UN-REDD PROGRAMME

DESIGN OF A REDD+ COMPLIANT BENEFIT DISTRIBUTION SYSTEM FOR INDONESIA

UN-REDD PROGRAM

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Glossary

AFOLU Agriculture, Forestry and Other Land Uses
AMAN *Aliansi Masyarakat Adat Nusantara* (Indonesian Alliance of Indigenous Communities)
BAPLAN *Badan Planologi Kehutanan* (Forest Planning Agency), see: DGPLAN
BAPPENAS *Badan Perencanaan Pembangunan Nasional* (National Development Planning Agency)
BAU Business as Usual
BPN *Badan Pertanahan Nasional* (National Land Administration Authority)
CCBA Climate, Community, & Biodiversity Alliance
CI Conservation International
CIFOR Center for International Forestry Research
CO_2 Carbon dioxide
COP Conference of the Parties to the United Nations Framework Convention on Climate Change
DG Directorate General
DGPLAN *Direktorat Jenderal Planologi Kehutanan* (Directorate General for Forest Planning), a new name for BAPLAN. See: BAPLAN
FCPF Forest Carbon Partnership Facility
FFI Fauna and Flora International
FLEGT Forest Law Enforcement, Governance, and Trade
FMU Forest Management Unit
FOMAS Indonesia's Forest Monitoring and Assessment System
FORDA Forestry Research and Development Agency
FPIC Free Prior and Informed Consent
FRA Forest Resources Assessment
FRIS Forest Resources Information System
GEF Global Environment Facility
GER Global Eco-Rescue
GIS Geographical Information System
GoI Government of Indonesia
GoN Government of Norway
GTZ German Technical Cooperation Agency
Ha hectares
HPH *Hak Pengusahaan Hutan* (forest concession)
HR *Hutan Rakyat* (private forest)
HTI *Hutan Tanaman Industri* (Industrial Plantation Forest)
HTR *Hutan Tanaman Rakyat* (Community Plantation Forest)
HuMa *Perkumpulan untuk Pembaharuan Hukum berbasis Masyarakat dan Ekologi* (Community and Ecology Based Legal Reform Organisation)
ICRAF World Agroforestry Centre
IFCA Indonesian Forest Climate Alliance

IPB *Institut Pertanian Bogor* (Bogor Agricultural University)
IPCC Inter-Governmental Panel on Climate Change
INCAS Indonesia National Carbon Accounting System
ITTO International Tropical Timber Organization
IUPJL *Ijin Usaha Pemanfaatan Jasa Lingkungan* (Business Permit for Environmental Services)
IUPHHK-HA *Ijin Usaha Pemanfaatan Hasil Hutan Kayu – Hutan Alam* (Business Permit for Timber Utilization from Natural Forests), a new name for HPH. See: HPH
IUPHHK-HT *Ijin Usaha Pemanfaatan Hasil Hutan Kayu – Hutan Tanaman* (Business Permit for Timber Utilization from Plantation Forests), a new name for HTI. See: HTI
JICA Japan International Cooperation Agency
KfW German Development Bank
KpSHK *Konsorsium Pendukung Sistem Hutan Kerakyatan* (Consortium for Supporting Community Based Forest System Management)
LoI Letter of Intent
LR Liability Rule
LULUCF Land Use, Land Use Change, and Forestry
MODIS Moderate Resolution Imaging Spectroradiometer
MoE Ministry of Environment
MoF Ministry of Forestry
MoU Memorandum of Understanding
MRV Measurement (Monitoring) Reporting and Verification
NFI National Forest Inventory
NICFI Norway's International Climate and Forest Initiative
NORAD Norwegian Agency for Development Cooperation
ODA Official Development Assistance
ODA Overseas Development Agency
OECD Organisation for Economic Cooperation and Development
PDR Purchasing Development Right
PLR Purchasing Landuse Right
PERDA *Peraturan Daerah* (Regional Regulation)
PERMEN *Peraturan Menteri* (Ministerial Regulation)
PERPU *Peraturan Pemerintah Pengganti Undang Undang* (Provisional Law)
PES Payment for Environmental Services
PNG Papua New Guinea
PP *Peraturan Pemerintah* (Government Regulation)
PPP Polluter Pays Principle
PROFOR The Program on Forests
PSP Permanent Sample Plot
RECOFTC Center for Peoples and Forests (Regional Community Forestry Training Center)
REDD Reducing Emissions from Deforestation and Forest Degradation
REL Reference Emissions Level
RMU PT Rimba Makmur Utama
R-PIN REDD Project Idea Note
R-PLAN REDD Plan

RS Remote Sensing
SK *Surat Keputusan* (Decree)
ToR Term of Reference
TNC The Nature Conservancy (US Conservation NGO)
UKP4 *Unit Kerja Presiden Bidang Pengawasan dan Pengendalian Pembangunan* (Presidential Delivery Unit for the Supervision and Monitoring of Development)
UNDP United Nations Development Program
UNDRIP United Nations Declaration on Rights of Indigenous Peoples
UNEP United Nations Environment Program
UNFCCC United Nations Framework Convention on Climate Change
UN-REDD United Nations Collaborative Program on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries
UU *Undang Undang* (Law)
UUD *Undang Undang Dasar* (national constitution)
WRI World Resources Institute

Terms on Local Government

ASDA *(Asisten Daerah)*	Region Asisten
ASDEP *(Asisten Deputi)*	Deputy Assistant
BADAN	Coordinating agency of Province/Kabupaten/Kota, with special functions according to its sector.
BAPPEDA *(Badan Perencanaan Pembangunan Daerah)*	Regional Development Planning Agency
BAPEDALDA *(Badan Pengendalian Dampak Lingkungan Daerah)*	Regional Environmental Impact Management Agency. See: BLHD
BLHD *(Badan Lingkungan Hidup Daerah)*	Regional Environmental Agency, another name of BAPEDALDA used in several regions.
BPK *(Badan Pemeriksa Keuangan)*	Finance Monitoring Agency
BUMD *(Badan Usaha Milik Daerah)*	Region's Owned Enterprise
BPDAS *(Balai Pengelolaan Daerah Aliran Sungai)*	Watershed Management Agency
BUPATI	Head of District/Kabupaten (see: Kabupaten)
CRMP	Coastal Rehabilitation Management Project
CAMAT	Head of Kecamatan (see: Kecamatan)
DAK *(Dana Alokasi Khusus)*	Special Allocation Fund
DAU *(Dana Alokasi Umum)*	General Allocation Fund
DAERAH	Region, interpreted to two types: Province and District/City.
DESA	Village
DINAS	Part of government in the Province/*Kabupaten/Kota*, designated to specific sectors (region service unit)
DPRD *(Dewan Perwakilan Rakyat Daerah)*	Region Legislative (exist both in Province and District)
GOLKAR	*Golongan Karya*, a Political Party
GUBERNUR	Governor
Juklak *(Petunjuk Pelaksanaan)*	Operation Guideline
Juknis *(Petunjuk Teknis)*	Technical Guideline
KABUPATEN	District (rural area)

KANTOR	Office
KANWIL *(Kantor Wilayah)*	Regional Office
KECAMATAN	Sub-District
KELURAHAN	Sub-sub district (administrative unit equal to village in a city region)
KEPALA BADAN	Head of *Badan,* Head of Agency (see: Badan)
KEPALA DESA	Head of *Desa,* Head of Village (see: Desa)
KEPALA DINAS	Head of *Dinas*, Head of Region Service Unit (see: Dinas)
KEPALA KANTOR	Head of *Kantor,* Head of Office (see: Kantor)
KEPALA POLISI DAERAH	Head of Regional Police
KEPALA RUMAH SAKIT	Head of Regional Hospital
KKN *(Korupsi, Kolusi dan Nepotisme)*	Corruption, Collusion and Nepotism
KOTA	(1) Municipality: a legal entity, equivalent to a Kabupaten (See: Kabupaten)
	(2) City
LEMBAGA TEKNIS DAERAH	Regional Technical Body
LURAH	Head of village in urban area
MPR *(Majelis Permusyawaratan Rakyat)*	House of Representatives
Musbangdes *(Musyawarah Pembangunan Desa)*	Village Development Meeting
MOHA	Ministry of Home Affairs
NRM	Natural Resources Management
PERDA *(Peraturan Daerah)*	Regional Regulation
POLISI DAERAH	Regional Police
PKB	*Partai Kebangkitan Bangsa*, a Political Party
PPP	*Partai Persatuan Pembangunan*, a Political Party
PAN	*Partai Amanat Nasional*, a Political Party
PDIP	*Partai Demokrasi Indonesia Perjuangan*, a Political Party
PP *(Peraturan Pemerintah)*	Governmental Regulation

PROPINSI	Province
REPPETADA *(Rencana Pembangunan Tahunan Daerah)*	Regional Annual Development Plan
RENSTRADA *(Rencana Strategis Daerah)*	Regional Strategic Plan
RENCANA AKSI	Action Plan
RT *(Rukun Tetangga)*	Neighbor Association
RW *(Rukun Warga)*	Community Association
RSUD *(Rumah Sakit Umum Daerah)*	Regional General Hospital
SEKDA *(Sekretaris Daerah)*	Regional Secretary
SEKWAN *(Sekretaris Dewan)*	Legislative Secretary
UDKP *(Unit Daerah Kerja Pembangunan)*	*Kecamatan* Development Meeting
UPTD *(Unit Pelaksana Teknis Daerah)*	Regional Technical Taskforce
UU *(Undang-Undang)*	Law
WAKIL BUPATI	Vice *Bupati*, Vice Head of Regency *(see: Bupati)*
WAKIL GUBERNUR	Vice Governor
WAKIL WALIKOTA	Vice Mayor
WALHI	*Wahana Lingkungan Hidup Indonesia*, an environmentalist NGO
WALIKOTA	Mayor

DESIGN OF A REDD+ COMPLIANT BENEFIT DISTRIBUTION SYSTEM FOR INDONESIA

Contributors:
Dodik Ridho Nurrochmat
Lindayanti Sulistiawati

Executive Summary

The realization for more substantive measures in greenhouse gases emission led to the adoption of the Kyoto Protocol to the UNFCCC at the Third Conference of the Parties (CoP) in 1997. The Protocol entered into force in 2005 and currently has 169 States and the EEC as Parties[1]. REDD (Reducing Emission from Deforestation and Forest Degradation) comes as part of a global mechanism under UNFCCC and Kyoto Protocol which aims to provide incentives for developing countries to conserve and manage their forest resources in a sustainable manner, to contribute to the global struggle in combating climate change in terms of carbon sequestrated in the forests. REDD+ on the other hand, is an enhancement of REDD, as agreed in CoP 13's Bali Action Plan. REDD+ includes, as highlighted in the Bali Action Plan:

"Policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the roles of ***conservation****,* ***sustainable management*** *of forests and* ***enhancement*** *of forest carbon stocks in developing countries;"*

[FCCC/CP/2007/6/Add.1, 14 March 2008; Decision 1/CP.13 [BAP], paragraph 1(b)(iii)]

Indonesia is both a party of the UNFCCC and a signatory for the Kyoto Protocol. Indonesia is the fourth most populous nation in the world and therefore and is alsosuppossed to be one of a potential emitter of greenhouse gases. Indonesia land surface consists of nearly two million square km of land, most of which is covered by forests. The most recent data ofthe Indonesia deforestation and land-use changes are estimated at 0.45 million hectares (ha) per year[2] and contribute to the Indonesia's annual greenhouse gas emissions. Indonesia's forested land also supports extremely high levels of biodiversity, which in turn, support a diverse array of livelihoods and ecosystem services. The combination of high population density and high levels of biodiversity together with a staggering 80,000 km of coastline and 17,508 islands, makes Indonesia one of the most vulnerable countries to the impacts of climate change[3].

