (Table 2.16). East Kalimantan and South Sumatra Provinces are also reaching 'significant' progress for this Component (Annex 2 and 3). The following sub-sections will describe how these progresses could be achieved.

Table 2. 16 Results of Component 4. Monitoring Systems for Forests, and Safeguards

Component	Sub-component
A Manitaring Customs for Farast	a. National/Sub-national Forest Monitoring System
 Monitoring Systems for Forest, and Safeguard 	b. Information System for Multiple Benefits, Other Impacts, Governance, and Safeguards

2.4.1 National Forest Monitoring System

The existing Indonesia's forest monitoring system is known as SIMONTANA (Sistem Monitoring Hutan Nasional). It is available online at http://geoportal.menlhk.go.id/arcgis/home/, coupled with the WebGIS at http://webgis.dephut.go.id/ for display and viewing (Figure 2.7). SIMONTANA was launched in 16 June 2015.



Figure 2. 7 Preview of Sistem Monitoring Hutan Nasional (SIMONTANA), the Indonesia's NFMS.

Indonesia established a monitoring system on forest resources in 1986, when the Government began its National Forest Inventory (NFI) program; FAO gave the Ministry of Forestry technical support for the four years to 1990. The NFI is now funded by the national budget. The NFI was originally designed to gather information on standing stock volumes for each type of forest, namely mangroves, peatlands, lowland forests and mountain forests. The gathered information about forests distribution, forest cover types and land use is essential for decision makers, forest planners and forest managers. The information is also very important for controlling forestry sector activities at both national and sub-national levels.

The NFI has laid the foundation to establish a system to monitor forest resources, with four major components of forest resources (status) assessment, forest resources (change) monitoring, geographic information system (GIS) and users' involvement.

Several divisions carry out the NFI operational. The FRA (Forest Resources Assessment) division coordinates field inventories and ground-based measurement activities; it also operates the Field Data
System (FDS) and is responsible for its integration with the GIS. The DIAS (Digital Image Analysis System)
division interprets and monitors changes in forest cover using multi-date satellite (imagery) data; it also
prepares outputs that will serve as inputs for the FRM division. The FRM (Forest Resources [Change]
Monitoring) division, which has GIS capability, is responsible for national mapping and keeping maps up
to date for the GIS database analysis; it is also responsible for modeling forest land use, including
calculating forest coverage width and its distribution. The SDN (Spatial Data Networking) division is
responsible for providing standardized spatial data for the Ministry of Forestry to enable data sharing and
data exchange that will be beneficial for broad audiences. This task includes providing benefits to the
wider community, involving of a range of user groups and acting/facilitating as a node for spatial data
networks at the national level. The NFI system is fully supported by all the staff at the Jakarta
headquarters, along with 17 regional offices across Indonesia.

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There is a crucial need to continually updating and systematically archiving the data on forests and relevant information, as well as making them available in clear timeframes for both decision makers and the public. From the first NFI in 1986 until 1996, the Ministry of Forestry undertook periodical nationwide forest resources monitoring and assessment. Monitoring activities designed and established through the NFI program established as the main tasks and functions of the Directorate General of Forestry Planning at the Ministry of Forestry. The organization has four divisions, namely Forest Inventory, Forest Monitoring, Mapping and Spatial Data Networking (Figure 2.8).

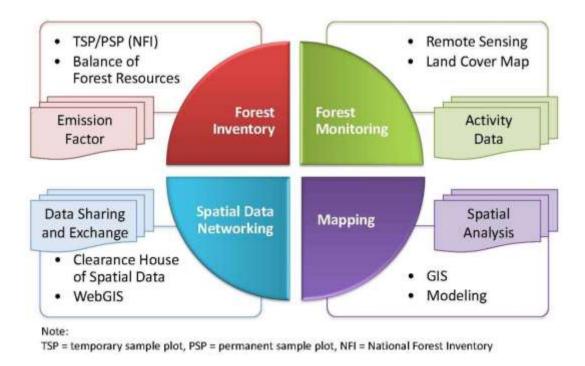


Figure 2. 8 Main tasks and functions of the Directorate of Forest Resources Inventory and Monitoring, Directorate General of Forestry Planning, Ministry of Forestry, Indonesia.

2.4.1.1 Land-cover map Developed by Ministry of Forestry (MoF) of Indonesia

Indonesia's forest and land-cover map initiated by MoF from the 2000s as part of NFMS, where the Landsat images used to produce a national coverage of forest and land cover map. During the period, the maps could only be updated every three years based on data availability, due to clouds and haze problems. This system has used satellite data since 1990s. In total, about 217 Landsat TM/ETM+ scenes needed to cover the entire land area of Indonesia, excluding other scenes to minimize/remove clouds and haze presence. Up to around 2006, other data sets such as SPOT Vegetation 1000 meters and MODIS 250 meters used for alternative, especially when the purchased Landsat data of MoF were not yet ready for processing and classification processes.

More consistent data was available around 2009; after the change in Landsat data policy of the United States Geological Survey (USGS) in 2008 - which has made Landsat data available free of charge over the internet. The new Landsat data policy, automatically benefits Indonesia by increasing the number of data available for supporting the mapping system. In 2013, MoF started to use the newly launched Landsat 8 OLI to monitor Indonesian land cover condition and placed the Landsat 7 ETM+ as a substitution for cloud elimination. More data available through free-download has opened opportunities for Indonesia to change the three-year interval into annual basis. Up to now, land-cover data is available for the years of 2000, 2003, 2006, 2009, 2011, 2012, and 2013. In the last five years, the updating work for land cover data of 1900s has carried out, to renew the information made during the era of NFI. However, USGS and

Indonesian National Institute of Aeronautics and Space (Lembaga Penerbangan dan Antariksa Nasional/LAPAN) have not enough Landsat archive available, so that annual 1990s data were not possible, and only two 1990s sets of data established - of : 1990 and 1996. To maintain continuity and work improvement, collaboration between LAPAN for Landsat data preparation and the MoF for classification process becomes significant key for future works. These two institutions have a Memorandum of Understanding for the work since 2004 and has recently updated.

Variation of sensors and methods employed post 2000 is a significant contributor in better illustrating national land-cover, compared to before 2000 when land-cover map in the year of NFI was mostly derived from various data formats (hard copy, soft copy, analog, digital). The historical condition and ongoing improvements is illustrated in Figure 2.9.

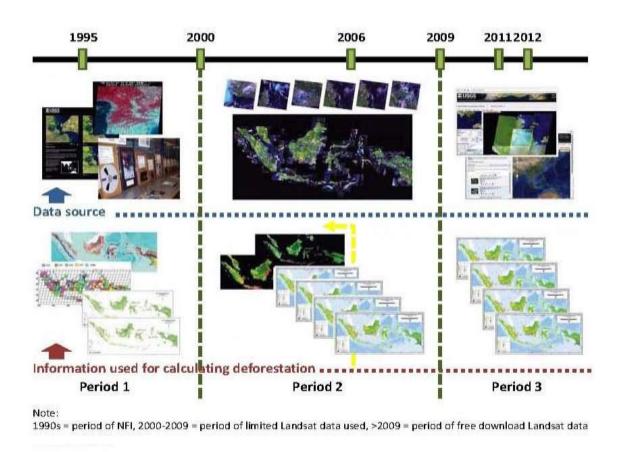


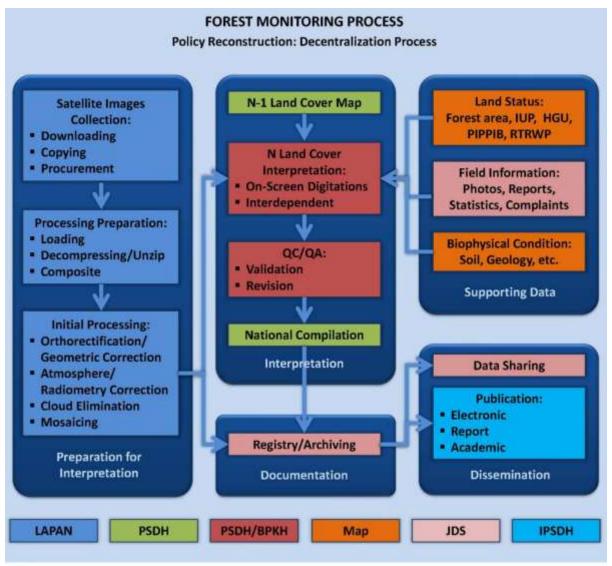
Figure 2. 9 Historical condition and improvement in establishing the land-cover map of Indonesia that consists of three significant periods.

Period 1 (before 2000) saw all available data used, including analog data and Landsat hard copy that was delineated manually and digitized; where all products of Period 1 generated under the National Forest Inventory (NFI) activity. Most scenes in Landsat data were either found as softcopy in CCT format or hard copy format, as they did not have the same year interval; as during Period 1 it was the only available data for generating land cover.

Period 2 (2000-2009) was the time where digital data started used. However, the manual classification method applied was time consuming and caused delays in product deliveries; especially when there work experiences limited in wall-to-wall mapping. An alternative approach using SPOT Vegetation 1000 meters and MODIS 250 meters conducted for immediate reporting. Within Period 3 (2009 on), data availability was no longer a constraint and only Landsat data used as the source. Within this period, overcoming time consuming manual classification process became main concern. Significant improvements applied during earlier period (2006) and turned into a major concern at the beginning of the Period 3 (2009); as the mentioned improvement intended to migrate every single layer of time-sequential land cover data (2000, 2003, 2006, and 2009) into a single geodatabase; a solution to improve interdependency among layers. The land cover map of Indonesia presented in 23 classes, including 6 classes of natural forests, 1 class of plantation forest, 15 classes of non-forested, and 1 class of clouds-no data (SNI: 7645-2010).

Manual classification is time-consuming and labor intensive; involving the MoF staffs from district and provincial levels to manually interpret and digitize the satellite images, to capture local knowledge in the same time. Prior to 1989, visual interpretation on aerial photos started to take place, and later within NFI, continuously employed on Landsat data. Digital classification was initially generated in the early 1990s; but constrained with conversion of raster format into vector format for further analysis. Visual classification technique was then selected for operational method.

Following the latest development on data availability, the MoF has been refining the national land cover classification map, trace-back from 1990s to 2013, and plans to update deforestation data over more than two decades using the refined land cover data set. The MoF has been collecting and archiving more than 10,000 scenes of Landsat images from the entire country dating back from the early 1990s on. Although targeting the observation period of the 1990s to 2013, the first version of refinement (up-to July 2014) focused on data 2009 on. The flow of work on developing land cover data annually depicted in Figure 2.10.



Note:

IUP = Mining Business License, HGU = Cultivation Rights Title, PIPPIB = Indicative Map of Moratorium on New Licenses, RTRWP = Provincial Spatial Plan, LAPAN = National Institute of Aeronautics and Space, PSDH = Forest Resources Management, BPKH = Forest Area Consolidation Office, JDS = Spatial Data Network, IPSDH = Forest Resources Inventory and Monitoring

Figure 2.10 The work flow of SIMONTANA in producing an annual nationwide land cover map.

Several Indonesia National Standards (SNI) for measuring and monitoring forest carbon have been introduced by Ministry of Forestry, including:

- 1. SNI 7724: 2011 Measurement and Carbon Stock Accounting-Field Measurement to measure forest carbon stock (BSN, 2011a).
- SNI 7725: 2011 Development of allometric equations for estimating forest carbon stocks based on field measurement (ground based forest carbon accounting) (BSN, 2011b).
- SNI 7848: 2013 Demonstration Activities for REDD+ (BSN, 2013).

In order to support the carbon information in Sub-national level, FCPF has established Permanent Sample Plots (PSPs) for monitoring forest carbon in 14 provinces. The measurements were conducted to

obtain data in five carbon pools (above ground, below ground, litter, dead wood, and soil). To integrated efforts conducted by central and local governments, as well as other initiatives with similar objectives for managing database, forest carbon monitoring system in the provincial level is required to integrate all available data. In addition, data integration in the national level is also needed. The database (Figure 2.11) is accessible at http://www.puspijak.org/karbon/.

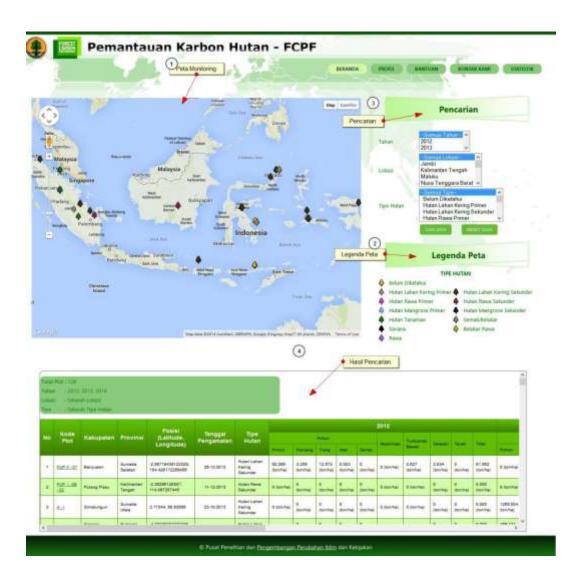


Figure 2.11 Web-based Forest Carbon Monitoring System (available at www.puspijak.org).

2.4.1.2 Improvement needed to increase sustainability and transparency of National Forest Monitoring System

While the basic elements needed for monitoring greenhouse gas (GHG) emissions have been established and practiced in activities related to forest inventory, implementation of reporting and verification requires the application of international standardized guidelines, and the involvement of external independent bodies. Indonesia's current forest monitoring processes can be developed into a robust and transparent system for monitoring and reporting REDD+ activities by strengthening capacity at national level and building capacity at Sub-national level. Further investments will be needed to build regulatory mechanisms for checks and balances, and mechanisms for coordination between and within government institutions. This is also an effort to support the need of sustainability and transparency of the system to the public.

The current national forest inventory and forest monitoring systems provide a foundation for developing a national forest monitoring system (NFMS), which was launched as SIMONTANA. The Forest Inventory and Forest Monitoring divisions of the Directorate should be able to produce activity data and determine emission factors. Supporting this capacity is the Mapping division's responsibility, where it would conduct spatial analysis using GIS and modeling. The Spatial Data Networking division will support data sharing and data exchange, thus publishing information on forest resources and monitoring to the public.

By establishing NFI, Indonesia have the capacity to conduct REDD+ MRV on the national level, but the system needs to be strengthened as part of the development of the NFMS. Meanwhile, international reporting to the UNFCCC is standardized and will be carried out by the focal point in each country, and verification process takes place as part of an external independent process. Thus, data validation is the next issue to be considered, in order to strengthen the quality of the data. Although BPREDD+ (2015) stated that data validation, to assure the classification results, has been carried out by comparing land cover map to the post classification field data, this activity has only been performed one time, while the data has been produced for at least 10 periods.

The creation of a national measurement and monitoring system is the main activity for REDD+ MRV. Indonesia has extensive experience in this area, but other initiatives related to measurement and monitoring currently at the field level needed to be harmonized and synergetic, then aggregated to the national level. There is no need to build a new system, but strong leadership will be required to create clear mechanisms and procedures, to facilitate the compilation and scaling-up of existing initiatives and ongoing activities into robust national capacity.

The next challenge is how to integrate the web-based forest carbon database system with Indonesia National Forest Monitoring System (NFMS), led by Directorate General of Planology, MoEF. Integration challenge also came from two other monitoring systems, PEP and Bioclime. PEP, for instance, mainstreaming MRV under the National Development Planning Agency, through the following mechanism, that has been developed (FORDA 2014):

- All sectors report the GHG measurement activities periodically every 3 months, from District government agencies to District Planning Agency (Bappeda).

- Districts Planning Agencies then report their carbon monitoring activities every 3 months to Provincial Planning Agency, then the Provincial Planning Agency submits the report to the secretariat of National Action Plan of GHG Emission Reduction (RAD GRK).

Another chalange is how to develop a leakage management. However, the risk of leakage can be mitigated by other program's, among others addressing spatial planning issues, and improved land governance. The good example of the leakage management planning has been adopted by The ER Program for East Kalimantan

Province (available at https://www.forestcarbonpartnership.org/sites/fcp/files/2016/May/Indonesian%20ER-PIN%2020160429%20Final.pdf.)

Table 2.17 shows the Assessment results for Sub-component 4a of National/Sub-national Forest Monitoring System. Although institutional arrangements and capacities (Criteria 33) are in 'significant' progress, the results of the Assessment for other criteria in the sub-component 4a, about the progress of implementing the REDD+ activities, are varied. Among all diagnostic questions in the Assessment, Criteria 32b, the system to identify and assess displacement of emission or leakage, is the only system that 'has not demonstrate progress'. This system has not been developed, since the system has not fit to assess the displacement of emission.

Table 2.17 Results of Sub-component 4a. National/Sub-national Forest Monitoring System

Sub-component 4a. National/Sub-national Forest Monitoring System.			
Criteria	Diagnostic Questions	Evidence	
31. Documentation of monitoring approach.	a. Is there clear rationale or analytic evidence supporting the selection of the used or proposed methodology (combination of remote sensing and ground-based forest carbon inventory approaches, systems resolution, coverage, accuracy, inclusions of carbon pools and gases) and improvement over time?	Yes, there is. Activity data has been under development of interpretation adjustment from manual to automatic. Note: Indonesia's NFMS is available online at http://geoportal.menlhk.go.id/arcgis/home/ , and WebGIS at http://webgis.dephut.go.id/	
	b. Has the system been technically reviewed and nationally approved, and is it consistent with national and international existing and emerging guidance?	NFMS using an upgraded existing system that has been reviewed nationally by BIG, and consistent with national guidance. Note: I Indonesia's NFMS is available online at http://geoportal.menlhk.go.id/arcgis/home/ , and WebGIS at http://webgis.dephut.go.id/	

Sub-component 4a. National/Sub-national Forest Monitoring System.			
Criteria	Diagnostic Questions	Evidence	
	c. Are potential sources of uncertainties identified to the extent possible?	Yes, further development needed, such as potential source of uncertainty, DSS platform, simple reporting, etc. Note: Indonesia's NFMS is available online at http://geoportal.menlhk.go.id/arcgis/home/ , and WebGIS at http://webgis.dephut.go.id/	
32. Demonstration of early system implementation	a. What evidence is there that the system has the capacity to monitor the specific REDD+ activities prioritized in the country's REDD+ strategy?	Land Cover Data is produced annually. It can detect deforestation, but needs improvement to detect forest regrowth and degradation. Note: Indonesia's NFMS is available online at http://nfms.dephut.go.id/ipsdh/ , and WebGIS at http://webgis.dephut.go.id/	
	b. How does the system identify and assess displacement of emissions (leakage), and what are the early results?	The system is not yet fit to assess the displacement of emission (leakage). NFMS is focused only to monitor landcover changes. Therefore, NFMS can not address leakage/ displacement, because the available spatial data have low resolution.	
	c. How are key stakeholders involved, participating or consulted, in the development and/or early implementation of the system, including data collection and any potential verification of its results?	The system is still an internal mechanism in the MoEF, and in the initiation process to engage multistakeholder participation.	
	d. What evidence is there that the system allows for comparison of changes in forest area and carbon content (and associated GHG emissions) relative to the baseline estimates used for the REL/RL?	The system can be use for comparison. Note: Indonesia's NFMS is available online at http://nfms.dephut.go.id/ipsdh/ , and WebGIS at http://webgis.dephut.go.id/	
33. Institutional arrangements and capacities.	a. Are mandates to perform tasks related to forest monitoring clearly defined (e.g. satellite data processing, forest	Yes, mandates are provided. Note: Presidential Regulation No. 16/2015 concerning the Ministry of Environment and Forestry.	

Sub-component 4a. National/Sub-national Forest Monitoring System.			
Criteria	Diagnostic Questions	Evidence	
	inventory, information sharing)?	Available at http://ditjenppi.menlhk.go.id/reddplus/ /images/resources/peraturan /Perpres 16 Tahun 2015-KLHK.pdf.	
	b. What evidence is there that a transparent means of publicly sharing forest and emissions data are presented and are in at least an early operational stage?	Websites are provided for sharing forest area, and emissions data books are available. Note: Indonesia's NFMS is available online at Indonesia's NFMS is available online at http://nfms.dephut.go.id/ipsdh/ , and WebGIS at http://webgis.dephut.go.id/	
	c. Have associated resource need has been identified and estimated (e.g. required capacities, training, hardware/software, and budget)?	Associated resource needs have been identified and estimated, but an updated budget plan is not provided yet.	

2.4.2 Information System for Multiple Benefit, Other Impacts, Governance, and Safeguards

This section will briefly describe the progress and major achievement on identification of relevant noncarbon aspect, social and environmental issues; monitoring reporting and information sharing; and its institutional arrangements and capacities.

Relevant non-carbon aspects as well as social and environmental issues have been addressed in Indonesia very well. Mechanisms to address these issues have been operational in various sectors' development activities, through mandatory requirement prior and post development projects, such as Environmental Impact Assessment (EIA), Strategic Environmental Assessment (KLHS), and Environmental Audit. Regulations for these mechanisms are Government Regulation No. 27/2012 concerning Environmental Licenses, and the Minister of Environment Regulation No. 3/2013 concerning Environmental Audit. Meanwhile, High Conservation Value Forest (HCVF) is currently voluntary for oil palm plantation, but there is a growing discussion to make it mandatory.

Monitoring, reporting and information sharing purposes for non-carbon aspects and safeguards, have been shared transparently in Indonesia, from local to national report. There are several mechanisms on how these aspects are periodically reported. One of them is GHG Monitoring, Evaluation and Reporting (*Pemantauan, Evaluasi dan Pelaporan Gas Rumah Kaca*/PEP GRK) system led by National Planning Agency from provincial level to national level. While from Indonesia to international forum, Indonesia's 1st Biennial Update Reports (BUR) has been submitted to the UNFCCC on 18 March 2016.

In the same context, the Ministry of Environment and Forestry (MoEF) publishes the Statistics of Environment and Forestry book annually. The Statistic book provides information regarding non-carbon aspect from forestry sector and accessible on the MoEF website. The Statistics book is the final point of reporting chain, from units in the district and provinces to relevant directorate generals in the MoEF, and finally published as one of MoEF publication products.

Specific indicators, such as HDI, GINI ratio, and Bruto Domestic Income are available in each district and Central Bureau of Statistics of Indonesia. These indicators need to be analyzed to address specific forestry sectors issues, such as deforestation, forest degradation, forest and land fire, etc., in order to know the progress of low emission development as aimed at the Indonesia's NDC.

In addition, the MoEF has developed a system for providing information on how safeguards, are addressed and respected. The National Safeguards Information System (SIS) was built on existing safeguards systems, and has been tested in Central Kalimantan and East Kalimantan provinces. A web based information system has been developed under the MoEF. The basic idea of REDD+ safeguards are within the scope of sustainable forest management in Indonesia. Ministry of Forestry, as of October 2014, the Ministry of Environment and Forestry (MoEF) embarked on a multi-stakeholder process to assess and analyze various existing mandatory and voluntary policies and regulations. The criteria used in the assessment were: relevance to COP-16 safeguards for REDD+ activities, limitations in scope of instruments; and effectiveness of instruments at different scales and contexts.

In early 2011, the MoEF initiated discussions on the establishment of a Safeguards Information System for REDD+ (SIS REDD+), in accordance with the obligation articulated in UNFCCC COP 16 Decision Annex 1 Paragraph 71D. This initiative aims to (UNORCID, 2015): (1) translated the Cancun Safeguards into the national context, in the form of Principles and Criteria, (2) analyzed the existing instruments and policies that are relevant to the Cancun safeguards, and an identification of gaps, (3) developed structure and mechanism of information system for implementing REDD+ safeguards, (4) designed SIS-REDD+ institution, and (5) identified relevant Principles, Criteria and Indicators as components of the SIS.

The development of the Principles, Criteria and Indicators (PCI) was conducted during 2011 to 2012 involving multi-stakeholder participation through three national workshops, three Focus Group Discussions and some major stakeholder consultations. The assessment and analysis process of the existing instruments, which resulted in the initial PCI framework, was conducted through the following steps (Center for Standardization and Environment, 2013):

- Identifying and prioritizing elements contained in existing instruments relevant to safeguards as defined by the COP-16 Decision.
- Identifying clusters of elements or "common denominators".
- Linking the emerging element clusters to safeguards in COP16 Decision.
- Mapping elements into Principles, Criteria and Indicators (PCI) framework and referencing back the PCI to the original instruments.

The establishment of SIS REDD+ was conducted in two tracks process:

1) multi-stakeholders' communication to develop institutional structure and discussing how the system works (2011-2012), and develop tools to assess conformity of safeguards implementation with Principle, Criteria, and Indicator (PCI) (2013)).

2) Consultant work, by identifying and assessing or analyzing the existing RPI's to develop PCI, for SIS-REDD+ Indonesia; establish institutional structure in SIS-REDD+; develop database system and web based SIS.

During 2011–2012, series of multi-stakeholder discussions have been held to develop the SIS-REDD+. This process was led by Ministry of Forestry (Center for Standardization and Environment/Pustanling), the Presidential REDD+ Task Force (Satgas REDD+) and National Council on Climate Change (DNPI) (UNORCID, 2015). The major multi-stakeholder consultations, and the key points of progress from each of these events, are summarized in Figure 2.12.

December 2010	COP 16: Cancun Safeguards
February 2011	SIS – REDD+ Concept Development
December 2011	COP 17: Principles of Safeguards Information Provision System
March 2012	FGD on PCI SIS REDD+ Development
November 2012	PCI SIS REDD+ published
July 2013	Database System and Web Platform began
May 2013	Public Consultation and Trial of PCI
December 2013	COP 19: SIS as the basis for result based payment
May 2014	FGD on Operationalization of SIS REDD+ at Provincial Level
July 2014	Submission of Safeguards and SIS REDD+ Lesson Learn
September 2014	FGD and Trial of SIS REDD+ at Provincial Level 2
February 2015	FGD and Trial of SIS REDD+ and Development of Web Platform in East Kalimantan
2015/2016	Internal Discussion of DG Regulation Draft on SIS REDD+
April 2016	Discussion of Safety Framework Monitoring Guide for Indigenous People (AMAN)
	Source: Rahmawati (20

Figure 2.12 Process of Development and Operational of SIS-REDD+.

In the context of FCPF, and any other REDD+ readiness schemes, SIS REDD+ is positioned as an umbrella of the safeguards for REDD+ implementation in Indonesia (UNORCID, 2015), such as Environmental Impact Assessment (AMDAL), Strategic Environmental Assessment (KLHS), Sustainable Management of Production Forest (PHPL), SFM Certification (LEI, FSC), System for Verification of Timber Legality (SVLK), High Conservation Value Forest (HCVF), Free Prior Informed Consent (FPIC), including SESA, and others (e.g. Rights-based safeguards, Partnership Governance Index, Legislation related to environmental management, biodiversity conservation). These tools are used to evaluate safeguards systems in a way that generates coherent and consistent information. The PCI's were derived from the existing safeguards related instruments, which further interpreted and translated into concrete practical assessment tools to assess the conformity of safeguards implementation with the PCI. Institutional arrangements and information flow has also been developed for SIS-REDD+, that were designed based on institutional structures of the autonomous governance system (from Sub-national to national level), operating through

phased-based approach, while maintaining consistency with the COP-guidance for SIS-REDD+ (UNREDD, 2015). SIS-REDD+ can also be used to bridge safeguards interest on the international level with the local/national level, by internalizing global guidance in existing systems and mechanisms in Indonesia. SIS-REDD+ can also use the existing processes in Indonesia to boost the negotiation and implementation at international level.

SIS-REDD+ was designed using the following principles: simplicity, completeness, accessibility, and accountability. It was also designed in such way to allow the synergy and integration with any other parallel safeguards related initiatives, that are applicable in the country, including the 3 (three) following safeguards systems: PRISAI (*Prinsip, Kriteria, Indikator Safeguards Indonesia*), REDD+ SES (Social and Environmental Safeguards), and REDD+ PGA (Participatory Governance Assessment) focusing on transparent and effective forest governance (UNREDD, 2015).

SIS REDD+ (Figure 2.13) consists of 7 Principles, 17 Criteria, and 32 Indicators that were developed to correspond directly to the relevant COP 16 Safeguards (CSE, 2013). The seven principles of SIS REDD+ are:

- 1) Legal Compliance and Consistency with National Forest Programs (3 criteria, 4 indicators)
- 2) Transparency and Effectiveness of National Forest Governance (2 criteria, 3 indicators)
- 3) Rights of Indigenous and Local Communities (4 criteria, 6 indicators)
- 4) Effectiveness of Stakeholder Participation (2 criteria, 6 indicators)
- 5) Conservation of Biodiversity, Social and Environmental Services (2 criteria, 6 indicators)
- 6) Reducing Risk of Reversals (2 criteria, 4 indicators)
- 7) Reduction of Emission Displacement (2 criteria, 3 indicators)

SIS REDD+ has been operating since 2014, under the DGCC. Web platform-based SIS REDD+ of Indonesia (Figure 2.14) has been established (Rachmawaty, 2016), and it is accessible on http://sisredd.menlhk.go.id. The main functions of SIS REDD+ is the development of the data base system to manage data and information received by the SIS REDD+ management (PSIS NAS), and the development of web-based information provision on safeguards implementation.

Currently, 11 out of 35 DA REDD+ and other REDD+ related activities in Indonesia have been registered to SIS REDD+. In the current early stage of SIS-REDD+ operation, two approaches have been used (Rachmawaty, 2016). The first approach is on the national level, REDD+ pilot project/activities proponents/implementers report directly to the national SIS-REDD+ data management unit (Ministry of Environment and Forestry), using a "self assessment approach to safeguards implementation". The second approach is on the Sub-national level, where Indonesia has exercised and tested the SIS-REDD+ mechanism in two provinces (Jambi Province and East Kalimantan Province), in order to see the possibility to link the system at the national level to the existing forest related information systems in those two provinces.



Figure 2.13 The book of SIS-REDD+ of Indonesia.



Figure 2.14 The performance of SIS-REDD+ of Indonesia in the website.

Progress and ongoing improvements of SIS REDD+ (Widyaningtyas, 2016) are: (1) 7 Principles, 17 Criteria, and 32 Indicators, along with a set of Assessment Tools for respective indicators have been developed; (2) institutional arrangement and information flow for SIS-REDD+ have been developed (Figure 2.15); (3) a web based SIS-REDD+ in Indonesia has been developed, and operating after being tested at national and provincial level, in Jambi and East Kalimantan; (4) summary of Information have been prepared to be submitted through 3rd National Communication; and (5) strengthening REDD+ Safeguards implementation and SIS operational, including customary law communities and other stakeholders in Sarolangun, South Sumatra, in collaboration with the SESA-ESMF development.

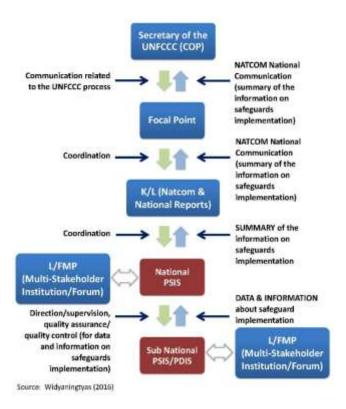


Figure 2.15 Institutional structure and SIS REDD+ mechanism.

SIS REDD+ covers some aspects related to leakage, namely: types of emission displacement that are likely to occur outside REDD+ activities within the national boundary, strategy for emission reductions, under realistic scenarios that avoid emissions displacement outside areas of REDD+ activities within the national boundary, and monitoring on forest-related emissions and carbon stocks changes for the area of REDD+ activities and emission displacement reduced outside area of REDD+ activities within the national boundary. However, there is a need to address a policy/legal aspect to prevent and to overcome the displacement.

Furthermore, the current results compared to expectations of SIS-REDD+ development showed that Indonesia is facing some challenges: (1) institutional aspect in operating the SIS at the national level, there

is an organizational change as a challenge, with limited human resources; (2) self or voluntary assessment in providing information, it needs high commitment on how to make information available; and (3) maintaining the operation of the system requires synergy with other REDD+ safeguards-related system. For the next step, Indonesia still concerns about creating legal umbrella for full operational of the SIS-REDD+, along with other REDD+ architecture's elements, improving capacity and commitment of institutions responsible at the sub-national levels, synergy among results of parallel processes relating to safeguards and SIS-REDD+ development, including SESA-ESMF, and getting local community to be more involved in the SIS operational: awareness raising, and capacity building. There is a new instrument in measuring non-carbon aspect, social and environmental issues and supporting SIS-REDD+ called the Forest Governance Index 2014 (Situmorang *et al.*, 2015). This book contains the important advances of forest governance in Indonesia. The book includes the simple criteria and indicators which are described comprehensively, prepared through a participatory approach, and recognize indigenous people. Meanwhile, National Forestry Council and Provincial Forestry Council of Maluku Province have developed guidance for effective engagement of indigenous people and local communities, that is mainly funded by FCPF.

At the Sub-national level, a formal institution is needed to serve as a permanent role as SIS-REDD+ manager at sub-national levels, to ensure clear distribution of responsibilities and the sustainability of information system. The formal institution does not need to be a new institution, but could utilize existing agencies and strengthen their capacity. Human resources capacity and infrastructure vary widely at Subnational levels, and in general should be improved to allow effective data collection and reporting. This applies both for the data managers at the Sub-national level, who are responsible to consolidate and verify data, as well as REDD+ implementers at site level, who are expected to supply the information and necessary documents.

Institutional arrangements and capacities on implementing information system and safeguards need to be improved. There is a clear mandate to perform tasks related to non-carbon aspects and safeguards from the RAN GRK document (the document of National Action Plan of GHG Emission Reduction), which has been implemented through the RAD GRK (the document of Provincial Action Plan of GHG Emission Reduction) in each province, and monitoring has already been conducted. DGCC of MoEF has identified and estimated the needs of capacity building activities, training programs, software/hardware, and budget. This identification results were stated in the annual work plan. Such activities have been initiated both by national and international supports, and also by the National Development Planning Agency through the RAN & RAD GRK.

At the regional level, there are Climate Change and Forest and Land Fires Offices (*Balai Pengendalian Perubahan Iklim dan Kebakaran Hutan dan Lahan*/Balai PPI dan Karhutla), in which its regional office under the DGCC throughout Indonesia. *Balai PPI and Karhutla* was established in 2015 with 5 Regional Offices, one each for Sumatra, Java-Bali-Nusa Tenggara, Kalimantan, Sulawesi, and Maluku-Papua. One of these offices' functions is to support DGCC on the SIS development and safeguards implementation for REDD+. As a new institution, *Balai PPI and Karhutla* has to be supported by DGCC and partners, because of lack of human resources, both for quantity and capacity, as well as technical capacity.

The above explanations were also revealed during the REDD+ Readiness Assessment to Sub-component 4b of Information System for Multiple Benefits, Other Impacts, Governance, and Safeguards. The Assessment concluded 'significant progress' for this Sub-component (Table 2.18). As previously explained,

relevant non-carbon aspect and social and environmental issues have been identified very well. National regulations on Environmental Impact Assessment (EIA), Strategic Environment Assessment (Kajian Lingkungan Hidup Strategis/KLHS), High Conservation Value of Forest (HCVF), and Environmental Audit are available (Criteria 34). In term of monitoring, reporting, and publishing, the non-carbon aspects and safeguards have been published transparently from local to national report, e.g. Monitoring Evaluating and Reporting of GHG (Pemantauan, Evaluasi, dan Pelaporan Gas Rumah Kaca/PEP GRK) by National Development Planning Agency, from provincial level to national level, as well as BUR (Criteria 35). A clear mandate from the National Action Plan for Green House Gas Emission Reduction (RAN GRK) has been implemented in the Provincial Action Plan for Green House Gas Emission Reduction (RAD GRK) in each province. Monitoring has already been conducted, and DGCC of MoEF has identified and estimated the needs of capacity building activities, trainings, software/hardware, and budget. Such activities have been implemented both with national and international assistance, and also by the National Development Agency in the RAN & RAD GRK.

Table 2.18 Results of Sub-component 4b. Information System for Multiple Benefits, Other Impacts, Governance, and Safeguards

Sub-component 4b. Information System for Multiple Benefits, Other Impacts, Governance and Safeguards.				
Criteria	Criteria Diagnostic Questions Verifier			
34. Identification of relevant non-carbon aspects, as well as social and environmental issues.	How were the identifications of the relevant non-carbon aspects, as well as social and environmental safeguard issues of REDD+ preparations? Are there any capacity building recommendations associated with these issues?	They have been identified very well. There are national regulations on the Environmental Impact Assessment (EIA), KLHS, HCVF and Environmental Audit. Notes: Goverment Regulation No. 27/2012 concerning Environmental Licences. Minister of Environment Regulation No. 3/2013 concerning Environmental Audit.		
35. Monitoring, reporting and information sharing.	a. Are there any evidences to show transparent system for periodically sharing consistent information on non-carbon aspects and safeguards presented, and are they in at least an early operational stage?	Non-carbon aspects and safeguards have been shared transparently from local to national reports. For instance: GHG Monitoring, Evaluation and Reporting (<i>Pemantauan</i> , Evaluasi dan Pelaporan Gas Rumah Kaca/PEP GRK) by the National Planning Agency in the provincial to national levels, as well as the BUR. There is also Ministry of Environment and Forestry Statistics, providing information regarding non-carbon aspects on forestry sector. Notes: The Ministry of Environment and Forestry Statistics, available at http://www.menlhk.go.id/. PEP GRK online is available at http://www.sekretariatrangrk.org/beranda/82-bahasa/berita/176-sosialisasipep.		

Sub-component 4b. Information System for Multiple Benefits, Other Impacts,			
Governance and Safeguards.			
Criteria	Diagnostic Questions	Verifier	
	b. How are the following information being made available: key quantitative and qualitative variables about impacts on rural livelihoods, conservation of biodiversity, ecosystem services provision, key governance factors directly pertinent to REDD+ preparations, as well as the implementation of safeguards and attention to the specific provisions included in the ESMF?	There are some Directorate Generals within The Ministry of Environment and Forestry, the Provincial and District Forestry Services, as well as the Forest Management Units that have been widely collecting data. However, these data collections need to be synchronized. Indicators, e.g. HDI, Gini ratio and Gross Domestic Income are available in each district. These indicators need to be linked to the rate of deforestation in order to know the progress of low emission development. The data of each indicator is publicly accessible. Note: http://www.menlhk.go.id/	
36. Institutional arrangements and capacities.	Are there clear definitions of mandates to perform tasks related to non-carbon aspects and their safeguards?	There is a clear mandate from the document of the GHG National Action Plan (<i>Rencana Aksi Nasional Gas Rumah Kaca</i> /RAN GRK), as it has been implemented in the GHG Regional Action Plan (<i>Rencana Aksi Daerah Gas Rumah Kaca</i> /RAD GRK) on each province, while monitoring has also been conducted. Note: Presidential Regulation No. 61 concerning GHG National Action Plan Development.	
	b. Have the associated resource needs been identified and estimated (e.g. required capacities, training, hardware/software and budget)?	DGCC of MoEF has been identified and estimated, including for the needs of capacity building activities, trainings, software/hardware and budget. Such activities have been implemented both by national and international assisstancy, and also by the National Development Agency in the GHG National Action Plan (Rencana Aksi Nasional Gas Rumah Kaca/RAN GRK) and the GHG Regional Action Plan (Rencana Aksi Daerah Gas Rumah Kaca/RAD GRK). Note: Strategic Planning of MoEF for 2015 - 2019 as stated by Minister Regulation No. P.39/Menlhk-Setjen/2015, including programmes and activities of DGCC for 2015 – 2019. Available at http://ditjenppi.menlhk.go.id/program/program-tahun-2015-2019.	

Meanwhile, East Kalimantan Province has shown good progress in developing safeguards. East Kalimantan Province has developed the REDD+ SES in 2013 as an adaptation of the International REDD+ SES. The Preparation of Principles, Criteria and Indicators for REDD+ SES aims to reflect the specific characteristics and needs of East Kalimantan Province (Pambudhi *et al.*, 2015). The Principles, Criteria and Indicators have been tested within a trial on REDD+ SIS monitoring activities in three Districts (Berau, Kutai and Paser). East Kalimantan has also completed the identification study on the needs of adapting SES in East Kalimantan in 2013 (Subekti *et al.*, 2013). For this adaptation process, the needs of safeguards development are adjusted to the local context of East Kalimantan, as the needs on the local context of REDD+ safeguards have also been identified and formulated. The Indonesian Ecolabel Institute (*Lembaga Ekolabel Indonesia*/LEI), in cooperation with the East Kalimantan REDD+ Task Force (supported by the Clinton Climate Initiative and Conservation International), facilitated this adaptation process.

East Kalimantan has determined the REDD+ SES (REDD+ Social and Environmental Standards) of East Kalimantan as a safeguard instrument to be used for the REDD+ implementation throughout the province. This safeguard was adopted and adapted from a combination of several safeguards, in accordance with the important issues and social characteristics in East Kalimantan. The safeguards of instruments/frameworks/initiatives compared during the development of the REDD+ SES for East Kalimantan are: REDD+ SES, PRISAI, SIS-REDD+, SESA and RBS (Rights Based Standard) (Pambudhi *et al.*, 2015).

After finalizing the platform, the environmental and social safeguards for REDD+ Readiness in East Kalimantan were developed in a two-year period (2015-2016). This process had involved various key stakeholders in the provincial and local levels, enriched by inputs from the national level stakeholders. These stakeholders' participation was engaged through discussions and policy dialogues by using various media in order to get points of improvements.

In order to complete the existing progress of the safeguards development toward the REDD+ implementation in East Kalimantan, improvements in the technical and institutional aspects are needed (GIZ Forclime, 2016). The technical aspect needs an analysis of synergies and integration of the REDD+ safeguards issues within the Provincial/District Forestry Information System (PFMIS/DFMIS), including other instruments such as FSC, AMDAL, FLEG-T and others. While the institutional aspect is in need of gap analysis on the existing information systems (capacities and structures) at the province level, identifying SIS managers and verifiers at the provincial level (among others the Provincial Forestry Service, DDPI, Provincial Environment Agency and Provincial Development Planning Agency), as well as training sessions planning regarding the SIS-REDD+ management.

Basically, the REDD+ SES of East Kalimantan Province and the national SIS REDD+ have been developed and tested (with one of the testing sites in East Kalimantan). Then, the next step needed is to operate the SIS REDD+ and the REDD+ SES in East Kalimantan to mitigate potential social and environmental impacts.

3 GAP ANALYSIS AND WAY FORWARD

The REDD+ Readiness Self-Assessment for Indonesia (hereinafter called 'the Assessment') has been described in Chapter 2, as it shows significant progress (81.25%) for all four components assessed: Component 1 on the Readiness Organization and Consultation (with further development required), Component on the REDD+ Strategy Preparation (which progressing well with further development required), Component 3 on the Reference Emissions Levels/Reference Levels (with significant progress) and Component 4 on the Monitoring Systems for Forests, and Safeguards (with significant progress). These have shown the opportunity for Indonesia to continue its efforts in the development required, to finalize those initiatives that have been progressing well, and to implement/operate the completed REDD+ elements. In parallel to the nationally initiated and financed REDD+ activities, Indonesia has welcomed bilateral, regional and international cooperations to implement the NDC, including the REDD+ implementation as the main component from land use sector that facilitates and expedites the technology development and transfer, payment for performance, technical cooperation and access to financial resources to support Indonesia's climate mitigation and adaptation efforts towards a climate resilient future³.

In order to determine the way forward, a gap analysis on the strengths and weaknesses in the REDD+ preparation was conducted as further strategies/activities necessary are identified based on the Assessment. Table 0.1 summarizes the gap analysis on the strengths and weaknesses in the REDD+ preparation and further strategies/activities necessary.

Table 3.1 Strengths and weaknesses analysis and proposed strategy to completing the Readiness Phase

Component/ Sub-component Component 1. Reading	Strength ess Organization and Consulta	Weakness ation.	Activity/Strategy
Sub-component 1a. National REDD+ Management Arrangement.	- The MoEF has two institutions with climate change nomenclature. The first one is the DGCC (under the MoEF), an institution for national REDD+ management arrangement and implementation. The second one is the Research and	- Lack of coordination among institutions and agencies (the Ministry of Finance, the National Planning Agency, and other sectoral agencies such as in agriculture, mining, agrarian or other sectors). - Lack of human resource capacity for local	 Intensification in coordination process is needed by DGCC. Technical supervision capacity for local governments (provincial and district administrations) and DGCC regional offices. Capacity building on feed back and grievance redress

³ First Nationally Determined Contribution – Republic of Indonesia. 2016. http://www4.unfccc.int/ndcregistry/PublishedDocuments/Indonesia%20First/First%20NDC%20Indonesia_submitted%20to%20UNFCCC%20Set_November%20%202016.pdf

Component/	Strength	Weakness	Activity/Strategy
Sub-component			
	Development Center for Social, Economic, Forest Policy and Climate Change, a research and development center that focuses on science in climate change. - There are five DGCC regional offices to support sub-national REDD+ implementation, covering Sumetera, Kalimantan, Java-Bali-Nusa Tenggara, Sulawesi and Maluku-Papua regions. - There are also other institutions in Indonesia supporting the agenda of climate change and REDD+ readiness and implementations, such as the Indonesia's Agency for Agriculture Research and Development (IAARD), CIFOR, ICRAF, IPB, UGM, and other universities in Indonesia.	governments and DGCC regional offices. - Feed back and grievance redress mechanism is available, but not specially for the REDD+ purpose.	mechanism on the REDD+ purpose for responsible institutions. - To develop a grievance redress mechanism at the sub-national level.
Sub-component 1b. Consultation, Participation and Outreach.	 Strong nested government with decentralization system. A lot of REDD+ projects and initiatives have been supporting the process of consultation, participation and outreach activities. 	- The existing consultation, participation and outreach processes have not reached all entities across the country. The major challenge is Indonesia being a very large country. It consists of 34 provinces and 514 districts/municipalities, with a complex national circumstance, including the stakeholders, sectors, interests, ethnicities, as well as various layers of communities and groups.	 Continuing consultation, participation and outreach process over Indonesia with various printed and online media. Consultation, participation and outreach on the framework of REDD+ strategies and implementations should be conducted in Indonesia's multilayered entities. Priority is given to the subnational level as a potential site for REDD+ scheme. Improving advocation approach on dissemination strategy.