In 2008, Indonesia took the initiative to join the UN-REDD Program. The Ministry of Forestry (MoF) sent its Letter of Interest as a pilot country to the FAO, UNDP and UNEP as initiators of UNREDD Program at the global level[4]. This letter was sent to the UNREDD Program prior to UN-REDD was launched by the UN's Secretary General in September 2008. In March 2009, Indonesia's proposal to join the UN-REDD was approved in the Policy Board Meeting UN-REDD Global in Panama and Indonesia became one of UN-REDD pilot countries joining eight other countries in UN-REDD.

This report is focused on the the Central Sulawesi Province, the widest province in Sulawesi Island, with total land area of 68,033 km^2. The borders of this Province are: North: Sulawesi Sea

[1] UNFCC, http://unfccc.int/essential_background/items/2877.php
[2] MoFor (2012). Statistik Planologi Kehutanan. Direktorat Jenderal Planologi Kehutanan, Kementerian Kehutanan
[3] UNFCC, http://unfccc.int/essential_background/items/2877.php
[4] http://www.un-redd.org/UNREDDProgram/CountryActions/Indonesia/tabid/987/language/en-US/Default.aspx, *last visited* August 12, 2012, and Dr. Machfudh, UN-REDD Indonesia Team Leader, *comments* July 20, 2012.

and Gorontalo Province; East: Maluku Province; South: Central Sulawesi Province and North Sulawesi Province; West: Makassar Strait[5]. Administratively, Central Sulawesi Province is divided into 10 districts and one city: Banggai District, Banggai Kepulauan District, Buol District, Donggala District, Morowali District, Parigi Mautong District, Poso District, Tojo Una-Una District, Toli-Toli District, Sigi District, and Palu City.The 2010 Census reported that Central Sulawesi Province has a population of 2,633,420 (with 1,349,225 men and 1,284,195 women) scattered across a total area of 68,033,000 ha, or 39 people per km^2.[6]

The forests of Central Sulawesi Province cover 4.4 million hectares, representing about 64% of the province's total land area. Some 800,000 people live in and around the forest areas, making up 33% of the province's population. Most of the forest dwellers are members of indigenous peoples, including the To Bungku, Mori, Pamona, Wana Taa, To Ondae, To Lage, To Bada, To Napu, To Behoa, To Lindu, To Kulawi, To Gimpu, To Tobaku, To Sigi, To Parigi, To Lauje, Dondo, and Dampelas. These peoples have been living in the same areas for many generations. They derive numerous benefits from the use and management of their their customary forests and products, such as rattan, medicines, game animals (hunting), fish, and so on[7]. The forest area of Central Sulawesi can be further divided into the categories of protected areas and cultivated areas[8]. The protected areas include: first, natural protection areas *(Kawasan Suaka Alam)* and natural conservation area *(Kawasan Pelestarian Alam)* including land and water, 676 248 ha or 9.94 percent and second, protected forest 1,489,923 ha or 21.9 percent. While, the cultivated areas include Limited Production Forest 1,476,316 ha or 21.7 percent, Permanent Production Forest, 500,589 ha or 7.36 percent, and Converted Production Forest, 251,856 ha or 3.7 percent. The 2008 data from the Forestry Planning Agency in Ministry of Forestry shows that from 2003-2006 the average deforestation rate in Central Sulawesi Province was 118,744 hectares each year[9].

The objective of this paper is to provide information and 'tools' for policy makers and development partners engaged in developing arrangements for transferring REDD+ benefits in Indonesia's (Benefit Distribution System, referred as 'BDS') at the national and local levels (Central Sulawesi). The paper assists key stakeholders to design a mechanism that is appropriate for Indonesia's context by taking into account: first, rules and regulations relevant to the design of a REDD+ compliant BDS in Indonesia; second, lessons learned from analogous benefit distribution systems available; and third, opportunities for using various Indonesian government budgetary mechanisms. The paper provides information and tools for assessing and structuring benefit sharing mechanisms at national, sub-national level (e.g. at the local government or project level) and local community levels. The paper, however, does not address benefit sharing within communities, as this will depend on the particular local circumstances.

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[5] UN-REDD Program Indonesia, Director General of Forestry Planning, Ministry of Forestry, Indonesia, "Central Sulawesi's Readiness to Implement REDD+ after 2012", 2011, pg. 21-25.

[6] Statistics Office (BPS), 2011, Central Sulawesi in Figure, p. 85

[7] Forest Peoples Program, PUSAKA, Yayasan Merah-Putih Palu Sulawesi Tengah, "Central Sulawesi, UN-REDD Indonesia's Pilot Province, Rights, Forest and Climate Briefing Series—October 2011", pg. 1-2.

[8] *Deforestation Calculation Book 2008*, Mapping Inventory Center, Forestry Planning Agency, Ministry of Forestry, 2008.

[9] Id.

Issues, Options, Recommendations and Actions for BDS REDD+

BDS ISSUE-1	**BDS LEGAL FRAMEWORK OF REDD+**
ISSUES TO BE ADDRESSED	The Government of Indonesia (GoI) enacted Presidential Decree of 19/2010 to form a Special Task Force for REDD+ institution in Indonesia (also known as 'REDD+ Task Force Part 1'), which mandates ended on June 30, 2011. On September 2011, the mandates of the REDD+ Task Force was renewed (known as the 'REDD+ Task Force Part 2'), under the Presidential Regulation (Perpres) 25/2011. As part of their mandates, the REDD+ Task Force Part 2 is finalizing the REDD+ National Strategy (STRANAS), National 'Body'or Agency of REDD+, Coordination with align ministries, forming a legal framework for REDD+ as well as directly assisting bottle necks in REDD+ related activities. During this 'waiting' period for the Task Force to be able to deliver the assignments, align Ministries have enacted various of regulations for REDD+. For example, the Ministry of Forestry has enacted MoF Regulation 68/2008 on REDD Demonstration Activities; MoF Regulation 30/2009 on Procedures for REDD; MoF Decision 36/2009 on Procedures for the Granting of Utilization of Carbon Sequestration or Sinks in Production Forest and Protected Forest. BAPPENAS has enacted RAN-GRK and RPJM, the Ministry of Environment has also enacted some related regulations.
OPTIONS	1. Use the existing REDD+ legal framework in Indonesia. 2. Wait until the REDD+ Task Force succeeded in formulating the enhanced REDD+ legal framework. 3. During the waiting period, all ministries and agencies has to document, list and synchronize all REDD+ related regulations as well as coordinating all align ministries before they enact their own REDD+ regulations.
Recommendedprinciple orpolicy to beadopted	Option 3 is recommended. During the waiting period, it is useful to keep track on how and what regulations are being made by align ministries in regards to REDD+. The legal framework working group within the Task Force REDD+ can give an update to each align ministries of what is needed and what is not needed to be regulated/or already regulated by other ministries.
Actions required to confirm policy options	It is useful for GoI to publicize their current positions, for example, how things are going in Central Kalimantan, the implementations of Presidential Instruction 10/2011 on Moratorium on New Permits and Improvements of Primary Forests and Peatland Governance to keep the public informed and the momentum going.

BDS ISSUE-2	**AUTHORITY TOWARDS REDD+ BDS**
ISSUES TO BE ADDRESSED	It is understood by the GoI as well as the shareholders of REDD+ that REDD+ related to multi sectoral issues. They encompass 18 different align ministries in Indonesia (among others: Ministry of Forestry, Ministry of Environment, National Agency for Development Planning/BAPPENAS, Ministry of Agriculture, Ministry of Industry, Ministry of Trade, Ministry of Public Works, Ministry of Labor, Ministry of Foreign Affairs, Secretary of State, Ministry of Energy and Mineral Resources, Ministry of Housing, National Land Agency, etc). From the REDD+ National Strategy document, it seems that coordination efforts and supporting implementation of REDD+ will be done by the upcoming National Agency of REDD+. But, in the meantime, there are two hurdles: first, the REDD+ National Strategy did not clearly state the date of the establishment of the National Agency of REDD+.