Component/ Sub-component	Strength	Weakness	Activity/Strategy
Component 2. REDD+ 9	Strategy Preparation.		
Sub-component 2a. Assessment of Land Use, Land-Use Change Drivers, Forest Law, Policy and Governance.	 There are lots of studies and assessment processes on land-use and land-use changes issued by various institutions, both on the national and subnational scales. There are land-use regulations (such as moratorium, one map policy, etc.) to support the REDD+ and good forest governance. 	 Tenure right is a main constraint to support the implementation of landuse regulations. There is no data management system for the critical spatial and statistical information related to emission reduction program. 	 Land rights assessment is needed to provide clear land-use policy for REDD+. To develop and establish data management system for the critical spatial and statistical information related to emission reduction program.
Sub-component 2b. REDD+ Strategy Options.	 There is a REDD+ National Strategy and REDD+ Provincial Strategy developed by the central and provincial governments as the basis for low-carbon development planning and implementation. There is a high political will from the President of the Republic of Indonesia. 	 Not all local political interests at the subnational levels are supporting the REDD+ strategy. The sectoral communities have yet to understand the National REDD+ Strategy. The role of REDD+ is not properly determined within Indonesia's NDC. 	 Mainstreaming the REDD+ Strategy in all sub-national levels to strengthen their local development plannings and strategies (in the provincial and district levels). Intensive communication with related sectors is needed at the national and sub-national levels. To start the facilitation process for the positioning of REDD+ in the current commitment of Indonesia's NDC.
Sub-component 2c. Implementation Framework.	 Laws and regulations are available as the legal basis to implement low carbon development. The National REDD+ registry system is available. 	 Lack of adoption and implementation of laws and regulations by private sectors, in their relations with the low carbon development. Institutional, authority and procedures in issuing the REDD+ business permit at the protected forest areas are not clear. The National REDD+ registry system is not yest disseminated to the 	 Advance policies that enhance the roles and participation of related private sectors within the law on carbon development process (in forestry, plantation, agriculture, mining and other sectors, both for mineral and peatland areas). To provide academic papers in developing regulation on the REDD+ business permit, in order to

Component/ Sub-component	Strength	Weakness	Activity/Strategy
		responsible and relevant entities.	improve the Ministerial Decree/Regulation on the REDD+ permit procedure Sosialization and dissemination of REDD+ registry are needed.
Sub-component 2d. Social and Environmental Impacts.	 Similar systems are available and functioning as the complementary to SESA. There is a compilation of background information for the development of SESA Final Report and preparation of ESMF. The report stated that more than 400 activities related to SESA have been found in Indonesia. 	Difficulties in bringing synergy initiatives within the country in relation to the social and environmental safeguards to create the SESA and ESMF document.	Finalization of SESA and ESMF documents.
Sub-component 2e. Funding Instrument and Benefit Sharing Mechanism.	Funding instrument: - There are the existing committed funding sources. - There are potential funding sources, including on domestic sources.	 Lack of participation from private sectors on the REDD+ financing. There is no sufficient legal aspect to support the funding scheme. 	 Exploring the roles of private sectors and developing an environmental funding scheme from domestic private sectors. Accelerating the development of the Government Regulation, other statutory laws and related minister technical decrees.
	Benefit sharing mechanism: - There are the existing vertical and horizontal benefit sharing mechanisms in the national and subnational levels, such as the Fiscal Transfer, Trust Funds, National Community Empowerment Programs (PNPM) and General Services Agency (Badan Layanan Umum/BLU).	- There is no available adoption of the existing procedural and legal frameworks at the national and sub-national levels.	- The existing mechanisms available must be developed, adjusted and adopted for the REDD+ benefit sharing mechanism.

Component/			
Sub-component	Strength	Weakness	Activity/Strategy
	- Lots of lessons learned and the experience of REDD+ Demonstration Activities and projects at the site level for horizontal benefit sharing mechanism. The Emission Levels/Reference FREL document with	e Levels. - Lack of national - sub-	- Developing the standard of
Levels/Reference Levels.	strong methodology, participatory process and relevant expertise involvement has been submitted.	national correlation in the jurisdiction boundary. - Different year-bases used for varied scheme requirements.	national - sub-national correlations on determining the sub-national FREL. - Developing a methodology or approach to synchronize varied year-bases for different purposes.
Component 4. Monito	ring System for Forest and Sa	feguards.	
Sub-component 4a. National/Sub- national Forest Monitoring System.	 NFMS and other forest monitoring-related systems have been established. National and subnational institutions are available to conduct NFMS. There are other activities on forest and carbon monitoring developed by projects, Demonstration Activities and other REDD+-related programs (such as the FCPF, INCAS, etc.) as the important sources of data support. 	 The system is still highly uncertain. The land cover data cannot detect forest regrowth and degradation. The system has yet to be capable of assessing and dealing with the displacement of emission (leakage) and reversals (non-permanence). Lack of data validation process. The process will strengthen the data quality. Other initiatives related to measurement and monitoring at the ground level need to be harmonized, synergetic and aggregated to the national level. 	 Developing additional PSP's to reduce uncertainty. Improving land cover data to detect forest regrowth and degradation. Improving REDD+ policy, REDD+ management arrangements, NFMS and safeguards to cover leakage and nonpermanence, both on the conceptual framework and practical guidelines. Data validation process is needed, such as by comparing land cover map to the post classification field data for all time periods. Developing a clear mechanisms and procedures to facilitate the compilation and scaling-up of existing initiatives and

Component/ Sub-component	Strength	Weakness	Activity/Strategy
			ongoing activities into robust national capacity.
Sub-component 4b. Information System for Multiple Benefits, Other Impacts, Governance and Safeguards.	 National regulations and environment assessment instruments are available. Monitoring system of GHG and other noncarbon aspect is available. SIS-REDD+ is ready to be operated. 	 Legitimacy of SIS-REDD+ is low without any legal foundation. Lack of coordination among agencies that possess forest related data (such as the potency of forest products, forest carbon, environmental services, socio-economic of forest, etc.) at the national and sub-national levels. Lack of synergy among the REDD+ safeguards-related system. Limited human resources for responsible institutions at the sub-national level to operate the SIS REDD+. Limited community involvement in the SIS operational. 	 Formalizing legal aspect for the full implementation of SIS-REDD+. Capacity building for responsible institutions at the sub-national level. Synergy among agencies collecting forest related data. Synergy among existing parallel safeguards. Community awareness in the raising and the capacity building of SIS-REDD operational.

The proposed strategies/activities listed in the table above are the expected contributions to improve what have been conducted during the REDD+ Readiness Phase in Indonesia. FCPF, as well as other entities, could prioritize their involvements into these activities, both at the national and sub-national levels. Activities that have potential strategic impacts (such as the enhanced coordination process, advanced policy on funding instruments and benefit sharing mechanisms, as well as the low-carbon development, etc.) are better to be carried out in the national scale. Meanwhile, for the activities that have been readied for operation and implementation, further process of development/implementation is directed to the selected sub-national levels, e.g. East Kalimantan Province selected for the FCPF Carbon Fund scheme. It will cover area approximately 12.9 million hectares (East Kalimantan is Indonesia's second largest province, and comprises 6.7% of the country's land area), and consists of 6,819,163 ha forest area (see at https://www.forestcarbonpartnership.org/sites/fcp/files/2016/May/Indonesian%20ER-PIN%2020160429%20Final.pdf).

The REDD+ scheme has been in a theoretical arena since its inception, and has very limited examples of success stories of its implementation. The choice of REDD+ to focus in a particular sub-national level is encouraged to support national efforts and can become an example for other sub-national levels. Another opportunity of the FCPF significant role to support the REDD+ Indonesia is to take a lead on bringing synergy and integrating the REDD+ activities, both at the national and sub-national levels, particularly in

East Kalimantan. The synergy and integration among agencies that provide data, information and safeguards, as well as the aggregation of forest carbon data in the context of MRV system, are among the choices of activities.

The following table will provide a timeline of proposed strategies/activities indicating the priority for REDD+ implementation. The criteria of priorities are the key element for REDD+ implementation, the high risk of cancellation of its implementation if it is not conducted, and the possible available funding.

Table 3.2 Timeline and priority setting of improvements

Component/	Activity/Strategy	Priority		Com	pletion 1	Time		Responsible	Possible
Sub-Component		Level	2017	2018	2019	2020	2021	Entity	Funding
Component 1 Readi	ness Organization and Consulta	tion							
Sub component 1a. National REDD+	Intensification in coordination process is needed by DGCC.	I						DGCC	APBN
management arrangement	Technical supervision capacity for local governments (provinces and districts) and DGCC regional offices.	II						DGCC	APBN, other resources (cooperation- based)
	Capacity building on the feedback and grievance redress mechanism on the REDD+ purpose for responsible institutions.	I						DGCC	FCPF, other resources (cooperation- based)
	- Develop a grievance redress mechanism at the sub-national level.	I						DGCC, Provincial Forestry Services	FCPF, APBN
Sub component 1b. Consultation, participation and outreach	Continuing consultation, participation and outreach process over Indonesia with various printed and online media.	II						DGCC, Local Government, Project Proponents, NGO's	APBN, APBD, other cooperation- based resources (including FCPF),
	- Consultation, participation and outreach on the REDD+ strategies and implementation framework should be conducted within Indonesia's multilayered entities.	II						DGCC, Local Government, Project Proponents, NGO's	APBN, APBD, other cooperation- based resources (including FCPF),
	Priority is given to sub national level as a potential site for the REDD+ scheme.	I						DGCC, Local Government, Project Proponents, NGO's	APBN, APBD, other cooperation- based resources (including FCPF),

Component/	Activity/Strategy	Priority		Com	pletion 1	Time		Responsible	Possible
Sub-Component	Activity/StrateBy	Level	2017	2018	2019	2020	2021	Entity	Funding
	- Improving advocation approach on dissemination strategy.	I						DGCC, Local Government, Project Proponents, NGO's	APBN, APBD, other cooperation- based resources (including FCPF),
Component 2 REDD	+ Strategy Preparation								
Sub component 2a. Assessment of land use, land use change drivers, forest law, policy	- Land rights assessment is needed to provide clear land-use policy for REDD+.	I						Priority province (East IKalimantan) – by FOEDIA and DGCC	FCPF
and governance	Developing and establishing data management system for critical spatial and statistical information related to emission reduction program	I						Priority province (East IKalimantan) – by FOEDRIA and DGCC	FCPF
Sub component 2b. REDD+ strategy options	- Mainstreaming REDD+ Strategy in all sub- national levels to strengthen their local development planning and strategy (provincial and district levels).	II						DGCC, DDPI and Provincial Forestry Service (for East Kalimantan Province), NGO	APBN, APBD, other cooperation- based resources (including FCPF),
	Intensive communication with related sectors is needed at the national and sub-national levels.	II						DGCC, local government, NGO	APBN, APBD, other cooperation- based resources (including FCPF),
	Facilitation process for positioning the REDD+ in the current commitment of Indonesia's NDC.	I						DGCC	APBN, APBD, other cooperation- based resources (including FCPF),
Sub component 2c. Implementation framework	- Advanced policies that enhance the roles and participation of related private sectors in low carbon development process (in the sectors of forestry, plantation, agriculture, mining, or others, both for mineral and peatland areas).	I						FOERDIA (for East Kalimantan Province)	FCPF
	- Providing academic paper to develop the regulation on the REDD+ business permit in order to improve the Ministerial Decre/Regulation on REDD+ permit procedure.	II						MoEF	APBN, other cooperation- based resources (including FCPF)

Component/	Activity/Strategy	Priority		Com	pletion 1	īme		Responsible	Possible
Sub-Component		Level	2017	2018	2019	2020	2021	Entity	Funding
	- Sosialization and desimination of REDD+ registry is needed.	I						DGCC	APBN, APBD, other cooperation- based resources (including
									FCPF),
Sub component 2d. Social and environmental impacts	Finalization of SESA and ESMF documents.	I						DGCC	FCPF
Sub component 2e. Funding instrument and benefit sharing mechanism	Exploring the role of private sectors, as well as developing an environmental funding scheme from domestic and private sectors.	II						DGCC, FOERDIA, DDPI	Other resources, FCPF
	Accelerating the development of the Government Regulation, other statutory laws and related minister technical decrees.	II						DGCC, FOERDIA	APBN, other resources
	The existing mechanisms available need to be developed, adjusted and adopted for the REDD+ benefit sharing mechanism	I						DGCC	APBN, APBD, other cooperation- based resources (including FCPF),
Component 3. Refer	rence Emission Level/Reference	Level							
Reference emission level/reference level	Developing standards of national - sub-national correlations on determining the sub- national FREL	II						DGCC	FPCF
	Developing the methodology or approach for synchronizing varied year-bases for different purposes.	II						DGCC	FPCF
Component 4. Mon	itoring System for Forest and Sa	feguards						•	•
Sub component 4a. National forest monitoring	- Developing additional PSP's to reduce uncertainty.	I						FOERDIA	FCPF
system	Improving land cover data to detect forest regrowth and degradation.	II						MoEF	APBN, other resources

Component/	Activity/Strategy	Priority		Com	pletion 1	ime		Responsible Entity	Possible
Sub-Component		Level	2017	2018	2019	2020	2021		Funding
	- Improving the REDD+ policy, the REDD+ management arrangements, the NFMS and safeguards to cover leakage and non- permanence, both on the conceptual framework and practical guidelines.	ı						DGCC, FOERDIA, East Kalimantan (DDPI)	FCPF
	- Data validation process is needed, such as by comparing land cover map to the post classification field data for all time periods.	II						MoEF, East Kalimantan	FCPF
	- Developing clear mechanisms and procedures to facilitate the compilation and scaling-up of existing initiatives and ongoing activities into robust national capacity.	II						MoEF	APBN, other resources
Sub component 4b. Information system for multiple benefits,	Formalizing legal aspects for the full implementation of SIS- REDD+.	I						DGCC	APBN
other impacts, governance, and safeguards	Capacity building for responsible institutions at the sub-national level.	I						DGCC	APBN, APBD, other cooperation- based resources (including FCPF)
	Creating synergy among agencies that collect forest related data at the national and sub national levels.	I						DGCC	APBN, other resources
	- Synergy among existing parallel safeguards.	I						DGCC	APBN, other resources
	Raising the community awareness and applying capacity building.	I						DGCC	APBN, other resources

East Kalimantan Province was selected as a pilot province for the FCPF Carbon Fund, which is planned for implementation in 2018 to 2024. Carbon Fund is not the goal, but has become part of a long term development plan of the East Kalimantan Province with an objective to reduce land based GHG emissions in supporting the transition of the province to low carbon economy. The ERPD for East Kalimantan Province is being developed, as some of the REDD+ architectures or aspects are still in need of developments. Therefore, the FCPF Additional Fund will be prioritized to support the development of East

Kalimantan Province, as summarized in Table 3.2 above. In general, the activities required in East Kalimantan are: (a) activities related to spatial data (development of PSP's, MRV and FREL), (b) social and environmental safeguards (including the grievance and redress mechanism, as well as land rights), (c) financial, (d) internalization of the emission reduction program into a long term development plan, and (e) capacity building.

At the national level, by considering the current progress achieved by Indonesia (including by the Indonesian government itself with support from various development partners), the country is pursuing a full implementation of REDD+ in the near future. Indonesia needs to finalize its funding instrument and the REDD+ funding mechanism. Indonesia is also encouraging the implementation of REDD+ architecture elements (including FREL, MRV and SIS-REDD+) in a sustainable way to obtain result-based payment (including Carbon Fund and Bio Carbon Fund in FCPF), as well as boosting a contribution of REDD+ on the achievement of national emission reduction target (NDC). In addition, Indonesia has been consistent in conducting awareness raising and capacity building within its multilayer entities. Therefore, in the FCPF Additional Fund, Indonesia proposes the activities to support related facilitation processes (which are positioning REDD+ within the NDC, facilitation of REDD+ Result-Based Payment, operational of REDD+ National Registry System, awareness raising and capacity building, and others).

PARTICIPATORY SELF-ASSESSMENT PROCESS

4.1 Scope and Scale

Indonesia's REDD+ Readiness Self-Assessment Document is prepared to report the self-assessment processes and results of the REDD+ implementation in Indonesia, within the concept of national approach and sub-national implementation. This document is equipped by a brief progress of the REDD+ implementation in the provinces of East Kalimantan and South Sumatra. The two were selected as samples for the following reasons:

- These provinces have high forest areas and high number of biodiversity.
- There are varied initiatives on programs related to REDD+ facilitated by multiple agencies, among others the Central Government (Ministry of Forestry), The Nature Conservancy (TNC), and GIZ-Forclime, as well as the World Wild Fund (WWF).
- 3) These provinces need additional mechanisms to support local government's commitment in creating conceptual and practical resolution on how to manage their own natural resources in sustainable way.
- 4) These provinces are part of the pilot provinces for the REDD+ implementation model at the national scale, according to the REDD+ Task Force in 2010.

The scope of the REDD+ Readiness Self-Assessment covers all of the main readiness activities, either activities funded by Indonesia's National budget or other partnering institutions (within bilateral, regional, multinational and international collaborations), including the consultation and readiness strategies, reference level and monitoring system design, as well as the multisectoral issues resolutions such as within the governance, environment, social and economy.

4.2 Framework

The main concept of REDD+ Readiness is the environmental incentive through integrated REDD+ actions. It includes the vertical integrations of entities (e.g. national – sub-national communities), horizontal integrations (e.g. collaboration among communities, forest management units, private companies, or other REDD+ proponents), as well as the temporal integrations (the unity of time in a bundle of agreement).

This concept was then divided into four components according to the FCPF Readiness Assessment Framework (hereinafter called the FCPF Guideline)⁴, namely: (1) readiness organization and consultation, (2) REDD+ strategy preparation, (3) reference emission level/reference level, and (4) monitoring system for forest and safeguards. In line with these components, Indonesia has developed a REDD+ infrastructure⁵. It consists of (1) Policy and Strategy, (2) Reference Emission Level (REL), (3) Monitoring Reporting and Verification (MRV) system, (4) Safeguards, (5) Funding Instruments, and (6) Benefit Sharing Mechanism.

The assessment of those components is a crucial step to discover the status of preparation conducted by Indonesia during the REDD+ Readiness Phase. The assessment covers the process and results of the Readiness Phase in Indonesia.

The FCPF mentioned that many countries are experiencing varied national circumstances and specific characteristics; this is relevant only if the assessment is to be conducted by each country (FCPF, 2013). Therefore, the REDD+ Readiness Self-Assessment (hereinafter called 'the Assessment) was conducted through the participatory processes of stakeholders representing the REDD+ entities in Indonesia. Individuals representing the central government, provincial governments, district governments, communities, forest management units, academia, NGOs, private companies, donors and other independent institutions were involved to discuss and assess the REDD+ readiness implementation in Indonesia.

4.3 Processes

The Assessment process refers to the FCPF Guideline (FCPF, 2013). According to the framework, the process on developing document consists of three main stages, namely the preparation for the assessment, conducting of the assessment and communicating the assessment's outcome. The following sub-sections will briefly describe the processes conducted in Indonesia. The reports and related documents are available on http://puspijak.org/index.php/front/content/fcpf.

⁴ FCPC. 2013. A Guide to the FCPF Readiness Assessment Framework. The World Bank. Washington DC.

⁵ Ministry of Forestry. 2008. IFCA 2007 Consolidation Report: Reducing Emission from Deforestation and Forest Degradation in Indonesia. Forestry Research and Development Agency, Ministry of Forestry of the Republic of Indonesia. Jakarta.

4.3.1 Preparing for the Assessment

4.3.1.1 Identification of organizing team, facilitator and sponsor

An organizing team is crucial for the whole process of self-assessment and REDD+ Readiness Self-Assessment development. The Research Center for Social, Economy, Forest Policy and Climate Change (Pusat Penelitian dan Pengembangan Sosial, Ekonomi, Kebijakan dan Perubahan Iklim/P3SEKPI) of the Forestry Research, Development, and Innovation Agency (Badan Penelitian, Pengembangan, dan Inovasi Kehutanan/BLI) of the Ministry of Environment and Forestry (Kementerian Lingkungan Hidup dan Kehutanan/KLHK), in collaboration with several consultants, had worked for three months to organize and facilitate the self-assessment activities and REDD+ Readiness Self-Assessment document development. The FCPF-World Bank and Indonesia's National Budget System (Anggaran Pendapatan dan Belanja Negara/APBN) have funded all of these processes.

4.3.1.2 Development of a process and schedule, as well as allocating budget

The literature review, multi-stakeholder meetings and document writing have all been conducted within a three-month schedule, from August to October 2016. In August, the activities were focused on preparation phase, including on organizing team and facilitator identification, proposing sponsor, as well as the stakeholders' identification. Assessment events had started from the first week of September 2016, both at the national and sub-national levels (Table 0.1).

Table 4.1 Time schedule for developing REDD+ Readiness Self-Assessment Document

ACTIVITY		WEEK OF AUGUST				WEEK OF SEPTEMBER				WEEK OF OCTOBER		
	1	2	3	4	1	2	3	4	1	2	3	4
Preparing the Assessment												
 Identification of organizing team, facilitator, and sponsor 												
Development of a process and schedule, and allocation of a budget												
Identification of stakeholder participation												
Conducting the Assessment												
Preparation of stakeholder events (e.g. workshops or focus groups)												
2. Facilitation of the assessment process												
Communicating the Assessment Outcome												
1. Synthesis of outcomes												
2. Dissemination												

4.3.1.3 Identification of stakeholder participation

Various stakeholders have been identified and invited, before attending the self-assessment processes conducted in the form of Focus Group Discussions (FGDs) within four workshops in the national and subnational levels. Table 0.2 contains the summary of the participants' institution types and gender representations.