	This is important because work on the ground (such as the pilot province's activities, mainstreaming of REDD+ to RPJM, other REDD+ related projects, etc) are on-going, and they cannot wait for too long in order to be coordinated and organized under one roof. Second, the division of labor between the new National Agency of REDD+ with the agencies and align ministries who currently holds the mandate of REDD+ activities needs to be clear and well communicated, due to the high traffic of information which might confuse parties, coordination and communication are the key factors to have a well-managed REDD+ activities.
OPTIONS	1. The authority follows the existing REDD+ legal framework in Indonesia 2. Wait for the establishment of REDD+ National Agency 3. During the waiting period, ministries and agencies have to document, list and synchronize all REDD+ related activities as well as improving coordination amongst all align ministries, in a routine basis.
Recommendedprinciple orpolicy to beadopted	Option 3 is recommended. During the waiting period, it is useful to keep track on how and what activities are being made by align ministries in regards to REDD+. The Task Force REDD+ can give an update to each align ministries of the current situation in the establishment of National Agency of REDD+.
Actions required to confirm policy options	There is an urgency to establish the National Agency of REDD+, firstly because REDD+ activities on the ground have already rolled off, the momentum is already created and reached its peaks, and public expectation to see 'success' of REDD+ activities are high. Secondly, the current government administration only has two more years to wrap things up until 2014. If until 2014 REDD+ National Agency is not yet established under an act of law of some kind, it will be hard to lock the commitment of the next administration to REDD+ related activities. Thirdly, Indonesia will be the first nation in the world who established a National Agency of REDD+, which will show to the world the Indonesia's commitment on combating deforestation and forest degradation and keeping safe our forests. A detailed workplan on when and what steps taken to quickly established the National Agency of REDD+ is needed. There is also a need to involve legislative members in the Task Force REDD+ work. The more involvement of the legislative members in the design of the National Agency of REDD+, the more political support the National Agency of REDD+ will get in the future.

BDS ISSUE-3.	**CLARITY OF FOREST TENURE**
ISSUES TO BE ADDRESSED	Forest area, according to the Forestry Law 1999, is a legal classification of an area designated by the government for fixed forest and does not reflect the reality on the ground – forests exist outside of this Forest Area and, conversely, there are denuded areas within the Forest Area. The Forestry Law 1999 contains provisions relating to the sustainable use and multiple functions of forests. However, this law and its implementing regulations are problematic. Firstly, it has to be understood that there are people who live in and outside the forest of Indonesia. They are the 'adat' (customary) people, or the non-adat people, who have lived for generations as forest dependent people—even in the conservation forests. Secondly, it gives subsidiary position to adat forest as well as to the adat people and local people's 'ownership' living in and surrounding the forest. Hence, tenure security has very little clarity both in the forest and its immediate surroundings. Tenure security is a key underlying issue for REDD+, and in particular for whether REDD+ will present more risks than opportunities for these forest dependent people. Where tenure security is weak, REDD+ is likely to be more risky for local communities who could

	face the prospect of being alienated from lands which are conserved only for their GHG emission mitigation potential without allowing for community ownership and use. Uncertain or unresolved tenure arrangements at the local level might lead to a lack of support for REDD+ projects, or even social tensions, which could adversely impact the permanence of REDD+ projects. Social tensions could also discourage REDD+ investment due to concerns from investors about the reputational risks of being associated with projects which have, or are perceived as having, adverse social costs. National interest, a vague notion of development and the state's right of control enshrined in various laws and regulations relating to land and forests –including a recent REDD+ Regulation – have subordinated constitutional and legislative provisions protecting customary rights in Indonesia[10].
OPTIONS	1. Use existing legal framework on forest tenure in Indonesia. 2. Promote total land tenure reform. 3. Improve existing legal framework comprehensively, tenure security, and access to forests.
Recommended principle or policy to be adopted	Option 3 is recommended. Enhancing tenure security of forest dependent communities can help to address legal uncertainties surrounding REDD projects. It will not only empower forest dependent communities but will also benefit governments, REDD project developers and investors[11]. The 'one map' policy initiated by Task Force REDD+ will also play an important role in securing forest tenure. Each align ministries will have to compare and contest as well as coordinate their map as 'one map' in order to have a uniformed and standardized Indonesia map, for granting licenses, permits and ownership rights.
Actions required to confirm policy options	It is recommended that customary land ownership in and around forest areas is mapped, documented and registered as part of REDD+ projects. The boundaries of authority can be established pursuant to existing laws and regulations. New laws should allow for groups to register boundaries of authority. At present, customary ownership boundaries cannot be registered in the national land administration authority (BPN)[12]. The existing option of registering individual title requires communities to dismantle or abandon customary rules governing land use and ownership in order to gain security of tenure. New laws should allow for groups to have a number of choices in relation to register the wide variety of rights in Indonesia. This would allow communities to gain security of tenure while at the same time protecting their traditions of holding land communally or subject to community interests. Certainty of land tenure will be pursued through[13]: 1. Instruction by the Government to the Home Affairs Ministry and the National Land Agency to implement a survey of land occupied by indigenous peoples and other communities. 2. Support the National Land Agency to resolve land tenure disputes using existing statutory out-of-court settlement mechanisms. 3. Harmonization and revision of natural resources management regulations and policies to ensure the principle and processes of Free, Prior, and Informed Consent (FPIC) are internalized in the issuance of all permits for the exploitation of natural resources.

[10] Id.
[11] Id.
[12] Id.
[13] REDD+ National Strategy, id, p. 18.

BDS ISSUE-4.	BDS PROCEDURES AND ADMINISTRATION
ISSUES TO BE ADDRESSED	Unclear procedure and/or administration of BDS REDD+ is another important issue. It has to be understood that each region in Indonesia might have own social structure and different culture. This has to be accounted for when designing specific BDS for different areas in Indonesia. One BDS which work for the localities in Central Kalimantan for example, might be different with a BDS which will be accepted in Central Sulawesi. At the sub-national level, each provincial government may create a REDD+ institution to organize and implement its Regional REDD+ Strategy and Action Plan, developed from the REDD+ National Strategy[14]. Regional REDD+ Agencies will coordinate the following thematic activities[15]: (i) measurement, reporting and verification of emissions reduction; (ii) assurance of the effectiveness of REDD+ funding; and (iii) periodic reporting on developments in regional programs/ projects/activities to the national REDD+ Agency. Districts also can establish REDD+ institutions to consistently and efficiently coordinate all aspects of district-level REDD+ activities and report results to the provincial level. Data and information collected locally on developments in REDD+ program activities and projects will inform the national REDD+ Agency. The implementers of REDD+ Programs/Projects/Activities are organizations which have fulfilled specific criteria and procedures to register and implement REDD+ activities with the national REDD+ Agency upon the recommendation of a sub-national REDD+ institution[16]. Groups and bodies as diverse as business entities, civil society organizations, local government institutions, and community groups can function as implementers. The requirements for registration of REDD+ programs/projects/activities are based on principles determined by the national REDD+ Agency and must be in line with local policy and custom[17].
OPTIONS	1. Using the existing BDS in Indonesia, mostly through formal government payment system (from the Province-District-Sub District-Village-Community). 2. Imitating BDS best practices in Indonesia and other countries, then apply them to the regions. 3. Adapting existing local payment system in Indonesia, BDS best practices in Indonesia and other countries, as well as the social structure in each areas, then carefully design a BDS which is acceptable and has least corruption possibility for each area.
Recommended principle or policy to be adopted	Option 3 is recommended. Considering most of the important factors mentioned in the REDD+ National Strategy as well as studies done by expert in the area, BDS is a very sensitive issue -especially for the local people living in and outside the forest area. UNDP (2010) recorded that 80% of people living in and outside forested areas are considered poor.
Actions required to confirm policy options	Uniformity of BDS for REDD+ will be impossible, because each region in Indonesia has its own uniqueness. A BDS action plan for each district will be the first step to figure out how is the benefit going to be distributed.

[14] Id.
[15] Id.
[16] REDD+ National Strategy, id.
[17] Id.

BDS ISSUE-5.	**BENEFICIARIES & FORMS OF REDD+ BENEFIT SHARING**
ISSUES TO BE ADDRESSED	Defining beneficiaries and forms of REDD+ benefit sharing is definitely important issue for the succesfull implementation of REDD+. Regional governments are among the parties with the potential to receive benefits from REDD+ projects if VER/CER can be achieved as a result of their policies and public sector investments. Community members will receive payments either individually or collectively in line with their roles played within the context of having rights over resources and provision of services. The benefits distributed also to people working as paid staff members for programs or projects. Members of communities that contribute to the achievement of VER/CER from REDD+ projects will also receive payments.
OPTIONS	1. Making fixed procedures of BDS for all REDD+ projects nationally. 2. Delivering full athority of the BDS REDD+ arrangement to the regional government and/or local entity. 3. Considering different BDS for REDD+ projects, specifically paying attention to each beneficiaries in the project, as each location and each projects are unique. Only the general principle of BDS REDD+ are determined by the central government.
Recommended principle or policy to be adopted	Option 3 is recommended. As each REDD+ project is unique, in a specific locations with a different set of social rules, the BDS and beneficiaries in each project will not be exactly the same. However, those should not challenge the national interests.
Actions required to confirm policy options	A clear, detailed and accessible BDS is needed for each REDD+ projects. In designing the BDS, it is very important to include all stakeholders in the REDD+ projects and make sure that all of them are aware and in agreement with the BDS design.

BDS ISSUE-6.	**LEGAL CONSEQUENCES OF BDS**
ISSUES TO BE ADDRESSED	One pivotal issue concerning the implementation of REDD+ is measuring and considering the legal consequences of BDS REDD+ based on the following[18]: ▪ All parties with rights over the area of the REDD+ program/project/activity location have the right to payment; ▪ Services/remuneration/benefits provided to individuals other than workers will be distributed by the implementers of REDD+ activities. The provision of these 'service-based' benefits is collective when services are provided collectively; ▪ Communities contributing to the achievement of Verified Emissions Reductions or Certified Emissions Reductions (VER/CER) in cases, where land ownership and forest preservation is collective are not remunerated as individuals as would be the case with workers; ▪ Systems and mechanisms for benefit sharing must be transparent and accountable to prevent misallocation of benefits. It is very important to clarify land rights status and land use rights before and after REDD+. Then, it is also important to identify the potential for loss of income for regions where REDD+ programs/projects/activities are to be located. Within this context, it is necessary to identify the stakeholders who contribute to carbon absorption functions or the reduction of carbon emissions in regions in which REDD+ has project sites to ensure the proper distribution of service-based benefits. The implementation of benefit payments to deserving parties will be done on the basis of performance evaluations and

[18] REDD+ National Strategy, 2012, id.

	VER/CER measurement (results- or performance-based payments). REDD's impacts on forest communities will depend on two factors[19]: (1) the incentives offered to the different entities affecting deforestation and forest communities' livelihoods, and (2) the mix of benefits, rights and participation for forest communities associated with different incentives and the entities using them.
OPTIONS	1. Use current legal system and REDD+ regulation standards offered by donors, developers or current carbon market standards. 2. Wait for the national REDD+ Agency to take form and enact REDD+ regulations 3. Measuring legal consequences of the current BDS REDD+ standards and promoting a more rational, equitable, and suitable BDS REDD+ for Indonesia.
Recommended principle or policy to be adopted	Option 3 is recommended. To be a successful implementation of REDD+, it is very important to understand clearly the legal consequences of REDD+. Therefore, it requires to measure legal consequences of the current BDS REDD+ standards prior to the implementation of REDD+ and then, promote a more rational, equitable, and suitable BDS REDD+ for Indonesia.
Actions required to confirm policy options	Aside from coordination and support from law enforcer agencies, there is also a need to work together with the legislatives and political parties in order to gain political support. Any form of coordination, such as working group or MoU between Task Force REDD+ and legislatives bodies will help gaining political support for promoting a more rational, equitable, and sustainable BDS REDD+ standards in Indonesia, as well as strengthening law enforcement in REDD+ related activities.

BDS ISSUE-7.	**FPIC (FREE, PRIOR, INFORMED, AND CONSENT) OF REDD+ BDS**
ISSUES TO BE ADDRESSED	FPIC can be described as the establishment of conditions under which people exercise their fundamental right to negotiate the terms of externally imposed policies, programs, and activities that directly affect their livelihoods or wellbeing, and to give or withhold their consent to them. The right to FPIC can therefore be viewed as an additional component to any effective, ongoing consultation process, or as an extension to sound community engagement strategies. The more participatory the process of change is, the less emphasis and time is needed to secure 'consent', as communities will have already actively defined the processes and outcomes of any proposed change. The most frequently referred to summary of FPIC is the one endorsed by the United Nations Permanent Forum on Indigenous Issues (UNPFII) at its Fourth Session in 2005. Elements of Free, Prior, and Informed Consent[20] ▪ **Free** should imply no coercion, intimidation or manipulation; ▪ **Prior** should imply consent has been sought sufficiently in advance of any authorization or commencement of activities and respect of time requirements of indigenous consultation/consensus processes; ▪ **Informed** – should imply that information is provided that covers (at least) the following aspects of: the nature, size, pace, reversibility and scope of any proposed project or activity; the reason/s or purpose of the project and/or activity; the duration of project; the locality of areas that will be affected; a preliminary assessment of the

[19] Springate-Baginski and Wollenberg, eds. (2010). REDD, forest governance and rural livelihoods: the emerging agenda. CIFOR. p. 12.

[20] UN Permanent Forum on Indigenous Issues-UNPFII (2005). *Report of the International Workshop on Methodologies Regarding Free Prior and Informed Consent and Indigenous Peoples*. Document E/C.19/2005/3, submitted to the Fourth Session of UNPFII, 16–17 May. Available at: www.un.org

	likely economic, social, cultural and environmental impact, including potential risks and fair and equitable benefit sharing in a context that respects the precautionary principle; personnel likely to be involved in the execution of the proposed project (including indigenous peoples, private sector staff, research institutions, government employees, and others); and procedures that the project may entail. ▪ **Consent** Consultation and participation are crucial components of a consent process. The parties should establish a dialogue allowing them to find appropriate solutions in an atmosphere of mutual respect in good faith, and full and equitable participation. Indigenous peoples should be able to participate through their own freely chosen representatives and customary or other institutions. The inclusion of a gender perspective and the participation of indigenous women are essential, as well as participation of children and youth as appropriate. This process may include the option of with holding consent. Consent to any agreement should be interpreted as indigenous peoples having reasonably understood it. FPIC will act as a social safeguard for REDD+ in Indonesia. Hence, it is crucial to have it introduced and disseminate issues related to climate change, REDD+ and FPIC not only to the local people, but also to the local government and legislators.
OPTIONS	1. Conducting business as usual. 2. Introducing and disseminating FPIC to all related REDD+ stakeholders, by considering the stakeholder characteristics and suitable communication.
Recommended principle or policy to be adopted	Option 2 is recommended. FPIC is important in REDD+ areas, because in almost all of Indonesia's forest, there will be local people or adat people who have already settled years (sometimes centuries) in those forests. Organizing REDD+ activities or project of any kind, without asking or giving their Free Prior Informed Consent will not guarantee a smooth acceptance from the local/adat community.
Actions required to confirm policy options	▪ Identify needs and wants of the REDD+ stakeholders. ▪ Develop the FPIC, guidelines, mechanism and its implementation in REDD+ areas of Indonesia.

BDS ISSUE-8.	**ALLOCATION OF REDD+ BENEFIT SHARING**
ISSUES TO BE ADDRESSED	Determining allocation of REDD+ benefit sharing amongst stakeholders. The benefit sharing allocation, both vertically and horizotally, has to be defined clearly prior to the starting of REDD+ project.
OPTIONS	1. Allocation of benefit sharing is fully defined by stakeholders/community. 2. Allocation of benefit sharing is fully determined by regulations. 3. The general principle of BDS is defined by regulations, but technical detail should be made at local level.
Recommended principle or policy to be adopted	Option 3 is recommended. The general principle of REDD+ BDS has to be defined by regulations, but the technical detail should be made at local level. It is important to regulate the general principles to avoid sectoral conflicts and to ensure the REDD+ BDS design does not challenge the national interests. The technical details, however, has to meet the local needs and respect with local specifics.
Actions required to confirm policy options	▪ GoI should review participatory monitoring methods with a demonstrated history of success. ▪ GoI should prepare the general principles for participatory REDD+ monitoring.

BDS ISSUE-9.	**TRANSACTION COSTS OF REDD+ BDS**
ISSUES TO BE ADDRESSED	Implementation of REDD+ is costly. The transaction costs of REDD+, included preparation costs, implementation costs, monitoring, and other costs, have to be calculated prior to the implementation of the REDD+. It is very important to calculate the transaction costs before REDD+ project implemented because in many cases the transaction costs are very high, much higher than the financial benefits will be received from REDD+ project.
OPTIONS	1. Transaction cost is part of the consequence of the REDD+ implementation, no obligation for donors or buyers to consider the transaction costs of the supliers. 2. Transaction cost has to be beared by donors or buyers. 3. Transaction cost has to be measured and has to be used as the basis for price negotiations in carbon trading/carbon projects and consideration for REDD+ BDS.
Recommended principle or policy to be adopted	Option 3 is recommended. Transaction cost is one of the main considerations to accept or refuse certain proposal of REDD+ project. Therefore, the transaction costs have to be measured and have to be used as the basis for price negotiations in carbon trading/carbon projects and consideration for REDD+ BDS.
Actions required to confirm policy options	▪ Measuring the opportunity costs of each proposed REDD+ project sites. ▪ Measuring costs of preparation, implementation, monitoring, reporting, and verifification of REDD+ in each specific REDD+ project site.

BDS ISSUE-10.	**SPENDING ALLOCATION OF REDD+ BENEFITS**
ISSUES TO BE ADDRESSED	The spending allocation of the REDD+ benefits is one of the major concerns for the sustainability of REDD+. The sustainability of development and leakage of the REDD+ project are strongly influenced by whether the benefits from REDD+ are spent properly.
OPTIONS	1. Right for spending of the REDD+ benefits is fully defined by beneficiaries at local level. 2. Spending allocation of the REDD+ benefits is regulated by law or other state regulations. 3. General principle for spending allocation of the REDD+ benefits has to be defined by law or other state regulations, however the technical details have to be devolved at the local level.
Recommended principle or policy to be adopted	Option 3 is recommended. It is important to regulate the general principles for spending allocation of the REDD+ benefits by law or government regulations to avoid bias of narrower interests of region or short-term interests of regional head. However, the technical details of the spending allocation of REDD+ benefits have to be devolved at the lowest level.
Actions required to confirm policy options	▪ Measuring the leakage and linkage of each REDD+ projects (e.g. output, income, and employment) ▪ Improving knowledge and capacity of local people and REDD+ BDS institutions at local level. ▪ GoI shall define the general guidance for the spending allocation for REDD+ benefits.

BDS ISSUE-11.	REDD+ BDS PARTICIPATORY MONITORING
ISSUES TO BE ADDRESSED	Participatory monitoring in REDD+ can create spaces and opportunities for more inclusive, better-informed decision making. The term "participatory monitoring" applies to monitoring activities that involve local people, who may have not received specialist, professional training and who have varying skills, expertise, societal roles and interests[21]. Participatory monitoring is an ongoing process, where local forest users systematically record information about their forest, reflect on it and take management action in response to what they learn[22]. Monitoring systems that involve local people in scientifically-designed projects have many advantages, such as enriched data, lower total costs and a better chance of being sustained. Some types of information can only be provided by local people, such as changes or events that have occurred over long timeframes, information about traditional use and community perceptions about the forest.
OPTIONS	1. Full participatory monitoring in all locations and forms of BDS REDD+. 2. Improved participatory monitoring; bringing the advantages of community engagement and ensuring the involvement of a critical stakeholder at the local level; or 3. Non-participatory monitoring by parties and persons from outside.
Recommended principle or policy to be adopted	Option 2 is recommended. Full participatory monitoring does not fit for all situation. It is ideal for the situation of the educated or enlighted participants. Thus, improved participatory monitoring is needed to bring the advantages of community engagement and to ensure the involvement of a critical stakeholder at the local level.
Actions required to confirm policy options	▪ Improving knowledge and capacity of local people. ▪ GoI should review participatory monitoring methods with a demonstrated history of success. Based on this review, GoI should prepare principles for participatory REDD+ monitoring.

[21] Evans K (2008). Participatory monitoring in tropical forest management: a review of tools, concepts and lessons *Learned'* Bogor, Indonesia: Center for International Forestry Research (CIFOR), p. 1-5.
[22] Id.