Table 4.2 Participants of self-assessment

NO.	PARTICIPANT	NATIONAL INCEPTION WORKSHOP		SUB NATIONAL WORKSHOP (East Kalimantan)		SUB NASTIONAL WORKSHOP (South Sumatera)		VALIDATION AND DESIMINATION WORKSHOP	
		Total	%	Total	%	Total	%	Total	%
1	Central Government	13	24.5	2	4.8	3	7.1	8	15.7
2	Provincial government	0	0.0	17	40.5	10	23.8	3	5.9
3	District Government	0	0.0	1	2.4	1	2.4	0	0.0
4	NGO	8	15.1	5	11.9	1	2.4	5	9.8
5	Research and academics institution	26	49.1	11	26.2	17	40.5	23	45.1
6	Private sector	1	1.9	3	7,1	6	14.3	8	15.7
7	International institution	5	9.4	1	2.4	1	2.4	4	7.8
8	Community	0	0.0	2	4.8	3	7.1	0	0.0
	Total	53	100	42	100	42	100	51	100
	a. Male (L)	26	49.1	34	81.0	34	81.0	30	58.8
	b. Female (P)	27	50.9	8	19.0	8	19.0	21	41.2

The stakeholders attending the workshops are as follow:

4.3.1.3.1 Inception Workshop, National Level, September 1st, 2016

Government Institutions

- 1) Directorate of Green House Gas Inventory, Directorate General of Climate Change, Ministry of Environment and Forestry
- 2) Directorate of Mitigation, Directorate General of Climate Change, Ministry of Environment and Forestry
- 3) Directorat of Mobilization, Directorate General of Climate Change, Ministry of Environment and Forestry
- 4) Directorate of Forest Resource Inventory, Directorate General of Planology, Ministry of Environment and Forestry
- 5) Center for Standardization of Environment, Ministry of Environment and Forestry
- 6) Directorate of Law, Secretariate General of the Ministry of Environment and Forestry
- 7) Climate Change Task Force, Ministry of Environment and Forestry
- 8) National Secretariat of National Action Plan for Green House Gas Emission Reduction, National Development Planning Agency of Indonesia

- 9) Coordinating Ministry for Economics
- 10) Ministry of Agriculture, The Republic of Indonesia
- 11) Ministry of Finance, The Republic of Indonesia
- 12) Indonesian National Institute of Aeronautics and Space (*Lembaga Penerbangan dan Antariksa Nasional*/LAPAN), The Republic of Indonesia
- 13) Geospatial Information Agency of Indonesia (*Badan Informasi Geospasial*/BIG), The Republic of Indonesia

Non-Governmental Organizations

- 14) The Nature Conservancy (TNC)
- 15) World Wildlife Fund (WWF) Indonesia
- 16) Flora & Fauna International (FFI) Indonesia Program
- 17) World Resource Institute (WRI) Indonesia Program
- 18) Indegenous People Alliance of the Archipelago (Aliansi Masyarakat Adat Nusantara/AMAN)

International Agencies

- 19) JICA
- 20) GIZ-Forclime
- 21) IJ-REDD+
- 22) United Nation Development Programme (UNDP)
- 23) AFOCO
- 24) The World Bank
- 25) Royal Norwegian Embassy

Research and Academic Institutions

- 26) Bogor Agricultural University (Institut Pertanian Bogor/IPB)
- 27) ICRAF
- 28) Research and Development Center for Social, Economy, Forest Policy and Climate Change
- 29) Research Center for Forest and Conservation
- 30) CCROM, IPB
- 31) PSP3, IPB

Private Sectors

- 32) PT Inhutani I Labanan (Proponent of DA-REDD+)
- 33) PT Sumalindo Jaya IV (Proponent of DA-REDD+)
- 34) PT Global Alam Lestari (Proponent of REDD+ Permit Holder)

4.3.1.3.2 Virtual Survey, National Level, September 6th – October 16th, 2016

A virtual survey was then conducted to verify the results of the Inception workshop. Experts invited for the virtual survey are listed in Annex 5.

4.3.1.3.3 Sub-national Workshop, East Kalimantan Province, October 7th, 2016

Local Government Institutions

- 1) Provincial Forestry Service of East Kalimantan Province
- 2) Provincial Development Planning Agency of East Kalimantan Province
- 3) Regional Council on Climate Change (Dewan Daerah Perubahan Iklim/DDPI) of East Kalimantan
- 4) REDD+ Task Force of East Kalimantan Province
- 5) District Forestry Service of Berau District
- 6) REDD+ Task Force of Berau District

Technical Implementation Unit of the Central Government at the Sub-National Level

- 7) Forest Area Consolidation Office (*Balai Pemantapan Kawasan Hutan*/BPKH Wilayah IV), East Kalimantan
- 8) Natural Resources Conservation Office (*Balai Konservasi Sumber Daya Alam*/BKSDA), East Kalimantan

Research and Academics Institutions

- 9) Dipterocarp Research Center, Samarinda
- 10) Research Institute for Natural Resource Conservation Technology, Samboja
- 11) Center for Climate Change Studies (C3S, Mulawarman University)
- 12) TESD, Mulawarman University
- 13) CEBERES, Mulawarman University
- 14) CSF, Mulawarman University

International Agencies

- 15) GIZ Forclime of East Kalimantan
- 16) GIZ GELAMAI
- 17) The Nature Conservancy, Berau Programme

Local NGOs

- 18) WWF of East Kalimantan
- 19) GGGI
- 20) Yayasan BIOMA
- 21) Yayasan STABIL
- 22) SERUMPUN
- 23) Indegenous People Alliance of the Archipelago (*Aliansi Masyarakat Adat Nusantara*/AMAN), East Kalimantan Office

Private Sectors

- 24) PT Inhutani Labanan, Samarinda Office (Proponent of DA-REDD)
- 25) PT Sumalindo Jaya IV, Samarinda Office (Proponent of DA-REDD)

Communities

- 26) Long Duhung Village Representative, Berau District
- 27) Merabu Village Representative, Berau District
- 28) Communication Forum for Hulu Kelay Community, Berau District

4.3.1.3.4 Sub-national Workshop, South Sumatra Province, October 10th, 2016

Local Government Institutions

- Forestry Service of South Sumatra Province
- 2) Planning Agency of South Sumatra Province
- Agriculture Service of South Sumatra Province
- REDD+ Task Force of South Sumatra Province
- Forest Management Unit of Lalan Mangsang Mendis, Musi Banyuasin District
- REDD+ Task Force of Musi Rawas District

Technical Implementation Units of the Central Government at the Sub-National Level

- 7) Forest Area Consolidation Office (Balai Pemantapan Kawasan Hutan/BPKH Wilayah II), South Sumatra
- 8) Natural Resources Conservation Office (Balai Konservasi Sumber Daya Hutan/BKSDA), South
- 9) Production Forest Monitoring Office (Balai Pemantauan Pengelolaan Hutan Produksi/BP2HP), South Sumatra
- 10) Institute for Forest Seedlings (Balai Perbenihan Tanaman Hutan) of South Sumatra

International Agencies

- 11) GIZ Bioclime
- 12) WWF
- 13) GIZ LAMA-I

Research and Academics Institutions

- 14) Sriwijaya University, Palembang
- 15) Environment and Forestry Research and Development Institute, Palembang
- 16) Institute of Agricultural Science (Sekolah Tinggi Ilmu Pertanian/STIPER), Palembang

Private Sectors

17) PT Global Alam Lestari (Proponent of Carbon Permit Holder)

Local NGOs

18) Wahana Bumi Hijau

Communities

- 19) Muara Merang Village Representative, Bayung Lencir Sub District, Musi Banyuasin District
- 20) Kepayang Village Representative, Bayung Lencir Sub District, Musi Banyuasin District

4.3.1.3.5 Validation Workshop, National Level, October 25th, 2016

Government institutions

- 1) Coordinating Ministry on Economy
- 2) South Sumatra Provincial Forestry Service
- 3) South Sumatra Provincial Development Planning Agency

- 4) Directorate of Forest Resource Inventory, Directorate General of Planology, Ministry of **Environment and Forestry**
- 5) Directorate of Green House Gas Inventory, Directorate General of Climate Change, Ministry of **Environment and Forestry**
- 6) Center for Standardization of Environment, Ministry of Environment and Forestry
- 7) Indonesian National Institute of Aeronautics and Space (Lembaga Penerbangan dan Antariksa Nasional/LAPAN), the Republic of Indonesia
- Regional Council on Climate Change (Dewan Daerah Perubahan Iklim/DDPI) of East Kalimantan

Non-Governmental Organizations

- 9) The Nature Conservancy (TNC)
- 10) World Wild Fund (WWF)
- 11) Flora & Fauna International (FFI) Indonesia Program
- 12) World Resource Institute (WRI) Indonesia Program

International Agencies

- 13) The World Bank
- 14) IJ-REDD+
- 15) GIZ-Forclime
- 16) Royal Norwegian Embassy

Research and Academic Institutions

- 17) Research and Development Center for Social, Economy, Forest Policy and Climate Change (P3SEKPI), Forestry Research, Development, and Innovation Agency, Ministry of Environment and Forestry (FORDIA, MoEF)
- 18) Agricultural Land Resources Agency, Ministry of Agriculture
- 19) Sriwijaya University
- 20) CCROM, IPB
- 21) Faculty of Forestry, IPB
- 22) Center for International Forestry Research (CIFOR)
- 23) The World Agroforestry Centre (ICRAF)

Private Sectors

- 24) PT Hatfield Indonesia
- 25) PT Waindo Specterra
- 26) PT Global Alam Lestari
- 27) PT Daemeter Consulting
- 28) PT Rimba Makmur Utama

4.3.2 Conducting the Assessment

4.3.2.1 Preparation of events

Designing the assessment process and developing the REDD+ Readiness Self-Assessment must also consider the following aspects:

- There are enormous relevant participants and stakeholders throughout Indonesia to be involved in the assessment processes.
- Various aspects or components of the REDD+ and land-use should be addressed.
- Specific national circumstances in Indonesia, such as the government systems (presidential and local authonomy), cultures, as well as its biogeographic and ecological diversity.

Therefore, these assessment events were designed to include as much stakeholders as possible, with as many diversed topics as possible. The assessment processes consist of four events, described briefly as follows:

4.3.2.1.1 Inception workshop

Inception workshop had been conducted at the National Level on September 1st, 2016, in Jakarta. This workshop had aimed at:

- Informing self-assessment activities of REDD+ Readiness in Indonesia to relevant stakeholders.
- Updating the progress of REDD+ Readiness Phase in Indonesia.
- Identifying and agreeing the methodology of self-assessment, as well as the criteria and evidences used in the assessment.
- 4) Conducting self-assessment of the REDD+ Readiness Phase for Indonesia.

This workshop's outcomes are:

- 1) Current progress of the REDD+ readiness in Indonesia until 2016.
- Methodology options for self-assessment of the REDD+ Readiness in Indonesia.
- Self-assessment results of the REDD+ readiness at the national level.

4.3.2.1.2 *Virtual Survey*

A virtual survey has been designed to collect inputs, corrections and opinions for the first selfassessment results from the National Inception Workshop conducted on September 1st, 2016. The survey is a way to validate, and part of the triangulation techniques, by involving experts across Indonesia. Such experts came from various REDD+ related field of expertise, among others: policy, FREL/RL, MRV, forest and carbon inventory, social and environmental safeguards, funding, as well as benefit sharing mechanism. They also came from various backgrounds, such as academicians, researchers, government officers, NGOs, as well as international organizations. The survey was conducted from September 26th to October 16th, 2016. Twenty-one experts were contacted, where 30% of them participated in the survey and provided invaluable input to the Self-Assessment results.

4.3.2.1.3 Sub-national Workshops

Sub-national Workshops were conducted at selected sub-national levels, namely in East Kalimantan Province on October 7th, 2016, in Samarinda, as well as in South Sumatra Province on October 10th, 2016 in Palembang.

The objectives of these workshops were: (1) to collect the current progress of the REDD+ Readiness activities at the sub-national level, and (2) to conduct self-assessment of the REDD+ Readiness achievement at the sub-national level.

4.3.2.1.4 Validation Workshop

A validation workshop was aimed at proofing, correcting, validating and creating national agreement on the self-assessment results of the REDD+ Readiness Self-Assessment for Indonesia. This was a final workshop that invited all relevant stakeholders across Indonesia, both from the national and subnational levels.

Figure 0.1 shows the assessment processes that have been conducted to produce the REDD+ Readiness Self-Assessment for Indonesia.

4.3.2.2 Facilitation of the assessment process

4.3.2.2.1 Inception Workshop

Inception Workshop was conducted following the methods from the FCPF Guideline (FCPF, 2013). Participants have agreed to use self-assessment methods with modifications on the particular criteria and diagnostic questions to match with Indonesia's circumstances. A new sub-component was added within Component 2: Sub-component 2e of Funding Instrument and Benefit Sharing Mechanism. This new subcomponent consists of the former criteria No. 21 and two new criteria developed during the workshop (Table 0.3).

Table 4. 3 Component and sub component used in the self assessment

Component	Sub-component
1 Boodings Organization and Consultation	a. National REDD+ Management Arrangement
Readiness Organization and Consultation	b. Consultation, Participation and Outreach
	a. Assessment of Land-Use, Land-Use Change Drivers, Forest Law, Policy and Governance
	b. REDD+ Strategy Options
2. REDD+ Strategy Preparation	c. Implementation Framework
	d. Social and Environmental Impacts
	e. Funding Instrument and Benefit Sharing Mechanism
3. Reference Emission Levels/Reference Levels	_
	a. National Forest Monitoring System

- 4. Monitoring Systems for Forests and Safeguards
- b. Information System for Multiple Benefits, Other Impacts, Governance and Safeguards

Before conducting the Assessment, eight resource persons were invited to present current status of the REDD+ implementation and lessons learned from the activities. Titles of the presentation are as follow:

- 1) National REDD+ Strategy: Policy, Regulation and Governance
- Progress of FREL, NFMS and MRV to support REDD+
- Progress in Funding Instrument and Benefit Sharing Mechanism to support REDD+
- Progress in Safeguard Information System to support REDD+
- Lesson learned in the consultation, public participation and REDD+ outreach processes in Kutai **Barat District**
- Lesson learned from REDD+ implementation in village level in West Kalimantan
- Lesson learned from REDD+ implementation in District Level at Berau District
- Lesson learned in the implementation of measurement and reporting GHG emission from the forest based on community participation

The Assessment was then conducted in the form of Focus Group Discussion (FGD), with participants divided into four groups according to the following topics:

- 9) Group 1: National REDD+ Strategy: Policy, Regulation and Governance
- 10) Group 2: FREL, NFMS and MRV
- 11) Group 3: Funding Instrument and Benefit Sharing Mechanism
- 12) Group 4: Safeguard Information System

Each group discussed and assessed the diagnostic questions from the relevant criteria, sub-component, and component, as guided in the FCPF Guideline (FCPF, 2013). Evidences for each progress indicator (color) in each diagnostic question were discussed and documented, then agreed among the participants in each group. The results of the Assessment are in the form of progress indicators (colors), showing the level of readiness as answers to the diagnostic questions (Figure 0.1) and followed by reasons or evidences supporting the color.

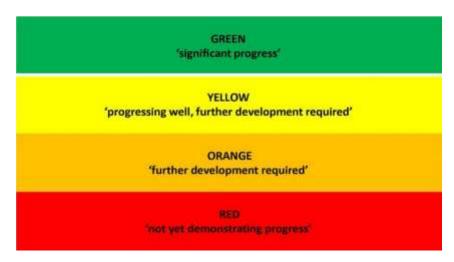


Figure 4.1 Progress indicators.

4.3.2.2.2 Virtual Survey

A virtual survey was conducted throughout September 26th to October 16th, 2016. E-mail was used as a survey media. Participants of the virtual survey contributed to all components, or part of these components (specific components/sub-components), according to their expertise.

Contributions were in terms of:

- a. Correction on the substances and evidences (column of evidence).
- b. Correction on the assessment results (column of result).
- c. Correction on the arguments of assessment results (column of result).
- d. Input on additional evidence, result and argument of the assessment results.
- e. Provide a note (on reasons/comments) for all corrections/comments (column of comment).

4.3.2.2.3 Sub-national Workshops

The Sub-national Workshops were conducted at provincial levels. As already mentioned in the previous sub-sections, two provinces were selected as the sub-national representatives, namely East Kalimantan and South Sumatra. The participants in both workshops also agreed to use the methods and the prescribed assessment formats from the Inception Workshop, as well as applying them to the sub-national condition.

As conducted in the Inception Workshop, resource persons were invited to present the current status of the REDD+ implementation in each Province. The following topics were presented in each sub-national workshop:

- 1) Provincial REDD+ Strategy: Policy, Regulation and Governance.
- 2) Progress of FREL, NFMS and MRV in East Kalimantan/South Sumatra Province.

- 3) Progress in Funding Instrument and Benefit Sharing Mechanism in East Kalimantan/South Sumatra Province.
- 4) Progress in Safeguard Information System in East Kalimantan/South Sumatra Province.

The FGD was also conducted in each sub-national workshop, following the methods in the Inception Workshop.

4.3.2.2.4 Validation Workshop

The validation workshop was the final workshop conducted in October 25th, 2016 in Jakarta. The aim of the workshop was to validate the results of the REDD+ readiness self-assessment conducted at the national level, considering the sub-national assessments and virtual surveys results. The workshop started with an introduction from the Head of P3SEKPI, a presentation on FCPF program in Indonesia and a presentation on the results of self-assessments: the national, sub-nationals and virtual surveys.

The FGD for validating the results of self-assessment was also conducted in the same method as that in the Inception Workshop, where participants were divided into four groups before validations were made by assessing the progress indicators for each diagnostic question. When the validated progress indicator (color) was the same as the previous result, the group must provide reasons. This was also applied when the validated progress indicator (color) changed.

4.3.3 Communicating the Assessment Outcome

4.3.3.1 Synthesis of outcomes

As described in Sub-section 4.3.2.2, based on Indonesia's national circumstances, a new sub-component and two new criteria were added to the R-Package: the Sub-component 2e of Funding Instrument and Benefit Sharing Mechanism, and the Criteria No. 25 of the Funds Management Capacity and 26 of the Availability of Funds. Therefore, the total components in the R-Package remained within four components, with ten sub-components, 36 criteria and 59 diagnostic questions (Annex 1).

In each workshop, participants were divided into 4 groups: 1) REDD+ Strategy, 2) MRV, FREL and NFMS, 3) Safeguards, as well as 4) Funding Instrument and Benefit Sharing Mechanism. Each diagnostic question was discussed, evidences listed, then the assessment result was given in the form of progress indicators (colors) to each diagnostic question, after considering the availability of evidences (Figure 4.2).

In order to obtain a conclusion on the readiness of each level (diagnostic question, criteria, sub-component and component), scores were given to each progress indicator (color). Then, to conclude the readiness in a higher level, the average of scores from the lower level was calculated and the result was re-assigned to the relevant progress indicator (color) based on the range of scores (Figure 0.2). These steps were repeated until all components have been completed. The result of this analysis was presented in the Validation Workshop.

PROGRESS INDICATOR	SCORE	RANGE OF SCORE
GREEN 'significant progress'	4	3,25 < x ≤ 4
YELLOW 'progressing well, further development required'	3	2,50 < x ≤ 3,25
ORANGE 'further development required'	2	1,75 < x ≤ 2,50
RED 'not yet demonstrating progress'	1	1 < x ≤1,75

Figure 4.2 Progress indicators, scores, and ranges

The results from the validation workshop were then processed with the same methods explained above, and in consideration of the evidences listed in the workshops. Final assessment was made considering the results from validation workshop and virtual surveys. A note from the virtual survey and validation workshop results says that not all diagnostic questions were assessed (or given progress indicator), simply because the experts in the virtual survey or participants in the validation workshop did not have the expertise in the particular subjects of diagnostic question, or due to other reasons. In this case, it has been assumed that the experts in the virtual survey and participants in the Validation Workshop had all agreed with the results from the Inception Workshop. The final assessment in complete sets of self-assessment results is presented in Annex 4.

4.3.3.2 Dissemination and validation

The dissemination process of the REDD+ Readiness Self-Assessment had been initiated through the validation workshop, held in Jakarta on October 25th, 2016. Next, the FCPF Indonesia representative would disseminate the assessment result through information outreach programs at the national and subnational levels, including the community and site levels, as well as the P3SEKPI and FCPF websites.

5 CONCLUDING REMARKS

The progress of REDD+ readiness activities in Indonesia has provided lessons learned process in from the national and sub-national level. Major achievements found on REDD+ infrastructures, including national and provincial policies and strategies, REL, MRV system, funding instrument, benefits sharing mechanism, and safeguards. At the national policy and strategy, among others, Indonesia issued the REDD+ National Strategy on 2012 as a national guidance for national REDD+ programs arrangement and operational activities in sub-national level. Through MoEF, Indonesia has submitted National Forest Reference Emission Level for Deforestation and Forest Degradation: In the Context of Decision 1/CP.16 para 70 UNFCCC and approved. NFMS operated by MoEF as part of the connected MRV system both in the national and provincial levels. Indonesia has developed Safeguard Information System (SIS) as an instrument for controlling impact on social and environmental aspects. Indonesia has also provided options for REDD+ implementation framework on funding instrument and benefits sharing mechanism based on existing national framework, but further development needed.

The result of the participatory self-assessment indicated that the REDD+ Readiness in Indonesia reached 81.25% (on the component level). It consists of two green, one yellow, and one orange progress indicators. There is no red progress indicator found in the component level. Significant progress achieved by Component 3 (Reference Emissions Levels/Reference Levels) and Component 4 (Monitoring Systems for Forests, and Safeguards). Component 2 (REDD+ Strategy Preparation) is progressing well, but requires further development, Component 1 (Readiness Organization and Consultation) obviously requires further development. All efforts conducted in implementing the REDD+ activities during the Readiness Phase both at national and sub-national levels contributed to this progress.

The achievement of REDD+ Readiness is more advanced than MTR 2014, with significant progresses such as (the detail comparation provided in Annex 6):

- Component 1 of REDD+ Organization and Consultation indicates: (1) the change of national REDD+ management arrangement from REDD+ Agency to the DGCC under the MoEF; (2) the improvement of consultation, participation, and outreach activities over Indonesia.
- Component 2 of REDD+ Strategy Preparation indicates: (1) 120 FMU's have been developed under Ministry of Forestry's authority and sub-national governments by the end of 2014, and 600 FMU's are expected operational by 2019. FMU is a decentralized structure for forest management, and support to the National REDD+ Strategy; (2) REDD+ National Registry developed and launched by the MoEF in November 2016; (3) the MoEF compiled background information for SESA Final Report development and preparation of ESMF at the end of 2016. The main finding is that more 400 activities related SESA found than in Indonesia. and finalizing Indonesia's SESA and ESMF analysis in 2017; (4) the General Service Agency (Badan Layanan Umum/BLU) of Environmental Financing is under development (now, Indonesia is on the stage of drafting the Presidential Regulation on Environmental Fund). The BLU is an agency responsible for climate change funding instrument under the Ministry of Finance (MoFin), and operationally under co-operation with MoEF.

- Component 3 of RELs/RLs shows that FREL has been under technical assessment by UNFCCC and almost completed with no significant corrections.
- Component 4 of Forest Monitoring System and Safeguards shows improvements of web-based national forest and forest carbon monitoring systems. SIS REDD+ has also been operational since 2014 under responsible of the DGCC, to develop of the data base system on data management and information received by the SIS REDD+ management.

The REDD+ Readiness progress achievement provides evidences that the Government of Indonesia committed to REDD+ implementation agenda. Nevertheless, there are still many works to do and opportunities to collaborate with Indonesia, from the remaining preparation to REDD+ implementation through finance, technology development and transfer, or capacity building. Indonesia welcomes bilateral, regional, and international co-operation to implement the Nationally Determined Contribution; including the REDD+ implementation as the main component from land use sector that facilitate and expedite technology development and transfer, payment for performance, technical co-operation, and access to financial resources to support Indonesia's climate mitigation and adaptation efforts towards a climate resilient future.

The challenge is the budgeting, where total budget needed for climate change-related programs during 2015-2019 reaches up to IDR 2.223 trillion (US\$ 165.9 billion). Indonesian Government has allocated budget of IDR 905.99 billion (US\$ 67.6 million), which brings the need for additional budget of IDR 1.317 trillion (US\$ 98.3 billion). FCPF supported REDD+ Readiness activities with around US\$ 8.6 million (or 0.005% of the total budget needed), nevertheless FCPF fund contributed to fill the gaps and allocated in the provinces considerably not too attractive for donors to participate in.

The next challenge is how to improve REDD+ instruments availability (such as FREL, MRV system, funding instrument, benefit sharing mechanism, safeguards, etc.) in proper legal framework for its legality and implementation legitimacy. Another challenge is on how to strengthen human resources readiness at national and sub-national levels. Both the quality and amount of human resources are relatively limited, while the REDD+ readiness programmes and measures are more diversed and large in scale, involving cross-sectoral and multi stakeholders.