BDS ISSUE-12.	GRIEVANCE MECHANISM OF REDD+ BDS
ISSUES TO BE ADDRESSED	Any BDS, however well designed, will inevitably give rise to complaints by those, who think that they have not been rewarded appropriately and/or are losing out to free-riders, who receive benefits but have made no contribution to forest protection andreducing carbon emissions. With the current situation of tenure, boundaries overlaps and adat community rights problems, grievance mechanism has to be considered in the implementation of REDD+ BDS.
OPTIONS	1. Grievance mechanism that is entirely managed by government. 2. Grievance mechanism, which is independent and specific for REDD+ related activities. 3. Grievance mechanism that includes civil society participation, under the National REDD+ Agency
Recommended principle or policy to be adopted	Option 3 is recommended. Given the importance of managing complaints to ensure that the BDS rewards those who deserve to be rewarded on the basis of emissions reductions and to generate information that can be used to improve the BDS, a credible grievance mechanism is required. GoI should consider establishing a grievance mechanism that allows complaints to be managed transparently and efficiently and how Indonesian civil society organizations can be most appropriately integrated into such a mechanism. The National REDD+ Agency would be an ideal place for host such grievance mechanism, although in the National REDD+ Strategy this role (of adjudication of grievance) were not explicitly mentioned.
Actions required to confirm policy options	▪ Identify all potential complains concerning BDS REDD+ ▪ The GoI should undertake a more detailed analysis of the appropriate institutional structure of a participatory grievance mechanism. This should lead to a communications strategy through which information on the proposed grievance mechanism is widely disseminated to all stakeholders.

Local BDS Options in Central Sulawesi

In the local level, such as Central Sulawesi, there are several options for the BDS:

1) The Trustee can work with the formal distribution channel of the government, meaning that from the provincial level, then the funds distributed to the district level, then down to sub-district, village and to the community level. This route may take similar approach as the 'Musrenbang process' where the community select program priorities to be presented to village, then the village government collects the data and present them to the sub-district and the sub-district agrees on the priority programs to be taken to district government. The district government will then reach agreement of the final workplan and buget of REDD+ activities.

OPTION 1: Trustee works with the Local Government	**National level**	**Local level**
Who is responsible for the distribution?	Trustee (selected by REDD+ Agency)	Local Government & Community
What are the possible rules/ regulations?	1. Law No. 32/2004 regarding Regional Governance 2. Law No. 25/2004 regarding National Development Planning 3. List of Grant Activity Plan *(Daftar Rencana Kegiatan Hibah/DRKH)*	1. Government Regulation No. 8/2008 regarding Steps, Procedures, Monitoring and Evaluation of Regional Development Plans Implementation 2. Joint Ministerial Decree 2006 regarding Musrenbang 3. Joint Ministerial Decree 2007 sets new procedures, processes and mechanisms for conducting Musrenbang. 4. Fiscal Balance Law 33/2004 5. Foreign Grants Agreement
How the benefits are going to be distributed?	Similar approach as the 'Musrenbang process' where the community select program priorities to be presented to the sub-district, then the village government collects the data and present them to the sub-district and the sub-district agrees on the priority programs to be taken to district government. The district government will then reach agreement of the final work plan and budget of REDD+ activities.	
Who are going to monitor and evaluate the distribution?	Trustee can monitor how the progress of the project then decides whether or not to continue to support the activities.	Local government and local community are working together to monitor the REDD+ activities on the ground, and periodically submitting mon-ev report to the Trustee.
Who is responsible to audit the funds and benefit which have been distributed?	Trustee (selected by REDD+ Agency) will be audited by one of the five top auditors in Indonesia, then the audit report will be forwarded to the Ministry of Finance[23].	Local government will be audited by Public Accountant in the area, and then the audit report will be forwarded to the Trustee.

2) The Trustee can select proposals of REDD+ activities, which met the requirement of the REDD+ program. Previously, REDD+ program was announced, a call for proposal was made, and requirements and eligibility for the funding was also announced. Hence the community, as well as NGOs, KPH, and other interested parties can apply to the REDD+ program, and will have the same chance to be selected as an REDD+ grantee[24].

[23] REDD+ National Strategy, id., p. 13.
[24] Building lesson learned from SGP-PTF UNDP 2007.

OPTION 2: Trustee selects proposals of activities independently/directly from local communities.	**National level**	**Local level**
Who is responsible for the distribution?	Trustee (selected by REDD+ Agency)	Community
What are the possible rules/ regulations?	1. Law No. 32/2004 regarding Regional Governance 2. Law No. 33/2004 regarding Fiscal Balance 3. Foreign Grants Agreement	Foreign Grants Agreement PP 55/2005
How the benefits are going to be distributed?	Trustee forms a 'board' to select REDD+ proposals, invites REDD+ stakeholders (prominent) to be board members; then, REDD+ program will be announced, (a call for proposal) and requirements and eligibility for the funding was also announced. Hence the community groups, as well as NGOs, KPH, and other interested parties can apply to the REDD+ program, and will have the same chance to be selected as an REDD+ grantee.	
Who are going to monitor and evaluate the distribution?	Trustee (selected by REDD+ Agency)	The REDD+ Project and the community will periodically send progress and monev report to the Trustee.

3) Trustee (under REDD+ Agency) conducts a study of what is needed in the REDD+ project area, in terms of infrastructure, capacity building and training for the local community and a study of WTP in this case to maintain the infrastructure/sustain the skill from the capacity building and training. After the study is conducted, options of development is offered and discussed with the local community, including with how and what the local community are willing to do in order to maintain the infrastructure/sustain the skill from the capacity building and training[25].

OPTION 3: Trustee assests what is needed in the REDD+ project area	**National level**	**Local level**
Who is responsible for the distribution?	Trustee (under by REDD+ Agency)	Community
What are the possible rules/ regulations?	Presidential Instruction No. 3/2010 on Equitable Development Program	-
How the benefits are going to be distributed?	Trustee (under REDD+ Agency) conducts a study of what is needed in the REDD+ project area, in terms of infrastructure, capacity building and training for the local community and a study of WTP in this case to maintain the infrastructure/sustain the skill from the capacity building and training. After the study is conducted, options of development is offered and discussed with the local community, including with how and what the local community are willing to do in order to maintain the infrastructure /sustain the skill from the capacity building and training.	
Who are going to monitor and evaluate the distribution?	Trustee	Local Community

[25] Lesson learned from PNPM, the World Bank.

4) Supervisory Council, consisted of National Government, Provincial Government, District Government, Civil Society and other related stakeholders is created to oversee and make decisions on REDD+ program implementation[26].An institution will be identified or created to manage program activities, with oversight by the Supervisory Council. The activities managed by the institution will include: (1) Cross-cutting enabling programs: The program will invest in structures and processes that support good forest governance and effective decision making – such as carbon accounting, regulatory reforms, community involvement and improved spatial planning – that will foster sustainable land use and reduced forest loss and degradation. (2) Site-specific demonstration activities: The program will work directly with land managers (e.g. communities, timber concessionaires, oil palm developers) to adopt practices that reduce forest loss and emissions. A result of individual policies and demonstration activities will be evaluated, but success of the overall program will be measured in terms of reduced emissions across the district as a whole. Once market rules are clarified, verified emissions reductions from the program will be bundled for marketing and proceeds will be shared with stakeholders as determined by the oversight body through its participatory planning process.

OPTION 4: Supervisory Council is created to oversee and make decisions on REDD+ program implementation	**National level**	**Local level**
Who is responsible for the distribution?	Supervisory Council (consisting of National Government, Provincial Government, District Government, Civil Society and other related stakeholders)	Project Management Unit (PMU) with the Community
What are the possible rules/ regulations?	Regulation of the Minister of Forestry of Republic of Indonesia P.30/Menhut-II/2009 on Procedures of Reducing Emmision from Deforestation and Forest Degradation (REDD)	-
How the benefits are going to be distributed?	An institution will be identified or created to manage program activities, with oversight by the Supervisory Council. The activities managed by the institution will include: (1) Cross-cutting enabling programs: The program will invest in structures and processes that support good forest governance and effective decision making – such as carbon accounting, regulatory reforms, community involvement and improved spatial planning – that will foster sustainable land use and reduced forest loss and degradation. (2) Site-specific demonstration activities: The program will work directly with land managers (e.g. communities, timber concessionaires, oil palm developers) to adopt practices that reduce forest loss and emissions. A result of individual policies and demonstration activities will be evaluated, but success of the overall program will be measured in terms of reduced emissions across the district as a whole. Once market rules are clarified, verified emissions reductions from the program will be bundled for marketing and proceeds will be shared with stakeholders as determined by the oversight body through its participatory planning process.	
Who are going to monitor and evaluate the distribution?	Supervisory Council and PMU	PMU and local community

[26] Drawing lesson learned from Berau-TNC and UNREDD.

INTRODUCTION

The primary international legal response to climate change to date is the United Nations Framework Convention on Climate Change (UNFCCC), which entered into force in 1994 and has been ratified by 189 countries and the European Economic Community[27]. In order to accommodate the 'political needs' of several nations, including the United States and OPEC States, the UNFCCC's mandatory targets for greenhouse gas emissions resorted to "constructive ambiguities" and "guidelines," rather than a legal commitment"[28]. Thus, UNFCCC merely calls on the Parties in Annex I (developed countries and economies in transition) to "aim" to return their emission back to 1990 levels[29]. The realization for more substantive measures in greenhouse gases emission led to the adoption of the Kyoto Protocol to the UNFCCC at the third Conference of the Parties (CoP) in 1997. The Protocol entered into force in 2005 and currently has 169 States and the EEC as Parties[30].

REDD (Reducing Emission from Deforestation and Forest Degradation) comes as part of a global mechanism under UNFCCC and Kyoto Protocol which aims to provide incentives for developing countries to conserve and manage their forest resources in a sustainable manner, to contribute to the global struggle in combating climate change in terms of carbon sequestrated in the forests. REDD+ on the other hand, is an enhancement of REDD, as agreed in CoP 13's Bali Action Plan. REDD+ includes, as highlighted in the Bali Action Plan:

"Policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the roles of ***conservation****,* ***sustainable management*** *of forests and* ***enhancement*** *of forest carbon stocks in developing countries;"*

[FCCC/CP/2007/6/Add.1, 14 March2008; Decision 1/CP.13 [BAP], paragraph 1(b)(iii)]

Indonesia is both a party of the UNFCCC and a signatory for the Kyoto Protocol, and Indonesia is the fourth most populous nation in the world and a potential emitter of greenhouse gases. Indonesia consists of nearly two million square km of land, most of which is covered by forests. The most recent data ofthe Indonesia deforestation and land-use change is estimated at 0.45 million hectares (ha) per year[31] and contribute to the Indonesia's annual greenhouse gas emissions.

[27] UNFCC, http://unfccc.int/essential_background/items/2877.php

[28] Ranee Khooshie Lai Panjabi, Can International Law Improve the Climate? An Analysis of the United Nations Framework Convention on Climate Change Signed at the Rio Summit in 1992, 18 N.C. J. INT'L L.&COM. REG. 401, 404 (1993).