As a way forward, there are at least three important steps possible to do by Indonesia. First, bringing activities with strategic impacts and high level policy process to the national scale; such as enhancing coordination process, advancing policy on REDD+ instruments, etc.). One of the opportunities on REDD+ readiness activities at national level is how to create synergies and to integrate REDD+ activities in various themes. Second, directing further development and technical implementation to the selected sub-national level like the East Kalimantan Province, selected for FCPF Carbon Fund scheme. The choice of focus is to encourage a certain sub-national level to support national efforts and can become an example to other sub-nationals.

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ANNEXES

Annex 1 R-Package Assessment Framework.

Component 1. Readiness Organization and Consultation.

Criteria	Diagnostic Questions	Progress indicator
1. Accountability and transparency.	How are national REDD+ institutions and management arrangements	Green : There are an early stage of initiative on establishing institution, mechanism, planning, monitoring, and evaluation process.
	demonstrating they are operating in an open, accountable and transparent manner?	Yellow: There are an early stage of initiative on establishing institution, mechanism, planning, monitoring, and evaluation process.
		Orange : There are an early stage of initiative on establishing institution, mechanism, planning, monitoring, and evaluation process.
		Red : There are no institution, mechanism, planning, monitoring, and evaluation process.
2. Operating mandate and budget.	How is it shown that national REDD+ institutions operate under clear mutually supportive	Green: There is a national REDD+ institution operate under clear mutually supportive mandates with adequate, predictable and sustainable budgets.
	mandates with adequate, predictable and sustainable budgets?	Yellow: There is national REDD+ institution operate under unclear mandates, unclear annual budget plan,

Criteria	Diagnostic Questions		Progress indicator	
		Orange	unpredictable and unsustainable budgets. : There are national REDD+ institutions in the early stage of operational activities, operating mandate and budget have not been established.	
		Red	budget have not been established.No operating mandate and budget at all in the national REDD+ institution.	
3. Multisector coordination mechanisms and cross-sector	How are national REDD+ institutions and management arrangements ensuring REDD+ activities are coordinated, integrated into and influencing the broader national or sector policy frameworks (e.g. agriculture, environment, natural resources management, infrastructure development and land-use planning)?	Green Yellow	 : There are multisector coordination mechanism and cross sector collaboration. : There are on going processes of 	
collaboration.			multisector coordination mechanism and cross sector collaboration.	
		Orange	 There is an early stage of initiative on multi-stakeholder coordination and cross sector collaboration. 	
		Red	: There are no multisector coordination mechanism and cross sector collaboration.	
4. Technical supervision capacity.	How effectively and efficiently are national REDD+ institutions and management arrangements leading and supervising multisector	Green	: There are sufficient human resource expertises, full mandate, supervision mechanisms, and have been experienced and implemented technical supervision activities at national and sub-national level.	
	readiness activities, including the regular supervision of technical preparations?	Yellow	: There are sufficient human resource expertises, full mandate, supervision mechanisms, but have not been implemented technical supervision activities at national and sub-national level.	
		Orange	: There is an early stage of initiative on developing human resource expertises, full mandate, and supervision mechanisms.	

Criteria	Diagnostic Questions		Progress indicator
		Red	: There are no sufficient human resource expertise, without mandate, no supervision mechanism.
5. Funds management capacity.	How are institutions and arrangements demonstrating effective, efficient and transparent fiscal management, including coordination with other development partner-funded activities?	Green	: There are finance division, fund management mechanism involving other entities, and audited fund management result.
		Yellow	: There are finance division, fund management mechanism involving other entities, but has not been audited by independent auditor.
		Orange	: There is an early stage of initiative on establishing finance division, fund management mechanism, and auditing system.
		Red	 There are no finance division, fund management mechanism, and audited fund management.
6. Feedback and grievance redress mechanism.	a. What evidence is there to demonstrate the mechanism operating at the national, sub- national and local levels, is transparent, impartial, and has a clearly defined mandate, and adequate	Green	 There is relevant institution or division for feedback and handling complaints, and there are tools and mechanisms available.
		Yellow	: There is relevant institution or division for feedback and handling complaints, but unclear tools and mechanisms.
	expertise and resources?	Orange	: There is an early stage of initiative on establishing and developing institution/division for feedback and handling complaints, as well as tools and mechanisms.
		Red	: There is no institution or division for feedback and handling complaints, tools and mechanisms are not available.

Sub-component 1a. National REDD+ Management Arrangements.

Criteria	Diagnostic Questions	Progress indicator
	b. What evidence is there that potentially impacted communities	Green: There is a good feedback and grievance redress to the impacted communities.
	are aware of, have access to, and the mechanism is responsive to feedback	Yellow: There are many feedback and grievance redress to the impacted communities.
	and grievances?	Orange: There is a few feedback and grievance redress to the impacted communities.
		Red : There is no feedback and grievance redress.

Component 1. Readiness Organization and Consultation.

Criteria	Diagnostic Questions		Progress indicator
7. Accountability and transparency.	How are national REDD+ institutions and management arrangements demonstrating they are operating in an open, accountable and	Green	 : There are an early stage of initiative on establishing institution, mechanism, planning, monitoring, and evaluation process. : There are an early stage of initiative on establishing institution,
	transparent manner?	Orange	mechanism, planning, monitoring, and evaluation process.There are an early stage of initiative on establishing institution, mechanism, planning, monitoring, and evaluation process.
		Red	 There are no institution, mechanism, planning, monitoring, and evaluation process.
8. Operating mandate and budget.	How is it shown that national REDD+ institutions operate under clear mutually supportive mandates with adequate,	Green	: There is a national REDD+ institution operate under clear mutually supportive mandates with adequate, predictable and sustainable budgets.

Criteria	Diagnostic Questions predictable and sustainable budgets?	Progress indicator	
		Yellow	: There is national REDD+ institution operate under unclear mandates, unclear annual budget plan, unpredictable and unsustainable budgets.
		Orange	: There are national REDD+ institutions in the early stage of operational activities, operating mandate and budget have not been established.
		Red	: No operating mandate and budget at all in the national REDD+ institution.
9. Multisector coordination mechanisms	How are national REDD+ institutions and management arrangements ensuring REDD+ activities are coordinated, integrated into and influencing the broader national or sector policy frameworks (e.g. agriculture, environment, natural resources	Green	: There are multisector coordination mechanism and cross sector collaboration.
and cross- sector collaboration.		Yellow	: There are on going processes of multisector coordination mechanism and cross sector collaboration.
		Orange	: There is an early stage of initiative on multi-stakeholder coordination and cross sector collaboration.
	management, infrastructure development and land-use planning)?	Red	: There are no multisector coordination mechanism and cross sector collaboration.
10. Technical supervision capacity.	How effectively and efficiently are national REDD+ institutions and management arrangements leading and supervising multisector readiness activities, including the regular supervision of technical preparations?	Green	 There are sufficient human resource expertises, full mandate, supervision mechanisms, and have been experienced and implemented technical supervision activities at national and sub-national level. There are sufficient human resource expertises, full mandate, supervision mechanisms, but have not been implemented technical supervision activities at national and sub-national level.
		Orange	: There is an early stage of initiative on developing human resource

Criteria	Diagnostic Questions		Progress indicator
		Red	expertises, full mandate, and supervision mechanisms. : There are no sufficient human resource expertise, without mandate, no supervision mechanism.
11. Funds management capacity.	How are institutions and arrangements demonstrating effective, efficient and transparent fiscal management, including coordination with other development partner-funded activities?	Green	: There are finance division, fund management mechanism involving other entities, and audited fund management result.
		Yellow	: There are finance division, fund management mechanism involving other entities, but has not been audited by independent auditor.
		Orange	: There is an early stage of initiative on establishing finance division, fund management mechanism, and auditing system.
		Red	: There are no finance division, fund management mechanism, and audited fund management.
12. Feedback and grievance redress mechanism.	c. What evidence is there to demonstrate the mechanism operating at the national, sub- national and local levels, is transparent, impartial, and has a clearly defined mandate, and adequate	Green	: There is relevant institution or division for feedback and handling complaints, and there are tools and mechanisms available.
		Yellow	 There is relevant institution or division for feedback and handling complaints, but unclear tools and mechanisms.
	expertise and resources?	Orange	: There is an early stage of initiative on establishing and developing institution/division for feedback and handling complaints, as well as tools and mechanisms.
		Red	 There is no institution or division for feedback and handling complaints, tools and mechanisms are not available.

Sub-component 1a. National REDD+ Management Arrangements.

Criteria	Diagnostic Questions	Progress indicator
	d. What evidence is there that potentially impacted communities	Green: There is a good feedback and grievance redress to the impacted communities.
	are aware of, have access to, and the mechanism is responsive to feedback	Yellow: There are many feedback and grievance redress to the impacted communities.
	and grievances?	Orange: There is a few feedback and grievance redress to the impacted communities.
		Red : There is no feedback and grievance redress.

Component 2. REDD+ Strategy Preparation.

Sub-component 2a. Assessment of Land Use, Land-Use Change Drivers, Forest Law, Policy and Governance.

Criteria	Diagnostic Questions	Progress indicator
13. Assessment and analysis.	Does the summary of the work conducted during R-PP formulation and preparation present an analysis of recent historical land-use trends (including traditional) and assessment of relevant land tenure and titling, natural resource rights, livelihoods (including traditional/customary),	Green : There are ample analysis and assessment on land use, land-use change drivers, policy and governance. Yellow : There are fairly analysis and assessment on land use, land-use change drivers, policy and governance. Orange : There are analyses and assessment on land use, land-use change drivers, policy and governance but very limited.

Component 2. REDD+ Strategy Preparation.

Sub-component 2a. Assessment of Land Use, Land-Use Change Drivers, Forest Law, Policy and Governance.

Criteria	Diagnostic Questions		Progress indicator
	forest law, policy and governance issues?	Red	: There is no such analysis and assessment on land use, land-use change drivers, policy and governance.
14. Prioritization of direct and indirect drivers/barrier s to forest	a. How was the analysis used to prioritize key direct and indirect drivers to be addressed by the programs and	Green	: The results of analysis were mostly used to prioritize key direct and indirect drivers to be addressed by the programs and policies included in the REDD+ strategy.
carbon stock enhancement.	policies included in the REDD+ strategy?	Yellow	: The results of analysis were fairly used to prioritize key direct and indirect drivers to be addressed by the programs and policies included in the REDD+ strategy.
		Orange	: The results of analysis were less used to prioritize key direct and indirect drivers to be addressed by the programs and policies included in the REDD+ strategy.
		Red	: The results of analysis were not used to prioritize key direct and indirect drivers to be addressed by the programs and policies included in the REDD+ strategy.
	b. Did the analysis consider the major barriers to forest carbon stock enhancement activities (if appropriate) to be	Green	: The analysis mostly considered the major barriers to forest carbon stock enhancement activities (if appropriate) to be addressed by the programs and policies included in the REDD+ strategy.
	addressed by the programs and policies included in the REDD+ strategy?	Yellow	: The analysis fairly considered the major barriers to forest carbon stock enhancement activities (if appropriate) to be addressed by the programs and policies included in the REDD+ strategy.
		Orange	: The analysis less considered the major barriers to forest carbon stock enhancement activities (if

Component 2. REDD+ Strategy Preparation.

Sub-component 2a. Assessment of Land Use, Land-Use Change Drivers, Forest Law, Policy and Governance.

Criteria	Diagnostic Questions		Progress indicator
		Red	appropriate) to be addressed by the programs and policies included in the REDD+ strategy.The analysis did not consider the
			major barriers to forest carbon stock enhancement activities (if appropriate) to be addressed by the programs and policies included in the REDD+ strategy.
15. Links between drivers/barrier s and REDD+ activities.	What evidences demonstrate that systematic links between key drivers, and/or barriers to forest carbon stock enhancement activities (as appropriate), and REDD+ activities were identified?	Green	: There are identification results of systematic links between key drivers, and/or barriers to forest carbon stock enhancement activities (as appropriate), and REDD+ activities, already integrated in the REDD+ Strategy and some of them have been implemented.
		Yellow	: There are identification results of systematic links between key drivers, and/or barriers to forest carbon stock enhancement activities (as appropriate), and REDD+ activities, already integrated in the REDD+ Strategy but has not been implemented.
		Orange	: There are identification results of systematic links between key drivers, and/or barriers to forest carbon stock enhancement activities (as appropriate), and REDD+ activities, but have still not integrated in the REDD+ Strategy yet.
		Red	: Systematic links between key drivers, and/or barriers to forest carbon stock enhancement activities (as appropriate), and REDD+ activities were not identified.
16. Action plans to address natural	Do action plans to make progress in the short-, medium- and long-term	Green	: There is action plans to make progress in the short-, medium- and

Sub-component 2a. Assessment of Land Use, Land-Use Change Drivers, Forest Law, Policy and Governance.

Criteria	Diagnostic Questions		Progress indicator
resource rights, land tenure, governance. resource rights, livelihoods, and governance issues in priority regions related to specific REDD+ programs,	Yellow	long-term, outline further steps, and identify required resources. : There is action plans to make progress in the short-, medium- and long-term and outline further steps but lack of identifying required resources.	
	outline further steps and identify required resources?	Orange	: There is action plans to make progress in the short-, medium- and long-term, but no outline further steps and identify required resources
		Red	: There is no such action plans to make progress in the short-, medium- and long-term.
17. Implications for forest law and policy.	for forest law identify implications for and policy. forest or other relevant law and policy in the long-	Green	: The assessment identified implications for forest or other relevant law and policy in the short-, medium- and long-term periods.
	term?	Yellow	: The assessment identified implications for forest or other relevant law and policy in the short-and medium-term periods only.
		Orange	: The assessment identified implications for forest or other relevant law and policy in the short-term period only.
		Red	: The assessment did not identify implications for forest or other relevant law and policy in the long-term.

Component 2. REDD+ Strategy Preparation.

Criteria	Diagnostic Questions	Progress indicator
18. Selection and prioritization of	c. Were REDD+ strategy options (prioritized	Green: There has been regional strategy and regional action plans generated

Criteria	Diagnostic Questions		Progress indicator
REDD+ strategy options.	based on comprehensive assessment of direct and indirect drivers of deforestation, barriers to forest enhancement activities and/or informed by other factors, as appropriate) selected	Yellow	from a participatory and transparent process, and recognized by all entities. : There has been a regional strategy and action plan generated from limited transparent and participatory process, thus it has not recognized/legitimized by a certain entity.
	via a transparent and participatory process?	d Orange: There has and action a process	 There has been a regional strategy and action plan, but generated from a process that was not transparent and participatory.
		Red	: There is no regional strategy and action plan related to REDD+.
	d. Were the expected emissions reduction potentials of interventions estimated, where possible, and how did	Green	: There has been estimation on emission reduction from REDD+ policy intervention and the strategy plan of REDD+ related to this policy has been fully and widely informed to the parties.
	they inform the design of the REDD+ strategy?	Yellow	: There has been estimation on emissions reduction from REDD+ policy interventions, and the strategies plan of REDD+ related to this policy has been informed to the limited parties.
		Orange	: There has been estimation of emissions reductions from REDD+ policy interventions and strategy plans of REDD+ related to this policy have not been communicated to the parties.
		Red	: There is no estimation of emission reductions from REDD+ policy intervention and no information related to the REDD+ strategy plan.

	Criteria	Diagnostic Questions		Progress indicator
19.	Feasibility assessment.	Were REDD+ strategy options assessed and prioritized for their social, environmental and political feasibility, risks	Green	: There has been a selected of REDD+ strategy and prioritized according to the social, economic, environmental, and political feasibilities.
	and opportunities, and analysis of costs and benefits?	Yellow	: There has been a selected of REDD+ strategy and prioritized according to one of the eligibility criteria including social, economic, environmental, and political criteria.	
			Orange	: There has been a selected REDD+ strategy but not prioritized according to the social, economic, environmental, and political feasibilities.
			Red	: There is no or do not have the REDD+ strategy.
20.	Implications of strategy options on	d. Have major inconsistencies between the priority	Green	: The inconsistency of REDD+ strategy against the existing sectoral policies has been identified.
	existing REDD+ strategy sectoral options and policies or programs in other sectors related to the forest sector (e.g.	Yellow	: Being in the advanced stages in identifying the inconsistencies of REDD+ strategy against the existing sectoral policies.	
		transport, agriculture) been identified?	Orange	: Being in the early initiation stages in identifying the inconsistencies of REDD+ strategy against existing sectoral policies.
			Red	: The inconsistency of REDD+ strategy against the existing sectoral policies has not been identified.
		e. Is an agreed timeline and process in place to resolve inconsistencies and integrate REDD+ strategy options with relevant development	Green	: There is already a timeline and agenda about solving the inconsistency of REDD+ strategies against enforced policies, and has been executed and provide adequate results
		policies?	Yellow	: There is already a timeline and agenda about solving the

Criteria	Diagnostic Questions	Progress indicator
		inconsistency of REDD+ strategies against enforced policies, and has been executed but did not provide adequate results.
		Orange: There is already timeline and agenda inconsistency problem solving REDD+ strategies with applicable policies, but have not been executed.
		Red : There is no timeline and agenda about solving the inconsistency of REDD+ strategies against the enforced policies.
	f. Are they supportive of broader development objectives and have broad community support?	Green: There are regional strategies and action plans related to REDD+, which have supported regional development objectives and received public support.
		Yellow: There are regional strategies and plans related to REDD+, which has supported (or partially supported) regional development goal but never received broad public support, or vice versa.
		Orange: There is a regional strategies and action plan related to REDD+, but it does not support the goals of regional development and not supported by the wider community.
		Red: There is no regional strategy and action plan related to REDD+.

Sub-component 2c. Implementation Framework.

Criteria	Diagnostic Questions	Progress indicator
21. Adoption and implementation of legislation/regula tions.	c. Have legislation and/or regulations related to REDD+ programs and activities been adopted?	Green : All of the laws and/or regulations related to REDD+ are currently and have been adopted and enforced. Yellow : Part of Laws and/or regulations related to REDD+ are currently or have been adopted and enforced.
		Orange: In the early stages of adopting and implementing the laws and regulations related to REDD+.
		Red : The laws and regulations related to REDD+ have not been enforced.
	d. What evidence is there that these relevant REDD+ laws and policies are being implemented?	This becomes a reference for the previous diagnostic questions.
22. Guidelines for implementation.	What evidence is there that the implementation framework has defined carbon rights, benefit sharing mechanisms, REDD+ financing modalities, procedures for official approvals (e.g. for pilots or REDD+ projects), and grievance mechanisms?	Green: There is an implementation framework which has defined the carbon rights, benefit sharing mechanism, REDD+ financing modalities, approval procedure, and complaints mechanism. Yellow: There is an implementation framework which has clearly defined part of carbon rights, benefit sharing mechanism, REDD+ financing modalities, approval procedure, and complaints mechanism.
		Orange: There is an implementation framework but does not clearly defined carbon rights, benefit sharing mechanism, REDD+ financing modalities, approval procedure, and complaints mechanism.

Sub-component 2c. Implementation Framework.

Criteria	Diagnostic Questions		Progress indicator
		Red	: There is implementation framework as a guidance of REDD+ implementation.
23. National REDD+ registry and system monitoring REDD+ activities.	Is a national georeferenced REDD+ information system or registry operational has contained comprehensive relevant information (e.g. information on the location, ownership, carbon accounting and financial flows for subnational and national REDD+ programs and projects), and does it ensure public access to REDD+ information?	Yellow	: There is a national registry system and monitoring system REDD+ activities that can be run at subnational level, and contains comprehensive information regarding the location, ownership, carbon accounting, financial flows, for REDD+ activities). Or, there is a REDD+ system registry and monitoring system REDD+ activities at sub-national level that contains comprehensive information. Furthermore, it is guaranteeing public access to such information. : There is a national registry system and monitoring system REDD+ activities that can be operated at sub-national level, but has not contained comprehensive information related to the location, ownership, carbon accounting, financial flows, for REDD+ activities). Or, there is a REDD+ system registry and monitoring system REDD+ activities at subnational level, but has not been contained comprehensive information.
		Orange	: It is on early stage of development of national registry system and monitoring system of REDD+ activities that can be executed at sub-national level. Or, it is on early stage of development of REDD+ registry system and monitoring system REDD+ activities at sub-national level.

Sub-component 2c. Implementation Framework.

Criteria	Diagnostic Questions		Progress indicator
		Red	: There is no national registry system and monitoring system of REDD+ activities that can be implemented in the sub-national level. Furthermore, there is no registry system and monitoring system of REDD+ activities at sub-national level.

Component 2. REDD+ Strategy Preparation.

Sub-component 2d. Social and Environmental Impacts.

	Criteria	Diagnostic Questions	Progress indicator
	Analysis of social and environmental safeguard issues.	What evidence is there that applicable SESA issues relevant to the country context have been fully identified/analyzed via relevant studies or diagnostic and in consultation process?	Green: Assessments on the safeguards have been established by multistakeholders approach. Yellow: On going process of safeguargd establishment and assessment by multi-stakeholders approach. Orange: There is the early stage of initiative on SESA and ESMF establishment. Red: There is no progress.
2.	REDD+ strategy design with respect to impact.	How were SESA result and identification of social and environment impacts (both postitive and negative) used for prioritizing and designing REDD+ strategy options?	Green : The result of SESA has been used for prioritizing designing REDD+ strategy options. Yellow : The result of SESA has not been used for prioritizing designing REDD+ strategy options. Orange : There is the early stage of process on SESA establishment. Red : No progress et all.
3.	Environmental and social management framework.	What evidence is there that the ESMF is in place and managing environmental and	Green: ESMF has been functioned for managing social and environment risks.

Sub-component 2d. Social and Environmental Impacts.

Criteria	Diagnostic Questions		Progress indicator
	social risk/potential impacts related to REDD+ activities?	it has not bee managing soc	: ESMF has been established, but it has not been functioned for managing social and environment risks.
		Orange	: There is the early stage of ESMF establishment.
		Red	: No progress et all.

Component 2. REDD+ Strategy Preparation.

Sub-component 2e. Funding Instrument and Benefit Sharing Mechanism.

Criteria	Diagnostic Questions	Progress indicator
 Funds management capacity. 	How are institutions and arrangements demonstrating effective, efficient and transparent fiscal management, including coordination with other development partnerfunded activities?	 Green : There is an institution establish and ready to govern an environmental financing. Yellow : There is an advance stage of establishing institution and funding mechanism arrrangement on REDD+ schema or environmental financing.
		Orange : There is an early stage of initiative for building institution and funding arrrangement on REDD+ schema or environmental financing. Red : No progress at all.
2. Availability of fund.	How is it shown that national and international REDD+ institutions are providing committed funds for REDD+ under clear mutually supportive mandates with adequate, predictable and sustainable budgets?	Green : There are a lot of committed funds for REDD+ in Indonesia and have been realized in the implementation phase. Yellow : There are committed funds available for REDD+ in Indonesia, and it is ready for payment, testing, or the early stage of implementation.

Sub-component 2e. Funding Instrument and Benefit Sharing Mechanism.

Criteria	Diagnostic Questions		Progress indicator
		Orange	: There are committed funds for REDD+ in Indonesia, but it is still negosiation process.
		Red	: There are no commited funds for REDD+ in Indonesia.
3. Benefit sharing mechanism.	Transparent and equitable existing mechanism.	Green	: There is an implemented benefit sharing mechanism for REDD+.
	mechanism.	Yellow	: There are options for benefit sharing mechanisms, but need to be developed as a REDD+ benefit sharing mechanism.
		Orange	: There is an early stage of initiative on benefit sharing mechanism.
		Red	: There is no mechanism at all.

Component 3. Reference Emission Levels/Reference Levels.

Criteria	Diagnostic Questions	Progress indicator
24. Demonstration of methodology.	a. Is the preliminary sub- national or national forest REL or RL presented (as part of the R-Package) using a clearly documented methodology, based on a step-wise approach, as	Green : The methodology has been presented and fully documented, and is being/has been reviewed by the relevant independent expert. Yellow : Methodology has been presented and fully documented but has not been reviewed by the relevant independent expert.
	appropriate?	Orange: The methodology was not fully presented and documented.
		Red : The methodology was not presented and documented.
	b. Are plans for additional steps and data needs provided, and is the relationship between the subnational and the	Green: There are plans for additional measures and the need for additional data, and there is a documentation of reference

Component 3. Reference Emission Levels/Reference Levels.			
Criteria	Diagnostic Questions	Progress indicator	
	evolving national reference level demonstrated (as appropriate)?	relationship between national and sub-national. Yellow: In the advanced stages of plan preparation for additional measures and the need for additional data, and the identification of reference relationship between national and sub-national.	
		Orange : On the early initiation stage of plan preparation for additional measures and the need for additional data, and the identification of reference relationships between national and sub-national.	
		Red : There are no plans for additional measures and the need for additional data, the relationship reference between national and sub-national has not been shown.	
25. Use of historical data, and adjusted for national circumstances.	a. How does the establishment of the REL/RL take into account historical data, and if adjusted	Green: FREL is using historical data and very complete supporting data, so that it is credible and reliable, and is being/has been reviewed by an independent expert.	
	for national circumstance, what is the rationale and supportive data that demonstrate that the	Yellow: FREL is using historical data and relatively complete supporting data, so it is quite credible and accountable.	
	proposed adjustments are credible and defendable?	Orange: FREL is using historical data and incomplete supporting data, so it is not credible and difficult to be justified.	
		Red : FREL is not using historical data and other supporting data, so it is not credible and cannot be justified.	
	b. Is sufficient data and documentation provided in a transparent fashion to allow for the	Green: There are data and documentation for independent reconstruction and cross-examination, which are quite complete, including deforestation, forest degradation, SFM,	

Criteria	Diagnostic Questions	Progress indicator
	reconstruction or independent cross-checking of the REL/RL?	enhancement of forest carbon stocks, and conservation such as data on forest and peat fires. Yellow: There are some data and documentation for independent reconstruction and cross-examination, but incomplete. Orange: There are some data and documentation for independent reconstruction and cross-examination; however, it is incomplete and very limited. Red: Data and documentation are not available for independent cross-examination and reconstruction.
26. Technical feasibility of the methodological approach, and consistency with UNFCCC/IPCC guidance and guidelines.	Is the REL/RL (presented as part of the R-Package) based on transparent, complete and accurate information, consistent with UNFCCC guidance and the most recent IPCC guidance and guidelines, and allowing for technical assessment of the data sets, approaches, methods, models (if applicable) and assumptions used in the construction of the REL/RL?	Green : FREL/RL is prepared through process that is transparent and complete, in accordance with the guidelines of the UNFCCC/IPCC, as well as open for technical assessment methodology. Yellow : FREL/RL is prepared on a transparent process, complete, in accordance with the guidelines of the UNFCCC/IPCC, but not open for technical assessment on methodology. Orange : FREL/RL is prepared through a process that is lack in transparency, less complete, less in accordance with the guidelines of the UNFCCC/IPCC. Red : FREL/RL is not prepared through a transparent process, incomplete, and not in accordance with the

Criteria	Diagnostic Questions	Progress indicator
27. Documentation of monitoring approach.	d. Is there clear rationale or analytic evidence supporting the selection of the used or proposed methodology	Green: There is an analytic and scientific reason in selecting the methodology of high level forest monitoring systems, and with enough room for between times improvement.
	(combination of remote sensing and ground-based forest carbon inventory approaches, systems resolution, coverage, accuracy, inclusions of	Yellow: There is an analytic and scientific reason in selecting the methodology for sufficient level forest monitoring system, but not enough room for between times improvement.
	carbon pools and gases) and improvement over time?	Orange: There is an analytic and scientific reason in selecting the methodology of low level forest monitoring system.
		Red : There is no an analytic and scientific reason in selecting forest monitoring system methodology.
	e. Has the system been technically reviewed and nationally approved, and is it	Green: It has used a scheme that has been approved and reviewed nationally, and consistent with national/international guidelines.
	consistent with national and international existing and emerging guidance?	Yellow: Using a system that is in the advanced/final stages of approval and review processes nationally and relatively consistent with national guidelines/international.
		Orange: Using a system that is still in the early stages of approval and review process nationally, and not consistent with national/international guidelines.
		Red : Not using a scheme that is approved and reviewed nationally and not consistent with national/international guidelines.

Criteria	Diagnostic Questions	Progress indicator	
	f. Are potential sources of uncertainties identified to the extent possible?	Green: It has been identified the potential sources of uncertainty in the monitoring approach document.	
	extent possible:	Yellow: On the advanced/final stages on identification potential sources of uncertainty.	
		Orange : On the early initiative stages of identification the potential source of uncertainty.	
		Red : Potential sources of uncertainty a not identified.	
28. Demonstration of early system implementation	e. What evidence is there that the system has the capacity to monitor the specific REDD+ activities	Green: The monitoring system already had a high capacity and has been completed to process the monitoring of certain REDD+ activities from national priority.	
	prioritized in the country's REDD+ strategy?	Yellow: The monitoring system has a middlevel of capacity in monitoring certain REDD+ activities from national priority.	
		Orange: The monitoring system has very limited capacity in monitoring certain REDD+ activities from national priority.	
		Red : The monitoring system does not have the capacity to monitor the certain of REDD+ activities from national priority.	
	f. How does the system identify and assess displacement of emissions (leakage), and what are the early	Green: The system can acurately identify and assess emission leakage, and there is another complementary system supporting this informatio on emission leakage.	
	results (if any)?	Yellow: The system can identify and asses the emission leakage in low levels and there are other complementa systems supporting this information emission leakage.	

Criteria	Diagnostic Questions	Progress indicator	
		Orange : System is not able to identify and assess leakage, but there are other alternative systems to provide supporting information on emission leakage.	
		Red : The system is not able to identify and assess the emission leakage.	
	g. How are key stakeholders involved (participated/consult ed) in the	Green: There is a multi-stakeholder involvement on the planning of leakage anticipation at the provincial, district, and site level.	
	development and/or early implementation of the system, including data collection and any potential verification	Yellow: There is a multi-stakeholder engagement at provincial level, and an attempt to consolidate with the stakeholders at district and site level.	
	of its results?	Orange: There is little involvement of multi- stakeholders (at the provincial government only).	
		Red : There is no multi-stakeholder engagement.	
	h. What evidence is there that the system allows for comparison of changes in forest	Green: The monitoring system can make comparisons on forest area change, carbon content, and GHG emissions against baseline estimation.	
	area and carbon content (and associated GHG emissions) relative to the baseline estimates used for the REL/RL?	Yellow: The monitoring system can make comparisons on most aspects of forest area change, carbon content, and GHG emissions against the baseline estimation.	
		Orange: The monitoring system can make very limited comparisons on a few aspects of forest area change, carbon content, and GHG emissions against the baseline estimation.	
		Red : The monitoring system cannot provide comparisons oo forest area change, carbon content, and GHG	

Criteria	Diagnostic Questions	Progress indicator	
		emissions against the baseline estimation.	
29. Institutional arrangements and capacities.	d. Are mandates to perform tasks related to forest monitoring clearly defined (e.g. satellite data processing, forest inventory,	Green : There has a clear forest monitoring mandate and it can be run. Yellow : There is a clear mandate on forest monitoring, but can not be run due to technical, coordinative, and political reasons.	
	information sharing)?	Orange: There is a forest monitoring mandate, but it is not clear (ambiguous, multi interpretation, very general, etc.)	
		Red : There is no mandate on forest monitoring.	
	e. What evidence is there that a transparent means of publicly sharing forest and emissions data	Green : Data of forests and emission are open for public through certain accessible media. Yellow : In the advanced stages of	
	are presented and are in at least an early operational stage?	development system of information transparency on forests and emissions data for public.	
		Orange: There were early attempts on forest information and emissions data transparency to the public.	
		Red: There is no transparency of forest information and emissions data to the public.	
	f. Have associated resource needs been identified and estimated (e.g. required capacities, training,	Green: There is already a result of the identification on resource requirements for implementing monitoring, and has already been realized.	
	hardware/software, and budget)?	Yellow: There is already a result of the identification on resource requirements for implementing monitoring, but has not yet realized.	

Sub-component 4a. National/Sub-national Forest Monitoring System.

Criteria	Diagnostic Questions	Progress indicator	
		Orange	: On the stage of identifying resource requirements for monitoring implementation.
		Red	: There has been no identification of resource requirements for implementing monitoring.

Component 4. Monitoring Systems for Forests, and Safeguards.

Sub-component 4b. Information System for Multiple Benefits, Other Impacts, Governance, and Safeguards.

Criteria	Diagnostic Questions		Progress indicator
Identification of relevant non-carbon aspect, and social and environmental	How have relevant non- carbon aspect, and social and environmental safeguard issues of REDD+ preparations been	Green	: Non-carbon aspects as well as issues of social and environmental safeguards framework have been identified.
issues.	identified? Are there any capacity building recommendations associated with these issues?	Yellow	: On the advanced process of identification non-carbon aspects as well as issues of social and environmental safeguards framework.
		Orange	 On the early initiative identifying non-carbon aspects and issues of the framework of social and environmental safeguards.
		Red	 Non-carbon aspects and issues of social and environmental safeguards framework have not been identified.
Monitoring, reporting and information	c. What evidence is there that a	Green	: System of sharing information has been opened and operated.
sharing.	transparent system for periodically sharing consistent information on non-	Yellow	: On the advanced process and development of the openness of information sharing system.
	carbon aspects and safeguards has been presented and is in at	Orange	: On the early stages of openness of information sharing initiatives.

Sub-component 4b. Information System for Multiple Benefits, Other Impacts, Governance, and Safeguards.

Criteria	Diagnostic Questions	Progress indicator
	least an early operational stage?	Red : There is no transparency in sharing information.
	d. How is the following information being made available: key quantitative and qualitative variables about impacts on rural	Green : All of those informations are available. Yellow : Most of those informations are available. Orange : Those is a small part of the
	livelihoods, conservation of	Orange: There is a small part of the information available.
	biodiversity, ecosystem services provision, key governance factors directly pertinent to REDD+ preparations, and the implementation of safeguards, paying attention to the specific provisions included in the ESMF?	Red : There is no such information at all.
32. Institutional arrangements and capacities.	c. Are mandates to perform tasks related to non-carbon aspects and safeguards clearly	Green: There are clear mandates related to non-carbon related aspects and safeguards, and it can be performed.
	defined?	Yellow: There are clear mandates, but can not be performed due to technical, coordinative, and political reasons.
		Orange: There are mandates but not clear (ambiguous, multi interpretation, very general, etc.).
		Red : No mandate related to the non-carbon and safeguards aspects.
	d. Have associated resource needs been identified and estimated (e.g. required capacities, training,	Green: There is already the result of the identification of resource requirements for safeguards implementation, and has already been realized.

Sub-component 4b. Information System for Multiple Benefits, Other Impacts, Governance, and Safeguards.

Criteria	Diagnostic Questions	Progress indicator
	hardware/software, and budget)?	Yellow: There is already a result of the identification of resource requirements for safeguards implementation, but has not been realized.
		Orange : At this stage of identification of resource requirement for safeguards implementation identifying resource needs.
		Red : There has been no identification of resource requirements for safeguards implementation.

Annex 2 R-Package Assessment Results from the East Kalimantan Workshop.

Conclusion of the East Kalimantan Workshop

Со	SC	Cr	DQ	
4	6	15	21	
0	3	14	28	
0	1	7	10	
0	0	0	0	
Percer	Percentage of REDD+ Readiness			
100	87.50	80.56	79.66	

Со	sc	Cr	DQ	Assessment Results from the East Kalimantan Workshop
1	1.1a	1.1a.1	1.1a.1.a	 Regional Council on Climate Change - East Kalimantan (RCCC) has been established since 2011 (REDD+ Working Group included). RCCC has partnered openly to all parties. The results of RCCC - East Kalimantan are accountable.
1	1.1a	1.1a.2	1.1a.2.a	 East Kalimantan Governor Regulation (Pergub) No. 2/2011. There is already budget allocation from local government through local government work units (Satuan Kerja Perangkat Daerah, SKPD) and partners, although it is relatively inadequate.
1	1.1a	1.1a.3	1.1a.3.a	 REDD+ activities have been integrated into Medium Term Development Plan-East Kalimantan. There are multisectors coordination and cross sectors collaboration facilitated by Regional Council on Climate Change (<i>Dewan Daerah Perubahan Iklim</i>, DDPI) of East Kalimantan.
1	1.1a	1.1a.4	1.1a.4.a	 Adequate human resources. The mandate lies on DDPI of East Kalimantan and each SKPD. Supervision mechanism lies on each SKPD.

Со	SC	Cr	DQ	Assessment Results from the East Kalimantan Workshop
				Technical supervision lies on DDPI of East Kalimantan.
1	1.1a	1.1a.5	1.1a.5.a	 Management of funding that comes from the government adheres to Government financial system. Fundings from Non-Government are accounted by DDPI of East Kalimantan according to the donors' financial system. Budget management is audited.
1	1.1a	1.1a.6	1.1a.6.a	 There is an information disclosure system in activities management at SKPD including the handling of the public complaints. Public complaints have been managed through mentoring by DDPI of East Kalimantan work partners. Instruments and mechanism (SOP) still need to be developed and transparent to other parties.
1	1.1a	1.1a.6	1.1a.6.b	 The parties may submit a complaint to the related agency/institution. The number of complaints can not be in quantification. The handling is still ad hoc (established in the relevant institutions, when the problem arises).
1	1.1b	1.1b.7	1.1b.7.a	Each meeting was held by inviting the parties, but not on all occasions all of the invited parties can attend the meeting.
1	1.1b	1.1b.7	1.1b.7.b	Every meeting in the village, district, or provincial level invites representatives of all parties including local/indigeneous community.
1	1.1b	1.1b.8	1.1b.8.a	The public consultation process uses a language understood by the participants and invites all parties.
1	1.1b	1.1b.8	1.1b.8.b	The consultation process has been attended by the parties and with no discrimination.
1	1.1b	1.1b.8	1.1b.8.c	Communities were involved in the decision-making process.
1	1.1b	1.1b.8	1.1b.8.d	The consultation process has involved all gender.
1	1.1b	1.1b.9	1.1b.9.a	Management has been built, including providing information to all parties.
1	1.1b	1.1b.9	1.1b.9.b	There are areas that are not easily accessed in relation to the access of communication and information.
1	1.1b	1.1b.9	1.1b.9.c	Through village leaders, or the involvement of social development officer.

Со	sc	Cr	DQ	Assessment Results from the East Kalimantan Workshop
1	1.1b	1.1b.10	1.1b.10.a	Informations gathered from public consultation are delivered back to the participants, through electronic media and printed documents.
2	2.2a	2.2a.11	2.2a.11.a	There has been already analysis and assessment of land use, land-use change drivers, policy and governance system which is quite complete, and has received formal approval from the sub-national authorities, as well as recognized by the parties.
2	2.2a	2.2a.12	2.2a.12.a	All of the results of analysis and assessments have been used to set up priorities.
2	2.2a	2.2a.12	2.2a.12.b	The results of the analysis and assessment have considered all of the main obstacles on the forest carbon stocks enhancement for the activities/programs/strategies of REDD+.
2	2.2a	2.2a.13	2.2a.13.a	The result of systematic relationship identification on the causes/barriers of forest carbon stocks enhancement with REDD+ activities, has been already integrated into the regional strategy and plan of action of REDD+, and has been executed.
2	2.2a	2.2a.14	2.2a.14.a	There has been a Regional Strategy and Action Plan of REDD+, and already handled some issues about rights on natural resources, land tenure and forest governance.
2	2.2a	2.2a.15	2.2a.15.a	The analysis and assessment have identified its implications on the forest and medium term policies only.
2	2.2b	2.2b.16	2.2b.16.a	There is a regional strategy and action plan, which is originated from a participatory and transparent process, and recognized and implemented by all entities.
2	2.2b	2.2b.16	2.2b.16.b	There has been estimation on emission reduction contained in Regional Medium-term Development Plan (<i>Rencana Pembangunan Jangka Menengah Daerah</i> , RPJMD) and fully notified to the parties.
2	2.2b	2.2b.17	2.2b.17.a	There is already a priority, but has yet to consider the social aspects.
2	2.2b	2.2b.18	2.2b.18.a	The inconsistency has been identified.
2	2.2b	2.2b.18	2.2b.18.b	The timeline has already existed; the problem-solving agenda has been executed but did not provide adequate results.
2	2.2b	2.2b.18	2.2b.18.c	There is regional strategies and action plan related to REDD+, which has supported the regional development goal but have not received widely by the community. Therefore, the Green Growth Compact has been established and declared in May 2016.
2	2.2c	2.2c.19	2.2c.19.a	All of the laws and/or regulations related to REDD+ is being/has been adopted and executed/implemented by East Kalimantan Province.

Со	SC	Cr	DQ	Assessment Results from the East Kalimantan Workshop	
2	2.2c	2.2c.19	2.2c.19.b	 All of national programs, laws related to REDD+ have been implemented in East Kalimantan. Evidence: There are no activities which contradict to national policy. 	
2	2.2c	2.2c.20	2.2c.20.a	 There is already implementation framework of REDD+ in the form of Provincial Strategy and Action Plan (Strategi dan Rencana Aksi Provinsi, SRAP) of REDD+. There is already early initiation for FCPF Carbon Fund. The development of REDD+ financing modalities, official approval procedure, and complaints mechanism are required. 	
2	2.2c	2.2c.21	2.2c.21.a	There have been discussions related to the development of a national registry and monitoring systems of REDD+ activities, but have not been institutionalized, so it is still at an early stage.	
2	2.2d	2.2d.22	2.2d.22.a	 Not only SESA, other safeguards systems are also used. It has been widely discussed and adopted locally. Many partial evaluations have been done but have not been compiled comprehensively. Instruments such as HCV have been performed but the information system has not been compiled. 	
2	2.2d	2.2d.23	2.2d.23.a	It has been designed and organized for ERPD document compliance by considering 7 elements of safeguards.	
2	2.2d	2.2d.24	2.2d.24.a	 There is already improvement on work plans/tools. There has been Regional Regulation (<i>Peraturan Daerah</i>, PERDA) related to customary communities (recognition of customary community in some districts). It has been used but not maximum. There are already environment instruments (HCV, AMDAL, RKL, RPL, and Certification). There has been safeguards simplification, even translated into some local languages (3 largest local tribes in East Kalimantan). There has been mechanism for objections submission in several institutions (even with national instruments). Information system needs to be improved. Public involvement need to be improved. 	

Со	sc	Cr	DQ	Assessment Results from the East Kalimantan Workshop
				■ FPIC is not fully implemented.
2	2.2e	2.2e.25	2.2e.25.a	Fund management institutions have been established but have not had a complete setup.
2	2.2e	2.2e.26	2.2e.26.a	Funding is available for East Kalimantan through the International Cooperation Institutes and the Non-Government Organizations, for example: GIZ, TNC, WWF, GGGI, TFCA, MCAI, TAF.
2	2.2e	2.2e.27	2.2e.27.a	There has been already a mechanism established on some of undertaken projects, for example: in Berau.
3	3.3a	3.3a.28	3.3a.28.a	The methodology has been presented and fully documented but has not been reviewed by the relevant independent expert.
3	3.3a	3.3a.28	3.3a.28.b	There are plans for additional measures and the need for additional data, and there is a documentation of reference relationship between national and sub-national as well.
3	3.3a	3.3a.29	3.3a.29.a	FREL is using historical data and very complete supporting data, so that it is credible and reliable, but it has not been reviewed by an independent expert.
3	3.3a	3.3a.29	3.3a.29.b	Data and documentation of forest and peat fires are not yet available.
3	3.3a	3.3a.30	3.3a.30.a	FREL/RL is prepared through a process that is transparent, complete, in accordance with the guidelines of the UNFCCC/IPCC, as well open for technical assessment on methodology and reproducible (trace back).
4	4.4a	4.4a.31	4.4a.31.a	There is an analytic and scientific reason in selecting the methodology of high level forest monitoring system, and still have enough room for between times improvement.
4	4.4a	4.4a.31	4.4a.31.b	Already using a system that is approved and reviewed nationally and consistent with national/international guidelines.
4	4.4a	4.4a.31	4.4a.31.c	It has been identified the potential sources of uncertainty in the monitoring approach document.

Со	sc	Cr	DQ	Assessment Results from the East Kalimantan Workshop
4	4.4a	4.4a.32	4.4a.32.a	The monitoring system has middle level capacity in monitoring certain REDD+ activities from national priority.
4	4.4a	4.4a.32	4.4a.32.b	The system cannot identify and assess the emission leakage, but there are other alternative systems that can provide supporting information on emission leakage.
4	4.4a	4.4a.32	4.4a.32.c	There is a multi-stakeholder engagement at provincial level, and an attempt to consolidate with the stakeholders at the district and site level.
4	4.4a	4.4a.32	4.4a.32.d	The monitoring system can make comparisons on most aspects of forest area change, carbon content, and GHG emissions against the baseline estimation.
4	4.4a	4.4a.33	4.4a.33.a	There is a clear mandate on forest monitoring, but can not be run due to technical, coordinative, and political reasons.
4	4.4a	4.4a.33	4.4a.33.b	There were early attempts on forest information and emissions data transparency to the public.
4	4.4a	4.4a.33	4.4a.33.c	There is already a result of the identification on resource requirements for monitoring, but have not been realized.
4	4.4b		4.4b.34.a	 There is already a document containing important issues about East Kalimantan in order to complete the criteria and indicators. There is already a document adapting CI safeguards into local context. There is already a language simplification point in the implementation criteria of safeguards. Trial and error tests have been conducted in several districts. GAP analysis has been performed.
4	4.4b	4.4b.35	4.4b.35.a	 There is already a WEB based at the national level. Socialization and discussion about the alignment of the existing safeguards have been done. There is data management analysis at sub-national level (at province). There is no data management institution (PPID is established but its functions are not yet maximized). It has been hoped that Information and Documentation Management Office (<i>Pejabat Pengelola Infromasi dan Dokumentasi</i>, PPID) to be maximized when the duties and incentives including supporting data on each SKPD are available. Data protocol needs to be built (who can input and has access on it).

Со	sc	Cr	DQ	Assessment Results from the East Kalimantan Workshop
4	4.4b	4.4b.35	4.4b.35.b	 Most of the data are available but have yet to be properly compiled (for example biodiversity data which are dispersed over several agencies), it needs a good mechanism. There are already profiles of Provincial and District biodiversity (Paser District). Data about socio-economic and impact on livelihood are not up-to-date even though these yearly data are available in Central Bureau of Statistics (Badan Pusat Statistik, BPS). Encouraging One Map and One Data, including biodiversity and socio-economic data.
4	4.4b	4.4b.36	4.4b.36.a	 Encouraging the establishing of permanent institutions in the province. There are human resources even though their capacity must be improved. The infrastructure already exists but not adequate. There are working groups but do not have clear authority. The mandates should be clarified.
4	4.4b	4.4b.36	4.4b.36.b	 Some training has been done, for example LUMEN, but not yet acted upon. Hardware web-based system has been developed at the national level and has been discussed in the subprovince level. There is database software that can integrate safeguards data. There is no capacity identification yet.