[29] UNFCCC, supra.

[30] Id.

[31] MoFor (2012). Statistik Planologi Kehutanan. Direktorat Jenderal Planologi Kehutanan, Kementerian Kehutanan

1.1 Objective

The objective of this report is to provide information and 'tools' for policy makers and development partners engaged in developing arrangements for transferring REDD+ benefits in Indonesia's (Benefit Distribution System, referred as 'BDS') at the national and local levels (Central Sulawesi).

This report assists key stakeholders to design a mechanism that is appropriate for Indonesia's context by taking into account:

- Rules and regulations relevant to the design of a REDD+ compliant BDS in Indonesia,
- Lessons learned from analogous benefit distribution systems available,
- Opportunities for using various Indonesian government budgetary mechanisms.

This report provides information and tools for assessing and structuring benefit sharing mechanisms at national, sub-national level (e.g. at the local government or project level) and local community levels. This, however, does not address benefit sharing within communities, as this will depend on the particular local circumstances.

1.2 Methodology

A four-step research process was used for this report. The four steps involved:

1. Consolidating a list of over 20 different benefit sharing analysis and reports from all over the world, done by research institutions, countries as well as international organizations such as the World Bank and UNDP.
2. A desk-based research of the collected reports, weighing their importance and applicability in Indonesia with the Indonesian perspective, such as the current legal framework in Indonesia, existing benefit distribution system available as well as best practices of benefit distribution system in the country.
3. Interviews of key actors in REDD+ BDS, as well as organization of a workshop on Benefit Distribution System Analysis in the project area (Central Sulawesi), to gather information and opinions on the existing BDS in Indonesia and Central Sulawesi.
4. Compilation of all information into a comprehensive analysis report on the BDS in Indonesia.

1.3 Background

Indonesia's forested land also supports extremely high levels of biodiversity, which in turn, support a diverse array of livelihoods and ecosystem services. The combination of high population density and high levels of biodiversity together with a staggering 80,000 km of coastline and 17,508 islands, makes Indonesia one of the most vulnerable countries to the

impacts of climate change[32]. Historical data shows that the Indonesian weather has already changed. The direction of change in the future may vary between regions[33].

In 2008, Indonesia took the initiative to join the UN-REDD Program. The Ministry of Forestry (MoF) sent its Letter of Interest as a pilot country to the FAO, UNDP and UNEP as initiators of UNREDD Program at the global level[34]. This letter was sent to the UNREDD Program prior to UN-REDD was launched by the UN's Secretary General in September 2008. In March 2009, Indonesia's proposal to join the UN-REDD was approved in the Policy Board Meeting UN-REDD Global in Panama and Indonesia became one of UN-REDD pilot countries joining eight other countries in UN-REDD. On October 2009, the President of the Republic of Indonesia committed to reduce Indonesia's CO_2 emissions by 26% against a business-as-usual trajectory in 2020, the largest absolute reduction commitment made by a developing country[35].

Indonesia has set a bold target to reduce CO_2 emissions and Norway, is one of the country, wanted to support the Indonesian government's efforts to realize its commitment[36]. This is when REDD+ came about. Norway and Indonesia have entered into a partnership to support Indonesia's efforts to reduce greenhouse gas emissions from deforestation and degradation of forests and peat lands. Norway will support these efforts with up to 1 billion US dollars based on Indonesia's performance, over the course of the next 7-8 years[37]. As a response to the Norwegian's support, the Government of Indonesia (GoI) enacted Presidential Decree of 19/2010 to form a Special Task Force for REDD+ institution in Indonesia (also known as 'REDD+ Task Force Part 1'), which mandates ended on June 30, 2011. Results from REDD+ Task Force Part 1 among others are the draft of REDD+ National Strategy which has been consulted to stakeholders and shareholders of REDD+ Indonesia, Presidential Instruction (Inpres) 10/2011 on Moratorium of New Licenses and Enhancement of Primary Natural Forest Management and Peat Land, as well as selection of Central Kalimantan as the pilot province of REDD+ Indonesia.

On September 2011, the mandates of the REDD+ Task Force was renewed (known as the 'REDD+ Task Force Part 2'), under the Presidential Regulation (Perpres) 25/2011. As part of their mandates, the REDD+ Task Force Part 2 has finalized the REDD+ National Strategy (STRANAS), National 'Body' or Agency of REDD+, Coordination with align ministries, as well as directly assisting bottle necks in REDD+ related activities. UN-REDD and REDD+ Indonesia-Norway have been working together, simultaneously as they are working for the same goal, albeit in different areas of Indonesia. UN-REDD has chosen five Kabupaten in Central Sulawesi as their project areas.

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[32] Id.
[33] Id.
[34] http://www.un-redd.org/UNREDDProgram/CountryActions/Indonesia/tabid/987/language/en-US/Default.aspx, *last visited* August 12, 2012, and Dr. Machfudh, UN-REDD Indonesia Team Leader, *comments* July 20, 2012.
[35] http://www.norway.or.id/Norway_in_Indonesia/Environment/-FAQ-Norway-Indonesia-REDD-Partnership-/
[36] Id.
[37] Id.

1.3.1 Overview of the Project Area: Central Sulawesi

Central Sulawesi is an area with average high around 84 meters of sea surface, it is located between 2°22' north latitude and 3°48' south latitude, 119°22' and 124°22' east longitude. Sulawesi, one of the five big islands in Indonesia, has been designated as the hub in Central and East Indonesia since the Dutch Indies. Business, trading and travels to and from Central and East Indonesia are always centered in Sulawesi. Central Sulawesi is the widest province in Sulawesi Island, with total land area of 68,033 km2 and 189,480 km^2 of sea. The borders of Central Sulawesi Province are: North: Sulawesi Sea & Gorontalo Province; East: Maluku Province; South: Central Sulawesi Province & North Sulawesi Province; West: Makassar Strait[38].

The 2010 Census reported that Central Sulawesi Province has a population of 2,633,420 scattered across a total area of 68,033,000 ha, or 39 people per km^2.[39] The forests of Central Sulawesi Province cover 4.4 million hectares, representing about 64% of the province's total land area. Some 800,000 people live in and around the forest areas, making up 33% of the province's population. Most of the forest dwellers are members of indigenous peoples, including the To Bungku, Mori, Pamona, Wana Taa, To Ondae, To Lage, To Bada, To Napu, To Behoa, To Lindu, To Kulawi, To Gimpu, To Tobaku, To Sigi, To Parigi, To Lauje, Dondo, and Dampelas. These peoples have been living in the same areas for many generations. They derive numerous benefits from the use and management of their their customary forests and products, such as rattan, medicines, game animals, fish, and so on[40].

The forest area of Central Sulawesi can be further divided into the following categories[41]:

1) Protected Areas:
    a. Natural Protection Areas *(Kawasan Suaka Alam)* and Natural Conservation Area *(Kawasan Pelestarian Alam)* including land and water, 676,248 ha or 9.94 percent.
    b. Protected forest 1,489,923 ha or 21.9 percent.
2) Cultivated Areas:
    a. Limited Production Forest, 1,476,316 ha or 21.7 percent.
    b. Permanent Production Forest, 500,589 ha or 7.36percent.
    c. Converted Production Forest, 251,856 ha or 3.7 percent.

The 2008 data from the Forestry Planning Agency in Ministry of Forestry shows that from 2003-2006 the average deforestation rate in Central Sulawesi Province was 118,744 hectares each year. The diagram below shows average deforestation rate across the six provinces in Sulawesi[42].

[38] UN-REDD Program Indonesia, Director General of Forestry Planning, Ministry of Forestry, Indonesia, "Central Sulawesi's Readiness to Implement REDD+ after 2012", 2011, pg. 21-25.
[39] Statistics Office (BPS) (2011). Central Sulawesi in Figure, p. 85
[40] Forest Peoples Program, PUSAKA, Yayasan Merah-Putih Palu Sulawesi Tengah (2011) "Central Sulawesi, UN-REDD Indonesia's Pilot Province, Rights, Forest and Climate Briefing Series, October 2011", p. 1-2.
[41] Deforestation Calculation Book 2008, Mapping Inventory Center, Forestry Planning Agency, Ministry of Forestry, 2008.
[42] Id.

Figure 1. Average deforestation rate across the six provinces in Sulawesi

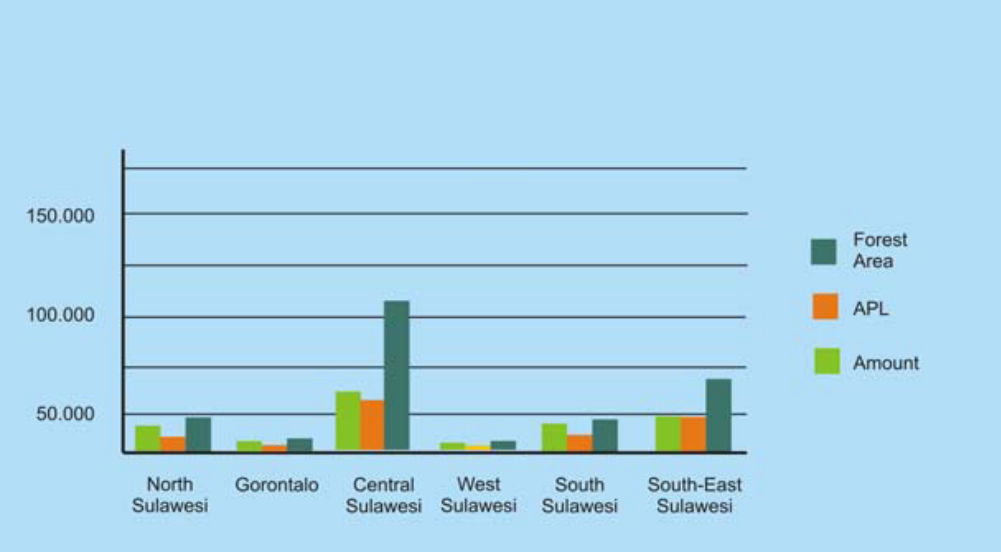


Table 1. Condition of forest areas at district or municipality level in Central Sulawesi Province