Annex 3 R-Package Assessment Results from the South Sumatra Workshop.

Conclusion of the South Sumatra Workshop

Со	SC	Cr	DQ	
2	4	10	13	
1	4	12	28	
1	2	12	15	
0	0	2	3	
Percer	Percentage of REDD+ Readiness			
81.25	80.00	70.83	71.61	

Со	sc	Cr	DQ	Assessment Results from the South Sumatra Worksh
1	1.1a	1.1a.1	1.1a.1.a	 Can South Sumatra REDD+ Working Group (WG) (ad hoc) already be said as REDD+ I does Climate Change Unit position when not yet carry out openly? Conclusion: Not yet sufficiently open, accountable and transparent.
1	1.1a	1.1a.2	1.1a.2.a	REDD+ activities in South Sumatra are financially dependent, still partial and fragmente coordinated with REDD+ Working Group.
1	1.1a	1.1a.3	1.1a.3.a	Currently, the institution in charge of REDD+ activities in South Sumatra is still in transit longer active to Climate Change Office (Balai PPI).
1	1.1a	1.1a.4	1.1a.4.a	It cannot be explained in detail since the transition from REDD+ WG to Climate Change
1	1.1a	1.1a.5	1.1a.5.a	Because the REDD+ Working Group of South Sumatra does not have Finance Division th
1	1.1a	1.1a.6	1.1a.6.a	
1	1.1a	1.1a.6	1.1a.6.b	
1	1.1b	1.1b.7	1.1b.7.a	NGO and private sector through various programs have involved a wide range of comm
1	1.1b	1.1b.7	1.1b.7.b	Participation of community through various projects has been carried out but the Gove community with project parties.
1	1.1b	1.1b.8	1.1b.8.a	The lack of information shared by members of the group (consultation with Bappeda (R Agency) and Dinas Kehutanan (Forestry Office) is necessary).

Со	sc	Cr	DQ	Assessment Results from the South Sumatra Worksh	
1	1.1b	1.1b.8	1.1b.8.b	Public consultations have involved various stakeholders, but not all relevant stakeholde	
1	1.1b	1.1b.8	1.1b.8.c	In some cases, local community institutions were involved in determining the location a	
1	1.1b	1.1b.8	1.1b.8.d	The consultation process has begun accommodating the arising issues at the site level.	
1	1.1b	1.1b.9	1.1b.9.a	Some information has been known and shared.	
1	1.1b	1.1b.9	1.1b.9.b	Information is presented in a document form that can be accessed by stakeholders.	
1	1.1b	1.1b.9	1.1b.9.c	Document in the form of report and the dissemination have been undertaken.	
1	1.1b	1.1b.10	1.1b.10. a	The results of existing research and studies report have not been utilized.	
2	2.2a	2.2a.11	2.2a.11. a	Analysis of land use has been used but land conflicts still occurred.	
2	2.2a	2.2a.12	2.2a.12. a	All of program determination used bottleneck analysis.	
2	2.2a	2.2a.12	2.2a.12. b	All of program determination used obstacle analysis.	
2	2.2a	2.2a.13	2.2a.13. a	Some programs have been implemented and there were some obstacle factors.	
2	2.2a	2.2a.14	2.2a.14. a	 It has been mostly included in the document collated by the REDD+ WG. It has not been implemented due to all technical and financial constraints (rules, no 	
2	2.2a	2.2a.15	2.2a.15. a	Medium-term has been included (RPJMD). Not all of the long term.	
2	2.2b	2.2b.16	2.2b.16. a	There has been already a regional strategy and action plan involving various institutions	
2	2.2b	2.2b.16	2.2b.16. b	There has been estimation on emissions reductions from REDD+ policy interventions w comprehensive.	
2	2.2b	2.2b.17	2.2b.17. a	There has been REDD+ strategy and prioritized by taking into account the social, econor feasibilities.	
2	2.2b	2.2b.18	2.2b.18. a	There are advanced stages of identification of incosistency REDD+ strategy against police	
2	2.2b	2.2b.18	2.2b.18. b	There have been already a timeline and agenda about solving the problems but did not	
2	2.2b	2.2b.18	2.2b.18. c	There is a regional strategy and action plan related to REDD+ which has supported the received support from the wider community.	

		,		
Со	sc	Cr	DQ	Assessment Results from the South Sumatra Worksh
2	2.2c	2.2c.19	2.2c.19. a	All of the laws and regulations related to REDD+ are in the prosess of adoption and imp and implemented.
2	2.2c	2.2c.19	2.2c.19. b	
2	2.2c	2.2c.20	2.2c.20. a	The implementation framework has defined the carbon right and clearly regulated part benefits, etc.
2	2.2c	2.2c.21	2.2c.21. a	National geo-referenced system has been already established and newly introduced (or
2	2.2d	2.2d.22	2.2d.22. a	 SIS-REDD+ has been initiated by MRPP. But it has not been developed yet. Community Development, Development of Village Nursery, and Community Fire Coestablished. But it has not been developed yet.
2	2.2d	2.2d.23	2.2d.23. a	 Strategic action plan has been included in REDD+ SRAP (Provincial Strategic Action P It has been included in social forest schemes (community forest, village forest). It has been included in work plans of SKPD (local government work unit) of Dinas Ke
2	2.2d	2.2d.24	2.2d.24. a	DGCC has been developing regulations on SIS-REDD+ Indonesia.
2	2.2e	2.2e.25	2.2e.25. a	Some institutions have individually and collaboratively initiated to rise funding.
2	2.2e	2.2e.26	2.2e.26. a	There are potential donors that are ready to carry out activities in South Sumatra (need relevant agencies).
2	2.2e	2.2e.27	2.2e.27. a	Provincial Bappeda has submitted several mechanism options.
3	3.3a	3.3a.28	3.3a.28. a	 Majority events are second tier. Activities should be undertaken to reach the third t The methodology has been used and awaiting the review from the independent exp
3	3.3a	3.3a.28	3.3a.28. b	 The additional data is needed especially data about land cover types that have not to mangrove, rubber, palm oil, primary forest, secondary forest, shrub. Conditions of burnt forest types. It is still in initiation stage. The changes in the commitment on national emission reduction need to be scaled d 29%).
3	3.3a	3.3a.29	3.3a.29. a	It has been used complete data and field measurement data but has not been reviewed

Со	sc	Cr	DQ	Assessment Results from the South Sumatra Worksh
3	3.3a	3.3a.29	3.3a.29. b	 It can be verified based on the coordinate data of each PSP point. Complete documentation including data, photos, etc. Emissions generated from the fire have not been fully calculated (still in the process Data are complete but still spread over various parties, both government and NGOs It needs a synergy among the various parties.
3	3.3a	3.3a.30	3.3a.30. a	 It has been using IPCCC 2006 guidelines. There are still shortages scattered in various institutions. Methodology is open for public review and the used methods have been informed t seminars/workshops.
4	4.4a	4.4a.31	4.4a.31. a	 All carbon pools have been measured. Database is complete but still scattered over various parties. Not enough space for between times measurement (financial constraints). Insufficient number of PUP at each land cover.
4	4.4a	4.4a.31	4.4a.31. b	It has been consistent with the SNI guidelines.SNI has been reviewed nationally.
4	4.4a	4.4a.31	4.4a.31. c	The method has been considering the uncertainty, for example the location access.
4	4.4a	4.4a.32	4.4a.32. a	 The updated data have not been available quickly and accurately. The result of land cover has not been fast and on time.
4	4.4a	4.4a.32	4.4a.32. b	The system is able to identify emission leakage.
4	4.4a	4.4a.32	4.4a.32. c	Have involved various stakeholders.It is still in initiation stage.
4	4.4a	4.4a.32	4.4a.32. d	The monitoring system used has been largely utilized to monitor on forests area change
4	4.4a	4.4a.33	4.4a.33. a	There are already primary duties and functions (<i>Tugas Pokok dan Fungsi,</i> Tupoksi) in ea
4	4.4a	4.4a.33	4.4a.33. b	Website has been completed but need to be updated quickly and accurately.

Co	SC	Cr	DQ	Assessment Results from the South Sumatra Worksh
-	1.1-	4.4- 22	4.4- 22	this a beautiful and any arted but get out go!
4	4.4a	4.4a.33	4.4a.33.	It has been identified and expected but not yet realized.
			С	
4	4.4b	4.4b.34	4.4b.34.	Aspects of environmental services and NTFPs have been included in the working plan of
			а	(Kesatuan Pengelolaan Hutan, KPH). And the identification process still continues.
4	4.4b	4.4b.35	4.4b.35.	PEP (Monitoring, Evaluation and Reporting) mechanism has been built.
			а	
4	4.46	4 4 5 2 5	4.45.25	- At the time of NADD was set involvementation has been developed the livelihoods of
4	4.4b	4.4b.35	4.4b.35.	 At the time of MRPP project implementation has been developed the livelihoods of
			b	assistance.
				 In some village, empowerment effort has been followed by GIZ in BIOCLIM project.
				- In some village, empowerment enort has been followed by GIZ in Biocellivi project.
				 But in some villages such efforts are not sustainable.
4	4.4b	4.4b.36	4.4b.36.	Climate Change Office (Balai PPI) has been established with one of the primary tasks an
			а	safeguards implementation.
4	4.4b	4.4b.36	4.4b.36.	Climate Change Office (Balai PPI) is still preparing resource requirements in the work pl
			b	Climate Change Office (Balai PPI).

Annex 4 R-Package Final Assessment Results.

Conclusion of the Final Assessment Workshop

Со	SC	Cr	DQ	
2	4	11	16	
1	4	18	31	
1	2	7	11	
0	0	0	1	
Percentage of a+ Readiness				
81.25	80	77.78	76.27	

С 0	sc	Cr	DQ	Assessment Results from the Final Assessment Workshop
1	1.1 a	1.1a.1	1.1a.1.a	Directorate General of Climate Change (DGCC) has been established under the Ministry of Environment and Forestry. The institutional mechanisms, planning, monitoring, and evaluation mechanisms also has been developed since 2014. Website is available, but need revision on the contents. Registry system (monitoring and evaluation) related with accountability is still on progress. Reliable system has not yet developed. Note: http://ditjenppi.menlhk.go.id/
1	1.1 a	1.1a.2	1.1a.2.a	There is a DGCC as a national REDD+ institutions operating under clear mutually supportive mandates with adequate, predictable and sustainable budgets from National Budget and Expenditure System (Anggaran Pendapatan dan Belanja Negara, APBN). Notes: Presidential Regulation No. 16/2015 concerning the Ministry of Environment and Forestry. Available at http://ditjenppi.menlhk.go.id/reddplus/images/resources/peraturan/Perpres_16 _Tahun_2015-KLHK.pdf
1	1.1 a	1.1a.3	1.1a.3.a	DGCC is the national institution on dealing with climate change, including REDD+ activities. Since 2014, DGCC has been conducting coordination activities, integrations into and influencing the broader national or sector policy frameworks (e.g. agriculture, natural resources management, infrastructure development and land-use planning). However, it is still lack of coordination between institutions.

C o	sc	Cr	DQ	Assessment Results from the Final Assessment Workshop
				Note: http://ditjenppi.menlhk.go.id/
1	1.1 a	1.1a.4	1.1a.4.a	DGCC has a sufficient human resource, full mandate for take a lead, and the supervision mechanism is available. However, technical capacity buildings are still needed. Note: http://ditjenppi.menlhk.go.id/program
1	1.1 a	1.1a.5	1.1a.5.a	DGCC has a good capacity to manage the funds. There is a finance division within DGCC. However, there is no system for independent auditing yet. Notes: http://ditjenppi.menlhk.go.id/program http://www.menlhk.go.id/
1	1.1 a	1.1a.6	1.1a.6.a	There is an early stage of initiative on establishing and developing institution/division for feedback and handling complaints, as well as tools and mechanisms, throughout the country, but there is already a division in the Ministry of Forestry dealing with feedback and grievance, especially related with forest and land fire, land conflict, etc. Notes: - Link for complaint on hot spot and forest fire: http://sipongi.dephut.go.id/ - Link for complains on land tenure conflixt:
				http://pskl.menlhk.go.id/pktha/pengaduan/frontend/web/index.php?r=site% 2Ftatacara
1	1.1 a	1.1a.6	1.1a.6.b	There is a few feedbacks and grievance redress to the impacted communities.
1	1.1 b	1.1b.7	1.1b.7.a	There is participation from multi-stakeholders, with less participation and less escalation.
1	1.1 b	1.1b.7	1.1b.7. b	There is early stage initiative to build participative mechanism. There are several initiatives, but still operational in the local level.
1	1.1 b	1.1b.8	1.1b.8.a	There is early stage initiative to build a consultation process in national and local level. FCPF guideline for conducting public consultation is available. Note: REDD+ National Strategy, issued by REDD+ Task Force on 2012. Available at www.satgasreddplus.org

C	sc	Cr	DQ	Assessment Results from the Final Assessment Workshop
1	1.1 b	1.1b.8	1.1b.8. b	There is early initiative to build a self-selection process. Some self-assessment selections processes are also exist, but limited in number. Note:
				- The Minister of Forestry Regulation (Peraturan Menteri Kehutanan) No. P.30/Menhut-II/200930 /Menhut-II/20092009 concerning the Procedure for REDD (Tata Cara Pengurangan Emisi dari Deforestasi dan Degradasi Hutan (REDD).
				 The Minister o Foretry Regulation No. P.36/Menhut-II/2009 concerning the Procedure of Carbon Sink and Removal Bussiness Permit in the Protection and Production Forests.
1	1.1 b	1.1b.8	1.1b.8.c	There is early initiative to facilitate engagement indigenous people institution.
1	1.1 b	1.1b.8	1.1b.8. d	Gender issues mainstreaming has been initiated, gender sensitive and inclusive consultation processes available, but still in limited cases.
1	1.1 b	1.1b.9	1.1b.9.a	There is a transparent, consistent and timely sharing and disclosure of information (related to all readiness activities, including the development of REDD+ strategy, reference levels, and monitoring systems), but has not covered all levels of entities.
1	1.1 b	1.1b.9	1.1b.9. b	Little information can be accessed by stakeholders in some of regions in Indonesia.
1	1.1 b	1.1b.9	1.1b.9.c	There are quite channels of communications have been used to ensure that stakeholders are well informed, but less coverage to those that have limited or no access to relevant information. Notes: Web based such as: http://ditjenppi.menlhk.go.id/; www.satgasreddplus.org; Indonesia also used the structural mechanism through REDD+ Task Force at national and sub-national (provincials and districts) levels.
1	1.1 b	1.1b.1 0	1.1b.10 .a	There are quite outcomes of consultations integrated in management arrangements, strategy development and technical activities related to RL and monitoring information system development.
2	2.2 a	2.2a.1 1	2.2a.11. a	There are ample analysis and assessment on land use, land-use change drivers, policy and governance. Note: Submission by Indonesia, National FREL for Deforestation and Forest Degradation. Available at http://ditjenppi.menlhk.go.id/pustaka-djppi
2	2.2 a	2.2a.1 2	2.2a.12. a	The results of analysis were mostly used to prioritize key direct and indirect drivers to be addressed by the programs and policies included in the REDD+ strategy. Note:

C 0	sc	Cr	DQ	Assessment Results from the Final Assessment Workshop
				REDD+ National Strategy, issued by REDD+ Task Force on 2012. Available at www.satgasreddplus.org
2	2.2 a	2.2a.1 2	2.2a.12. b	The analysis mostly considered the major barriers to forest carbon stock enhancement activities (if appropriate) to be addressed by the programs and policies included in the REDD+ strategy.
2	2.2 a	2.2a.1 3	2.2a.13. a	There are identification results of systematic links between key drivers, and/or barriers to forest carbon stock enhancement activities (as appropriate), and REDD+ activities, already integrated in the REDD+ Strategy and some of them have been implemented.
2	2.2 a	2.2a.1 4	2.2a.14. a	There are action plans to make progress in the short-, medium- and long-term, outline further steps and identifies required resources. Not all strategies in subnational level are available, but for the national level, National Strategy for REDD+ is available. Note: REDD+ National Strategy, issued by REDD+ Task Force on 2012. Available at www.satgasreddplus.org
2	2.2 a	2.2a.1 5	2.2a.15. a	The assessment identified implications for forest or other relevant law and policy in the short- and medium-term periods only.
2	2.2 b	2.2b.1 6	2.2b.16 .a	REDD+ strategy options selected via a transparent and participatory processes. Note: REDD+ National Strategy, issued by REDD+ Task Force on 2012. Available at www.satgasreddplus.org
2	2.2 b	2.2b.1 6	2.2b.16 .b	The expected emissions reduction potentials of interventions were not directly estimated because it was difficult to assess, and the design of the REDD+ strategy was informed to the public via public consultations, and various media in limited manner.
2	2.2 b	2.2b.1 7	2.2b.17 .a	The REDD+ strategy options have not yet fully supported by the local politics.
2	2.2 b	2.2b.1 8	2.2b.18 .a	There were minor inconsistencies between the priority REDD+ strategy options and policies or programs in other sectors related to the forest sector (e.g. transport, agriculture) have been identified.
2	2.2 b	2.2b.1 8	2.2b.18 .b	There is early initiative upon agreed timeline and process in place to resolve inconsistencies and integrate REDD+ strategy options with relevant development policies, but not operational.

C 0	sc	Cr	DQ	Assessment Results from the Final Assessment Workshop	
2	2.2 b	2.2b.1 8	2.2b.18 .c	The REDD+ Strategy has been fairly supportive of broader development objectives, but not yet supported by broad community. Note: REDD+ National Strategy, issued by REDD+ Task Force on 2012. Available at www.satgasreddplus.org	
2	2.2 c	2.2c.1 9	2.2c.19. a	Some of legislation and/or regulations related to REDD+ programs and activities have been adopted and implemented, for example: moratorium of new license in primary forest and peat land for improving forest governance, and One Map Policy. Some others are on-going process. Notes: - Presidential Instruction No. 10/2011 concerning Moratorium of the New Licences and Improving Forest Governance of Primary Forest and Peatland. - Act No 4/2011 concerning Geospatial Information.	
2	2.2 c	2.2c.1 9	2.2c.19. b	Some evidences are moratorium of new license in primary forest and peat land for improving forest governance, and One Map Policy, licenses on ecosystem restoration, and licenses on carbon stocking and sequestration. Note: - Presidential Instruction No. 10/2011 concerning Moratorium of the New Licences and Improving Forest Governance of Primary Forest and Peatland. - Act No. 4/2011 concerning Geospatial Information.	
2	2.2 c	2.2c.2 0	2.2c.20. a	The infrastructure mechanism for implementation framework has been developed and almost finished (e.g. defines carbon rights, benefit sharing mechanisms, REDD+ financing modalities, procedures for official approvals (e.g. for pilots or REDD+ projects), and grievance mechanisms). Note: - The Minister of Forestry Regulation (Peraturan Menteri Kehutanan) No. P.30/Menhut-II/200930 /Menhut-II/20092009 concerning the procedure for REDD (Tata Cara Pengurangan Emisi dari Deforestasi dan Degradasi Hutan (REDD). - The Minister of Forestry Regulation No. P.36/Menhut-II/2009 concerning the Procedure of Carbon Sinc and Removal Bussiness Permits in the Protection and Production Forests.	
2	2.2 c	2.2c.2 1	2.2c.21. a	The REDD+ information system or registry has been developed, but not yet launched or operational. Note: http://bpredd.reddplusid.org/pustaka/dokumen/dokumen-satgas-redd	
2	2.2 d	2.2d.2 2	2.2d.22 .a	National Forestry Council (<i>Dewan Kehutanan Nasional</i> , DKN) representing multi- stakeholders on forestry sector has been facilitating SESA & ESMF development. Consultation processes are on-going and involving national and sub-national entities. However, the World Bank does not satisfy yet with the progress. Other mechanism, such as KLHS, EIA, HCVF are available and functioning as complementary to SESA.	

С 0	sc	Cr	DQ	Assessment Results from the Final Assessment Workshop
				Note: Indonesia has established the Safeguards Information System (SIS). Available at: http://sisredd.menlhk.go.id/
2	2.2 d	2.2d.2 3	2.2d.23 .a	Establishment of SESA was conducted in the same time with the REDD+ National Strategy. Hence, the REDD+ National Strategy has not been accomodated the lesson learns from SESA. Note: Indonesia has established the Safeguards Information System (SIS). Available at: http://sisredd.menlhk.go.id/
2	2.2 d	2.2d.2 4	2.2d.24 .a	Conceptual framework of ESMF is not established yet. Note: Indonesia has established the Safeguards Information System (SIS). Available at: http://sisredd.menlhk.go.id/
2	2.2 e	2.2e.2 5	2.2e.25. a	The concept of funding mechanism arrangement has been developed, and now it is on going process to be legalized by Government Regulation. Funding mechanism will be in the form of Public Service Agency (<i>Badan Layanan Umum</i>) of Environmental Financing. Note: Government Regulation Bill on the Environment Economics Instrument is Act No. 23/2009 concerning Protection and Environment Management.
2	2.2 e	2.2e.2 6	2.2e.26. a	There are funding mechanisms committed for REDD+ payment in Indonesia, e.g. through billateral agreements, joint creditting mechanism, national budget, and others.
2	2.2 e	2.2e.2 7	2.2e.27. a	There are options of benefit sharing mechanism in Indonesia, among others: fiscal transfer, Specific Allocation Funds (<i>Dana Aloksi Khusus</i> /DAK), General Allocation Funds (<i>Dana Alokasi Umum</i> /DAU), National Community Empowerment Program (<i>Program Nasional Pemberdayaan Masyarakat</i> , PNPM), etc. These mechanisms need to be developed and adjusted for REDD+ benefit sharing mechanism. Notes: - Minister of Forestry Regulation No. 30/2009 concerning the Procedures of Reducing Emission from Deforestation and Forest Degradation - REDD+. - Presidential Regulation No. 80/2011 on Trust Fund.
3	3.3 a	3.3a.2 8	3.3a.28. a	Significant progress. FREL has been under technical assessment by UNFCCC and almost completed with no significant correction, land use data and peat land need to be synchronize. Note: MoEF. 2015. National Forest Reference Emission Level for Deforestation and Forest Degradation: In the Context of Decision 1/CP.16 para 70 UNFCCC (Encourages developing country Parties to contribute to mitigation actions in the

С 0	sc	Cr	DQ	Assessment Results from the Final Assessment Workshop	
				forest sector), published by DGCC of MoEF Indonesia. Available at http://ditjenppi.menlhk.go.id/pustaka-djppi.	
3	3.3 a	3.3a.2 8	3.3a.28. b	Yes, additional steps and data have been provided. But the relationship between the sub-national and national RL is in the process of development.	
3	3.3 a	3.3a.2 9	3.3a.29. a	Yes, the FREL is credible and defendable (through TA FREL by UNFCCC). Note: MoEF. 2015. National Forest Reference Emission Level for Deforestation and Forest Degradation: In the Context of Decision 1/CP.16 para 70 UNFCCC (Encourages developing country Parties to contribute to mitigation actions in the forest sector), published by DGCC of MoEF Indonesia. Available at http://ditjenppi.menlhk.go.id/pustaka-djppi.	
3	3.3 a	3.3a.2 9	3.3a.29. b	The data and documentation of deforestation and forest degradation have been completed, but data and information of forest and peat fire need to be verified. Note: Indonesia's forest monitoring system is known as SIMONTANA (Sistem Monitoring Hutan Nasional). Available online at http://nfms.dephut.go.id/ipsdh/, coupled with the WebGIS at http://webgis.dephut.go.id/ for display and viewing.	
3	3.3 a	3.3a.3 0	3.3a.30. a	Yes. The development of FREL is using IPCC 2006 Guidelines and IPCC 2013 Wetlands Supplement. FREL Indonesia was already undergone TA FREL by UNFCCC. Note: MoEF. 2015. National Forest Reference Emission Level for Deforestation and Forest Degradation: In the Context of Decision 1/CP.16 para 70 UNFCCC (Encourages developing country Parties to contribute to mitigation actions in the forest sector), published by DGCC of MoEF Indonesia. Available at http://ditjenppi.menlhk.go.id/pustaka-djppi.	
4	4.4 a	4.4a.3 1	4.4a.31. a	Activity data has been under development of adjustment interpretation from manual to automatic. Note: Indonesia's NFMS is available online at http://nfms.dephut.go.id/ipsdh/, coupled with the WebGIS at http://webgis.dephut.go.id/ for display and viewing.	
4	4.4 a	4.4a.3 1	4.4a.31. b	NFMS is using an upgraded existing system and has been reviwed nationally (by BIG) and consistent with national guidance. Note: Indonesia's NFMS is available online at http://nfms.dephut.go.id/ipsdh/, coupled with the WebGIS at http://webgis.dephut.go.id/ for display and viewing.	
4	4.4 a	4.4a.3 1	4.4a.31. c	Yes, further development is needed. Such as potential source of uncertainty, DSS platform, simple reporting, etc.	