DISTRICT/ CITY	KSA-KPA	HL	HPT	HP	HPK	Sum	% Forest	APL	Total	% Total Area
Morowali	241.331	436.756	238.175	181.368	61.216	1.158.846	26,4	417.651	1.576.497	23,2
Banggai	23.726	169.669	309.113	55.526	52.529	610.563	13,9	329.990	940.553	13,8
Poso	126.739	140.287	136.372	22.716	16.969	443.083	10,1	427.048	870.131	12,8
Tojo Unauna	18.713	169.542	135.570	68.185	20.409	412.419	9,4	160.196	572.615	8,4
Parigi Moutong	60.714	162.640	127.607	22.467	22.808	396.236	9,0	207.301	603.537	8,9
Sigi	117.383	132.149	129.522	2.808	9.144	391.006	8,9	124.033	515.039	7,6
Donggala	18.353	100.846	164.905	8.816	24.152	317.072	7,2	194.221	511.293	7,5
Buol	9.802	63.602	100.341	60.413	24.070	258.228	5,9	158.613	416.841	6,1
Toli-Toli	53.698	55.955	80.644	39.999	1.208	231.504	5,3	173.054	404.558	5,9
Bangkep	-	51.336	49.691	38.291	19.351	158.669	3,6	194.446	353.115	5,2
Palu	5.789	7.141	4.376	-	-	17.306	0,4	21.815	39.121	0,6
Total Central Sulawesi	**676.248**	**1.489.923**	**1.476.316**	**500.589**	**251.856**	**4.394.932**	**100,0**	**2.408.368**	**6.803.300**	**100,0**

1.3.2 Brief History and Geographic Condition of Central Sulawesi

Central Sulawesi is located in the West of Maluku archipelago and South of the Philippines, apparently made the local ports as a transit point for ships of the Portuguese and the Spanish more than 500 years ago. It was on the route of Sir Francis Drake's voyage round the world in his galleon "The Golden Hind" when in January 1580, he spent a month on one of the small island of the eastern coast. Though there are no records, there is a possibility of Spanish or Portuguese encroachment in this part of the island as vestiges of European influence on the population's mode of dress remain till today. After conquest of the Dutch in Central Sulawesi, 1905, it was divided into small kingdoms ruled by kings who had full authority. The Dutch divided Central Sulawesi into three parts. The western part of what is now Donggala Regency and Buol Tolitoli came under the rule of the governor of Sulawesi, then residing in Makassar. The Central part comprising of eastern Donggala and the northern part of Poso came under the administration of the residence of North Sulawesi in Manado. The eastern part, Poso and Banggai, fell under control of East Sulawesi, then administration from Baubau. In 1919, the kings who had continued to reign under Dutch tutelage signed an agreement *"Korte Verklaring"* renewing their allegiance and the whole area of Central Sulawesi came under the administration of the residence of North Sulawesi.[43] After World War II, the area of the present province of Central Sulawesi underwent several divisions and sub divisions until it was declared a province in 1964, separating from North Sulawesi to which it had been bound since 1960. Finally, established in April 13, 1964, Central Sulawesi had its own governor and this date is celebrated as the province's anniversary, with its region covered: Poso Regency, Donggala Regency, Banggai Regency and Buol Tolitoli Regency. In 2010, Central Sulawesi is divided into ten regencies and one city, which had respectively area that is Banggai Kepulauan (3,214.46 km^2), Banggai (9,672.70 km^2), Morowali (15,490.12 km^2), Poso (8,712.25 km^2), Donggala (5,275.69 km^2), Tolitoli (4,079.77 km^2), Buol (4,043.57 km^2), Parigi Moutong (6,231.85 km^2), Tojo Una Una (5,721.51 km^2), Sigi (5,196.02 km^2) and 395.06 km^2 of Palu City.

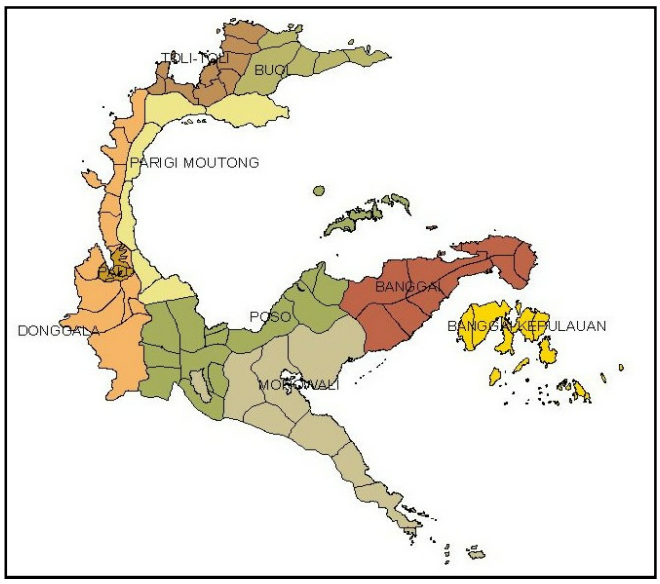
Table 2. Total Area and Number of Administrative Units by Region/City

Kabupaten/Kota *Regency/City*	Luas *Area* (km^2)	Banyaknya Kecamatan *Number of sub districts*	Banyaknya Desa *Number of villages*	Banyaknya Kelurahan *Number of urban villages*	Jumlah Desa dan Kelurahan *Total villages*
(1)	(2)	(3)	(4)	(5)	(6)
01. Banggai Kepulauan	3 214,46	19	204	6	210
02. Banggai	9 672,70	18	294	45	339
30. Morowali	15 490,12	14	230	10	240
04. P o s o	8 722,98	19	133	23	156
05. Donggala	5 275,69	16	141	9	150
06. Tolitoli	4 079,77	10	86	5	91
07. B u o l	4 043,57	11	101	7	108
08. Parigi Moutong	6 231,85	20	195	5	200
09. Tojo Una-Una	5 721,51	9	115	6	121
10. Sigi	5 196,02	15	157	-	157
11. P a l u	395,06	4	-	43	43
Jumlah / *Total*	**68 033,00**	**155**	**1 659**	**159**	**1 815**

[43] Id

Territorial Boundaries of Central Sulawesi Province in nothern area bordered by Sulawesi Sea and Gorontalo Province, eastern area border on Maluku Province, southern area border on Sulawesi Barat Province and Sulawesi Tenggara, and western area bordered by Makassar strait.

Figure 2. Map of Central Sulawesi[44]



1.4 Regional Government Analysis

1.4.1 National and Local Government Structure

Archipelago (*nusantara*) of Indonesia was the home of kingdoms before and during the colonial era. There was 67 monarchic states spread out from Sumatera to Ternate in a past history.[45] The extent of the Dutch colonial rule defined the territory of what later became Indonesia. During the independence movement, the Indonesian nationalists allowed no role of the constitutional monarchs because they considered the monarchs as colonial puppets.[46] Thus the independent Indonesia formally became a republic state with some of the former kingdoms' name and territories still remaining in the form of local governments either on province level (e.g. Aceh and Banten) or district/municipality level (e.g. Pontianak and Ubud). While political power was highly centralized under the authoritarian regime, the new democratic rule brought a quick and drastic decentralization of political power after 1999, mainly to the benefit of the district and municipality level bypassing the provincial level[47]. Thus, power relationship among national and local governments have been changing over time, from a moderate decentralized during Soekarno era known as "old order", 1945-1966, heavily centralized during Soeharto era

[44] Image is accessible at http://sulteng.go.id/pub3/index.php?option=com_content&view=article&id=108&Itemid=132
[45] Cahyat A, 2011. Guidebook to Local Governments in Indonesia.
[46] Id.
[47] Marbun, BN 2010, Otonomi Daerah, 1945-2010: proses dan realita (Regional autonomy, 1945-2010, process and reality, 2nd ed., Pustaka Sinar Harapan, Jakarta.

known as "new order", 1967-1998, and profoundly decentralized during *"reformasi"* era, 1999 onwards.

In *reformasi* era, the law on local governments has been revised two times. The first one was launched in 1999 and has been enacted officially since January 2001. The World Bank called the 2001 decentralization a 'big bang'. That refers to the significant changes that happened since then. For example, two third of the central government workforce and more than 16,000 service facilities were transferred to the responsibility of the regions[48]. The local government law has been changed in 2004 by enactment of Local Government Law 32/2004 and still valid until now. One major difference between the two is that the 2004 provide more power and roles to the province government on monitoring and supervising the kabupaten/kota[49].

Indonesia has three government tiers: (1) the national level, (2) the provincial level and (3) the district (kabupaten) in rural regions or municipality (kota) level in urban regions. All sub-national levels two and three are generally called "local governments". This usually causes some confusion as there are many similarities but also many differences between the provinces and the districts/municipalities in terms of their authorities, functional assignments, and organizational structure. By August 2011 there were 524 local governments, comprised of 33 provinces, 398 *kabupaten*, and 93 *kota*. There have been 205 new local governments since the 1999 decentralization law, comprised of 7 provinces, 164 *kabupaten*, and 34 *kota*[50]. *Kabupaten* (Districts) and *Kota* (municipalities) *(*have administration support units called kecamatan. Furthermore, kecamatan may comprise villages (*desa*, sometimes also called *kampung*) or urban neighborhoods *(kelurahan).* Although *desa* and *kelurahan* are at the same level, both differ in terms of autonomy. Under *desa* and *kelurahan*, there are two neighborhood administration support units. The first level is hamlet (dusun) in *kabupaten* or community units called *Rukun Warga* (RW)) in kota. The second level, either in *kota* or in *kabupaten*, is called *Rukun Tetangga* (RT).