С 0	sc	Cr	DQ	Assessment Results from the Final Assessment Workshop	
				Note: Indonesia's NFMS is available online at http://nfms.dephut.go.id/ipsdh/, coupled with the WebGIS at http://webgis.dephut.go.id/ for display and viewing.	
4	4.4 a	4.4a.3 2	4.4a.32. a	Land Cover Data is produced annually, it can detect lost of forest (deforestation), but there needs improvement to detect forest regrowth and degradation.	
				Note: Indonesia's NFMS is available online at http://nfms.dephut.go.id/ipsdh/, coupled with the WebGIS at http://webgis.dephut.go.id/ for display and viewing.	
4	4.4 a	4.4a.3 2	4.4a.32. b	The system is not yet fit to assess the displacement of emission (leakage).	
4	4.4 a	4.4a.3 2	4.4a.32. c	The system is still an internal mechanism in the MoEF and is in the initiation process to engaging multi-stakeholder participation.	
4	4.4 a	4.4a.3 2	4.4a.32. d	The system is capable for comparison. Note: Indonesia's NFMS is available online at http://nfms.dephut.go.id/ipsdh/, coupled with the WebGIS at http://webgis.dephut.go.id/ for display and viewing.	
4	4.4 a	4.4a.3 3	4.4a.33. a	Yes, mandates are provided. Note: Presidential Regulation No. 16/2015 concerning the Ministry of Environment and Forestry. Available at http://ditjenppi.menlhk.go.id/reddplus/images/resources/peraturan/Perpres_16 _Tahun_2015-KLHK.pdf	
4	4.4 a	4.4a.3 3	4.4a.33. b	Websites are provided for sharing forest area, and emissions data books are available. Note: Indonesia's NFMS is available online at http://nfms.dephut.go.id/ipsdh/, coupled with the WebGIS at http://webgis.dephut.go.id/ for display and viewing.	
4	4.4 a	4.4a.3 3	4.4a.33. c	Associated resources need to be identified and estimated, but an updated budget plan is not provided yet.	
4	4.4 b	4.4b.3 4	4.4b.34 .a	It has been identified very well. There are national regulations on: Environmental Impact Assessment (EIA), KLHS, HCVF, and Environmental Audit. Notes: Government Regulation No. 27/2012 concerning Environmental Licences. Minister of Environment Regulation No. 3/2013 concerning Environmental Audit.	
4	4.4 b	4.4b.3 5	4.4b.35 .a	Non-carbon aspects and safeguards have been shared transparently, from local to national report. For instance: GHG Monitoring, Evaluation and Reporting (<i>Pemantauan, Evaluasi dan Pelaporan Gas Rumah Kaca</i> , PEP GRK) by Planning Agency from provincial level to national level, as well as BUR. There is also	

С 0	sc	Cr	DQ	Assessment Results from the Final Assessment Workshop	
				Ministry of Environment and Forestry Statistics, provided informations regarding non-carbon aspect on forestry sector.	
				Notes: - The Ministry of Environment and Forestry Statistics, available at http://www.menlhk.go.id/ - PEP GRK online is available at http://www.sekretariat-rangrk.org/beranda/82-bahasa/berita/176-sosialisasi-pep.	
4	4.4 b	4.4b.3 5	4.4b.35 .b	There are some Directorate Generals within The Ministry of Environment and Forestry, as well as Provincial and District Forestry Services, and Forest Management Units have been widely collected data. But the data collections need to be sincronized each other. Indicators, e.g. HDI, Gini ratio, Bruto Domestic Income are available in each district. These indicators need to be linked to the rate of deforestation in order to know the progress of low emission development. Data of each indicator is publicly accessible. Note: http://www.menlhk.go.id/	
4	4.4 b	4.4b.3 6	4.4b.36 .a	There is a clear mandate from the GHG National Action Plan (<i>Rencana Aksi Nasional Gas Rumah Kaca</i> , RAN GRK) document, it has been implemented in the GHG Regional Action Plan (<i>Rencana Aksi Daerah Gas Rumah Kaca</i> , RAD GRK) on	
				each province, and monitoring are already conducted. Note: Presidential Regulation (Peraturan Presiden) No. 61 concerning GHG National Action Plan Development.	
4	4.4 b	4.4b.3 6	4.4b.36 .b	DGCC of MoEF has been identified and estimated the needs of capacity building activities, trainings, software/hardware, and budget. Such activities have been implemented both by national and international assisstancy, and also by the National Development Agency in the GHG National Action Plan (<i>Rencana Aksi Nasional Gas Rumah Kaca</i> , RAN GRK) and GHG Regional Action Plan (<i>Rencana Aksi Daerah Gas Rumah Kaca</i> , RAD GRK). Note: Strategic Planning of MoEF for 2015 - 2019 as stated by Minister Regulation No. P.39/Menlhk-Setjen/2015, including programs and activities of DGCC for 2015 – 2019. Available at ttp://ditjenppi.menlhk.go.id/program/program-tahun-2015-2019.	

Annex 5 List of expert invited for virtual survey.

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Annex 5 List of REDD+ Projects in Indonesia, Their Project Developers and Organization Type.

No	Project	Project Proponent	Code	Source
1	Ulu Masen Ecosystem – A Triple-Benefit Project	Carbon Conservation	3	http://www.forestpeoples.org/sites/fpp/files/publication/20 11/10/aceh-briefing-3.pdf
2	Leuser Ecosystem REDD Project	Global EcoRescue	3	http://redd- database.iges.or.jp/redd/download/project?id=51
3	Batang Toru REDD project	Conservation International	1	http://www.biomedcentral.com/content/supplementary/17 50-0680-5-7-S2.PDF
4	Tesso Nilo Pilot Project	World Wide Fund for Nature (WWF)	1	http://forestclimatecenter.org/map.php?cnt=International& lang=English&ID=4
5	The Kampar Peninsular REDD+ Project	Sinarmas Forestry & PT Putra Riau Perkasa	3	http://theredddesk.org/countries/initiatives/kampar- peninsula-carbon-reserve-riau
6	Kampar Ring - REDD and HTI	Asia Pacific Resources International Limited (APRIL)	3	http://www.redd-monitor.org/2009/10/29/indonesia- communities-reject-aprils-redd-plans-on-the-kampar- peninsular/
7	REDD+ Pilot Project in Bengkalis and Siak	Sinarmas Forestry	3	UNREDD. 2012. The Role of UN-REDD in the Development of REDD+ in Indonesia, Vol III Highlight of REDD+ Related Projects in Indonesia. MoF Republic of Indonesia, UN-REDD, FAO, UNDP, UNEP. Jakarta. [http://www.unredd.net/index.php?option=com_docman&t ask=doc_download&gid=8934&Itemid=53]
8	Siberut Project	Global Green	3	http://forestclimatecenter.org/files/2012-03- 26%20Indonesia%20- %20REDD%20Demonstration%20Activities.pdf; http://www.globalgreen.co.id/project.html
9	Berbak Carbon Inititiative (BCI)	Zoological Society London (ZSL)	1	http://static.zsl.org/files/berbak-info-sheet-may-2010- 1113.pdf
10	Community Carbon Pool in Jambi: Kerinci Seblats buffer zone forest	Flora and Fauna International (FFI)	1	http://forestclimatecenter.org/files/2012-03- 26%20Indonesia%20- %20REDD%20Demonstration%20Activities.pdf
11	Rehabilitation of Degraded Peatland in Ogan Komering Ilir, South Sumatra	Sinarmas Forestry	3	UNREDD. 2012. The Role of UN-REDD in the Development of REDD+ in Indonesia, Vol III Highlight of REDD+ Related Projects in Indonesia. MoF Republic of Indonesia, UN-REDD, FAO, UNDP, UNEP. Jakarta. [http://www.unredd.net/index.php?option=com_docman&t ask=doc_download&gid=8934&Itemid=53]
12	Lebong Carbon Conservation Project	Arthasuaka & Carbon Conservation	3	UNREDD. 2012. The Role of UN-REDD in the Development of REDD+ in Indonesia, Vol III Highlight of REDD+ Related Projects in Indonesia. MoF Republic of Indonesia, UN-REDD, FAO, UNDP, UNEP. Jakarta. https://lebongconservation.wordpress.com/category/about-lebong-carbon-conservation/
13	Meru Betiri National Park	Forest Research & Development Agency (FORDA)	2	http://theredddesk.org/countries/initiatives/redd-and-enhancing-carbon-stocks-meru-betiri-national-park-java
14	Mamberamo River Basin Forest Carbon Project	Conservation International (CI)	1	http://www.conservation.org/publications/Documents/Mamberamo%20Factsheet%20Oct%202007.pdf;
15	Jayapura REDD+ Readiness	World Wide Fund for Nature (WWF)	1	https://redd- indonesia.org/index.php/component/content/article/184- da-redd-indonesia/1500-jayapura
16	Sustainable Management of Poigar Forest	Office National des Forêts (ONF) International	3	http://redd-database.iges.or.jp/redd/download/project?id=21

17	Sulbar Habitat REDD+	Keepthehabitat	1	http://theredddesk.org/countries/initiatives/sulbar-habitat- west-sulawesi
18	Berau Forest Carbon Project	The Nature Conservency (TNC)	1	Berau REDD+ Working Group. 2011. Berau Forest Carbon Program 2011-2015. Berau REDD+ Working Group in cooperation with the Government of Berau District East Kalimantan Province, Ministry of Forestry of the Republic of Indonesia, The Nature Conservancy (TNC).
19	FORCLIME - Berau Demonstration Activity (REDD via SFM strengthening)	Gol, Berau District Gov, GFA, GTZ-KfW	2	UNREDD. 2012. The Role of UN-REDD in the Development of REDD+ in Indonesia, Vol III Highlight of REDD+ Related Projects in Indonesia. MoF Republic of Indonesia, UN-REDD, FAO, UNDP, UNEP. Jakarta. [http://www.unredd.net/index.php?option=com_docman&t ask=doc_download&gid=8934&Itemid=53]
20	FORCLIME - Malinau Demonstration Activity (Kayan Mentarang NP)	Gol, Berau District Gov, GFA, GTZ-KfW	2	UNREDD. 2012. The Role of UN-REDD in the Development of REDD+ in Indonesia, Vol III Highlight of REDD+ Related Projects in Indonesia. MoF Republic of Indonesia, UN-REDD, FAO, UNDP, UNEP. Jakarta. [http://www.unredd.net/index.php?option=com_docman&task=doc_download&gid=8934&Itemid=53]
21	East Borneo Project	Global Green	3	https://www.globalgreen.co.id/project2.html
22	Hutan Lestari untuk Orangutan: Kehje Sewen Forest	Borneo Orangutan Survival(BOS)	1	http://www.forests4orangutans.org/projects/hutan-lestari- project-everlasting-forest/
23	REDD in Kutai Barat District (i-REDD project)	World Wide Fund for Nature (WWF)	1	UNREDD. 2012. The Role of UN-REDD in the Development of REDD+ in Indonesia, Vol III Highlight of REDD+ Related Projects in Indonesia. MoF Republic of Indonesia, UN-REDD, FAO, UNDP, UNEP. Jakarta. [http://www.unredd.net/index.php?option=com_docman&t ask=doc_download&gid=8934&Itemid=53]
24	Kalimantan Forest and Climate Partnership (KFCP)	GoA, GoI, Care	2	http://redd- database.iges.or.jp/redd/download/project;jsessionid=F541 4B40A100A330B258A615F97995C8?id=57
25	Forest Carbon Partnership Facility (FCPF) – the World Bank	Ministry of Enviroment and Forestry (DGCC & FORDA)	2	https://www.forestcarbonpartnership.org/indonesia
26	Katingan Peat Conservation Project	Starling Resources, PT RMU	3	http://katinganproject.com/about-us
27	Community Carbon Project for Lamandau Wildlife Reserve	RARE & YAYORIN	1	http://forestclimatecenter.org/map.php?cnt=International& lang=English&ID=45
28	REDD in Sebangau National Park	World Wide Fund for Nature (WWF)	1	UNREDD 2012
29	Rewetting of Peatland to avoid emission in Sebangau National Park	World Wide Fund for Nature (WWF)	1	http://database.v-c-s.org/sites/v-c-s.org/files/140725_SNP%20Peat%20Rewettting%20Project%20-%20CCB%20PDD%20-%20V06.pdf
30	The Rimba Raya Biodiversity Reserve Project	Infinite Earth / OFI	3	http://redd- database.iges.or.jp/redd/download/project;jsessionid=F541 4B40A100A330B258A615F97995C8?id=90
31	Danau Siawan-Belida Ecological Restoration Concession	FFI & PT. Wana Hijau Nusantara	1	http://moderncms.ecosystemmarketplace.com/repository/moderncms_documents/redd_project-doc.pdf

32	FORCLIME - Kapuas Hulu Demonstration Activity (Sustainable Management and Conservation of Peat swamp forest)	Gol, Berau District Gov, GFA, GTZ-KfW	2	UNREDD. 2012. The Role of UN-REDD in the Development of REDD+ in Indonesia, Vol III Highlight of REDD+ Related Projects in Indonesia. MoF Republic of Indonesia, UN-REDD, FAO, UNDP, UNEP. Jakarta. [http://www.unredd.net/index.php?option=com_docman&t ask=doc_download&gid=8934<emid=53]
33	Ketapang Community Carbon Pool (KCCP): Laman Satong & Permatang Gadung Village	Flora and Fauna International (FFI)	1	http://www.cifor.org/redd-case-book/case-reports/indonesia/ketapang-community-carbon-pools-west-kalimantan-indonesia/
34	Kapuas Hulu Community Carbon Pool: Piasak & Jongkong Kiri Hilir Villages & Nanga Betung Village	Flora and Fauna International (FFI)	1	UNREDD. 2012. The Role of UN-REDD in the Development of REDD+ in Indonesia, Vol III Highlight of REDD+ Related Projects in Indonesia. MoF Republic of Indonesia, UN-REDD, FAO, UNDP, UNEP. Jakarta. [http://www.unredd.net/index.php?option=com_docman&t ask=doc_download&gid=8934&Itemid=53]
35	Reducing Emission from Deforestation caused by the Oil Palm Sector in Ketapang: PT. Cipta Usaha Sejati & PT. Jalin Vaneo	Flora and Fauna International (FFI)	1	UNREDD. 2012. The Role of UN-REDD in the Development of REDD+ in Indonesia, Vol III Highlight of REDD+ Related Projects in Indonesia. MoF Republic of Indonesia, UN-REDD, FAO, UNDP, UNEP. Jakarta. [http://www.unredd.net/index.php?option=com_docman&t ask=doc_download&gid=8934&Itemid=53]
36	Reducing Emission from Deforestation caused by the Oil Palm Sector in Ketapang: PT. Kayong Agro Lestari	Flora and Fauna International (FFI)	1	UNREDD. 2012. The Role of UN-REDD in the Development of REDD+ in Indonesia, Vol III Highlight of REDD+ Related Projects in Indonesia. MoF Republic of Indonesia, UN-REDD, FAO, UNDP, UNEP. Jakarta. [http://www.unredd.net/index.php?option=com_docman&t ask=doc_download&gid=8934&Itemid=53]
37	Korea-Indonesia Joint Project for Adaptation and Mitigation of Climate Change in Forestry (North Batu kliang protection forest)	Forest Research and Development Agency (FORDA)	2	http://forestclimatecenter.org/map.php?cnt=International& lang=English&ID=41

Note: Organization type code: 1 = NGO, 2 = Bilateral/Government, and 3 = Private. Data updated on July 2013.

Annex 6 Comparation between MTR 2016 and R-Package progress

Component/ sub component		MTR 2014		R Package 2016		
1. Readiness Organization and Consultation						
1a. National REDD+ Management Arrangement	Yellow	Feedback and GRM has been piloting at some REDD+ Demonstration Activities. Those lesson learned will be used for basis to develop GRM at	Yellow	The specific system of feedback and handling complaints, as well as tools and mechanisms for REDD+ throughout the country is under development. DGCC is currently designing the Government Internal Control System (Sistem Pengendalian Internal Pemerintah/SPIP)		
		National level.		which serves as an ongoing compliance for quality management standard (ISO 9001). In		

1b. Consultation, Participation, and Outreach	Green (4)	Information sharing and accessibility of information, implementation and public disclosure of consultation outcomes to some extent have been done but need further works are needed	Orange (2)	addition, all projects and REDD+ Demonstration Activities in Indonesia provide feedback and grievance and/or compensation mechanism in respective area/region Participation, engagement, and consultation processes have been done, both in national and Sub-national levels. However, due to the limitations of technology, the width of the area, and the complexity of the stakeholders, it required a more effective communication strategy. (The different result comes from the different point of view. R-Package result evaluates the progress at national and sub-national levels, while MTR 2014 was focused on national entities only).
2. REDD+ Strat	egy Prepa	ration		
2a: Assessment of Land Use, Land Use Change Drivers, Forest Law, Policy and Governance	Yellow	Although some parts of the criteria (iv) and (v) have been implemented, additional action plans need to be funded either by LoI of Indonesia - Norway and other scheme.	Green	There are ample analysis and assessment on land use, drivers of changes on land-use, policy and governance. The results of analysis from central government, local governments, research agencies, NGOs, and other institutions—both published and unpublished analytic works—were mostly used to prioritize key direct and indirect drivers to be addressed by the programs and policies in the REDD+ strategy.
2b: REDD+ Strategy Options	Orange	BP REDD+ and Ministry of Forestry (RPP-FCPF) are working to develop a set of policies and programs for addressing the drivers of deforestation and/or forest degradation address to meet the criteria.	Green	REDD+ Strategy Options were selected via transparent and participatory processes. It is important to have a full support from the local politics to do feasibility assessment for REDD+ Strategy Options. The result of identification showed minor inconsistencies between the priority REDD+ Strategy Options, policies and programs. The agreed timeline and process to resolve the inconsistencies is in place, but not operational. This process also requires support from broader community.
2c: Implementati on Framework	Orange	Work on implementation frameworks has been ongoing. Additional budget from RPP-FCPF is needed to fully meet the cirteria for developing REDD+ registry and benefit sharing mechanism.	Orange	Some legislations and/or regulations related to REDD+ programs and activities have been enacted, adopted and implemented in Indonesia. Among others are the moratorium of new license in primary forest and peatland for improving forest governance, and One Map Policy. However, there is a lack of adoption and implementation of laws and regulations by private sectors, in relation to low carbon development due to incentive policy that is not available yet. Forest Management Unit (FMU) will become the base for the implementation of REDD+ framework.

	1	T	I	
				National Registry System, where registry
				system for REDD+ is included and launched by
		05041	N 11	the MoEF in November 2016.
2d: Social and Environment	Orange	SESA has been develop	Yellow	Indonesia has many instruments to provide
		and advancing to be		social and environmental analysis in order to
al Impacts		tested in more region. ESMF is scheduled to be		support the development of the safeguards initiatives Indonesia has also established the
		done shortly.		Safeguards Information System for REDD+. Yet,
		done shortly.		a conceptual framework of ESMF and SESA
				needed to be developed
2e. Funding		Included in 2c	Yellow	·
Instrument		included in 20	Tellow	Although fund institution has not been
and Benefit				established yet, but funding mechanism
Sharing				arrangement is in on going process to be
Mechanism				legalized by Government Regulation. Funding mechanism will be in the form of General
Wicemanism				Service Agency (Badan Layanan Umum/BLU) of
				Environmental Financing.
				Several existing options of benefit sharing
				mechanism in Indonesia are available, such as:
				fiscal transfer, Specific Allocation Funds (Dana Aloksi Khusus/DAK), General Allocation Funds
				(Dana Alokasi Umum/DAU), National
				Community Empowerment Program (Program
				Nasional Pemberdayaan Masyarakat/PNPM),
				etc.
3. Reference Fi	missions L	evel/Reference Levels		Ctc.
3. Reference	Yellow	BP REDD+ and Ministry	Green	EDEL has been under technical assessment by
Emissions		of Forestry have made	0.00	FREL has been under technical assessment by UNFCCC and almost completed with no
Level/Refere		significant progress on		significant correction, land use data and peat
nce Levels		developing REL/RL.		land need to be synchronize.
		Further work is needed		Tana need to be syntimonize.
		to finalise the general		
		approach at national		
		level.		
		for Forests and Safeguards		
4a: National	Orange		Yellow	Activity data has been under development of
Forest		Forest monitoring		interpretation adjustment from manual to
Monitoring		System has been		automatic.
System		developed by the		NFMS using an upgraded existing system that
		Ministry of Forestry,		has been reviewed nationally by BIG, and
		Republic of Indonesia.		consistent with national guidance.
		It was developed to		Land Cover Data is produced annually. It can
		update data, especially		detect deforestation, but needs improvement
		for land cover data, forest cover change,		to detect forest regrowth and degradation.
		deforestation, hotspots,		
		and to ensure imagery		
		data (Landsat) are		
		continuously included in		
		forest monitoring.		
4b:	Orange	Safeguards Information	Green	Web-based Safeguards Information System
Information	2.460	System (SIS) for REDD+		(SIS) for REDD+ have been developed.
	1	,	ı	, ,

System for Multiple Benefits, Other Impacts, Governance, and Safeguards	have been developed. PCI has been piloted in Berau, Central Kalimantan and Jamb. On the other hand, SIS REDD/Web Platform database has been piloted in Jambi and East Kalimantan Further capacity required at sub national level	Relevant non-carbon aspects as well as social and environmental issues have been addressed in Indonesia very well. There are some Directorate Generals within The Ministry of Environment and Forestry, the Provincial and District Forestry Services, as well as the Forest Management Units that have been widely collecting data. However, these data collections need to be synchronized.
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