The local governments in province level are led by governor (Indonesian: *gubernur*) and in district/municipality level are led by *bupati/walikota*, who are directly being elected by the people**.** Gubernur has an important role as the representative of the central governmnent and the leader of his/her provincial government. This role possibly happen since the potition of Gubernur located in the middle between national and district/municipal government. As the leader of provincial government, Gubernur has responsibility for all provincial government issue as its mandated. In the other side, the role as the representative of central government, Gubernur has a responsibility to supervise and monitor the district/municipal governance and administration. One example of Gubernur role to district/municipal government is her/his role

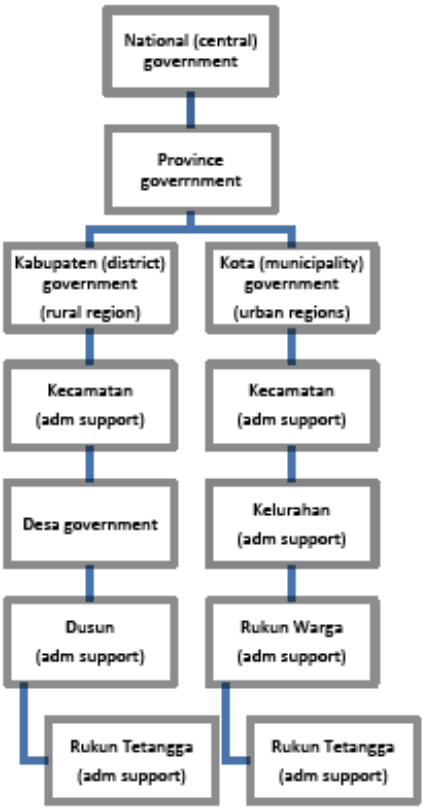
[48] Ministry of Finance, no date.

[49] World Bank, 2010, 'Completing decentralization', Indonesia Rising: Policy Priorities for 2010 and Beyond 53471, The World Bank, Washington, D.C.

[50] Yudhoyono, SB, 2011, 'Pidato Presiden Republik Indonesia pada penyampaian keterangan pemerintah atas rancangan undang-undang tentang anggaran pendapatan dan belanja negara tahun anggaran 2012 beserta nota keuangannya di depan rapat paripurna Dewan Perwakilan Rakyat Republik Indonesia' (Presidential speech on the 2012 state budget plan in the front of plenary session of DPR), Jakarta, 16 Agustus 2011.

to review and approve the regional budget plan (RAPBD). Without Gubernur aprroval, RAPBD can not be final.

Figure 3. Governmental System in Indonesia[51]



At the local level, district and municipal, like in central level there is also an local legislative body that elected by direct election called *Dewan Perwakilan Rakyat Daerah (DPRD)*. A similiar mechanism also applied to villages *(desa)*, where the head of villages *(kepala desa)* and the members of village legislative body *(Badan Permusyawaratan Desa/BPD)* are also directy elected by village's people. Meanwhile, the heads of subsdistricts called Camat and urban neighborhoods called Lurah are appointed by Bupati or Walikota. When at a national level we recognized government regulation or presidential regulation, at regional level we will find a regional regulation called *Peraturan Daerah/Perda.* This perda is prepared either by *Gubernur/Walikota/Bupati* and DPRD. The scope of law making at local level is limited by the functions that are assigned to local governments as regulated by Government Regulation 38/2007. In addition to Perda, Gubernur, bupati, or walikota has a authority to issue rules independently without an approval by DPRD. These rules are in a form of "Regulation" *(Peraturan)* and "Decree" *(Surat Keputusan).* When a head of local government wants to

[51] Cahyat A (2011) - based on Law No. 32/2004 regarding Local Government

regulate a service provision procedure they usually use a *Peraturan* form, and when they want to appoint someone for one position or team for a specific task, they use a *Surat Keputusan*.[52]

1.4.2 Structure and Key Player of Local Government

1.4.2.1 DPRD (Regional House of Representative)

The local legislative (*Dewan Perwakilan Rakyat Daerah*/DPRD) has three main tasks, i.e. legislation, budgeting, and monitoring. Legislation and budgeting function are implemented together with the head of local government, while the monitoring function is to monitor the implementation of legislation and budgeting function. To make this functions works DPRP is equipped with a secretariat and six instruments *(alat kelengkapan).* All DPRD members are assigned to one or more of the following six 'instruments'[53]: 1) *Pimpinan* (the chairs, who chairing the assemblies and become the DPRD speakers); 2) *Komisi* (regional governance thematic group, filled up with members from different political parties); 3) *Badan kehormatan* (overseeing the code of conducts and ethics of the members); 4) *Badan musyawarah* (arranging the convene agenda and timetable); 5) *Badan legislasi* (arranging the legislation making agenda, its timetable, and law draft preparation), and 6) *Badan anggaran* (discussing the draft of budget plan with government). The DPRD chairs *(pimpinan)* are elected from the majority party in DPRD. Because of DPRP chairs must come from the majority, they have the power to influence members' decision. But even though they come from majority party they must have a strong leadership quality If the *pimpinan* is respected by the membersof the parliament *(anggota dewan),* it is become easy for him/her to promote any policy ideas, and vice versa.

1.4.2.2 Local Government working units

With DPRD in the legislative branch, local government is the executive branch of local governance. The essential responsibility of locat government is policy implementation. There are Gubernur, Walikota, Bupati as the leader of local governments and the local government working *units (Satuan Kerja Pemerintah Daerah/SKPD)* that act like a ministries in central government who help the policy implementation of local government. However, since Indonesia practices a presidential system, the executive branch has more roles than policy implementation only. Beside the authority to make policies, local government also has an authority to prepare activities and budget plans that need to be approved by DPRD chairs. Policies related to human resources are fully under the authority of local government. But there is an exceptional regarding an appointement of regional secretary *(Sekretaris Daerah/Sekda). Sekda* is appointment by head of region and approved by higher level of government, e.g. the appointment of *Sekda* of *Kabupaten* or *Kota* must be approved by the Governor, as the head of provincial government.

Heads of local governments

There are three type of heads of local government: Governor *(Gubernur)* for provincial government, *Bupati* for district *(kabupaten),* and *Walikota* for municipality *(kota).* Each of them

[52] Cahyat A (2011). Guidebook to Local Governments in Indonesia
[53] Id.

are equiped with deputi/vice *(wakil).* Heads of local governments are directly being elected by the people. Usually the heads and their deputy come form one package of candidacy during the election. After being elected as head of local government, the duty is to manage public servants *(Pegawai Negeri Sipil/PNS)* resources to achieve their government's objectives and expected results which were promised during the election campaign. In order to achieve this target, Head of Local Governments can assign tasks to the *Sekretaris Daerah (Sekda),* the head of *Local Government Working Units,* head of local public service units, and the director of local government enterprises (BUMD).[54]

Local government working units (SKPD)

Local government working unit's functions are likely the function of ministries in central government. They help Head of local governments to run their governance. The SKPD can be categorized into three groups[55]:

(1) the secretariat with coordination function to directly assist the head of region and ensuring support and coordination to the internal and external services;

(2) the external service units providing services to citizens which usually called *'dinas'* and some others are in the form of *Badan Layanan Umum* (BLU);

(3) the internal service units providing management and administration support, most of them called *'badan'.* In terms of hierarchy, the secretariat is higher than *badan*and*dinas*, whereas the last two are at the same level of hierarchy.

The secretariat

The secretariat has a central function in local government administration. Its function is to coordinate the operation of the local government administration and to assists the head of local government and ensuring support and coordination to the local government units. The Secretariat is headed by a regional secretary *(Sekretaris Daerah/Sekda).* While the heads and deputy head of local government are a political position, *Sekda* is a position held by career civil servant. It can be said that *Sekda* is a highest bureaucrat position in local government. *Sekda* is assisted by assistances *(Asisten Daerah/Asda),* who help *Sekda* to coordinate several SKPD.[56]

Badan, Kantor, and Dinas

Local government working units (SKPD) can be classified into two criteria. First, the internal service providers called *'badan'.* Badan focuses on particular functions, such as planning, personnel administration, finance, etc. Meanwhile 'kantor' is formed to fulfill more specific functions, such as managing government archive, civil registration, etc. Generally *kantor*s are smaller agencies than *badan* and their heads are ranked lower that the heads of *Badan* and *Dinas.* Second, the external service providers called *'dinas'*. Dinas delivers the main function of local governments by creating public values through public services. Usually *dinas* named by its function such as *dinas kehutanan* for forest services*, dinas kesehatan* for health services, *dinas pendidikan* for education services, and *dinas pekerjaan umum* for public infrastructure. Dinas

[54] Id.
[55] Id.
[56] Id

provides services either by itself or by contracting external service providers. Local government can also establish a Technical Implementation Unit *(Unit Pelaksana Teknis Daerah/UPTD*). The establishment of UPTD can be positioned below *Badan or Dinas*.[57]

BLU

Under Government Regulation No. 23/2005, some public service units are autonomous in their financial administration[58], called as a Public Service Unit *(Badan Layanan Umum/BLU).* BLU is formed only for local government public service units, who sell their products or services but not for profit purposes, e.g. hospitals, community health service centers *(puskesmas),* or local government owned drinking water ccompany (PDAM). With this status, BLU is allowed to manage all of their revenues directly and also can employ workers by providing salary rate more than public servant's standard by using private sector scheme. The establishment of BLU is expected to rise the quality and increase the speed of services for community.

Bappeda

The Regional Development Planning Agency *(Badan Perencanaan Pembangunan Daerah—Bappeda)* is the most strategic government agency at local level for any development cooperation.[59] One strong indicator of ownership and alignment is the existence of co-financing budget for the development cooperation activities that are allocated in the in local budgets (APBD).[60] The function of *Bappeda* in a region is likely same with the function of National Development Planning Agency *(Bappenas)* at national level. The main role of *Bappeda* is to coordinate all sectoral planning. This sectoral planning is prepared by SKPD in form annual and mid-term work plan and be submitted to *Bappeda.* Because of its function and role, Bappeda usually seen as super agency in the region because of its power to control all the planning and budgeting products. Bappeda, together with the Finance and Asset Agency *(Dinas Pendapatan, Pengelolaan Keuangan, dan Aset Daerah/DPPKA)* are the core team in the Executive Budget Team *(Tim Anggaran Pemerintah Daerah/TAPD)* producing RAPBD.[61] *Bappeda* could disagree with the draft submitted by the sectoral agency and suggest for new idea.[62] *Bappeda* also has a role on providing advice on spatial planning as its position as a member of Regional Spatial Planning Coordination Board *(Badan Koordinasi Penataan Ruang Daerah/BKPRD).* Although there is a Spatial Plan Service *(Dinas Tata Ruang)* which formed with the role on spatial plan making, *Bappeda*'s role is essential to ensure the consistency between the spatial plan and the development and budget plan.[63]

Camat and Lurah

Camat and *Lurah* are civil servants who appointed by *walikota* or *bupati. Camat* is the head of *Kecamatan*, his/her duty is to coordinate several *Lurah,* who led *Kelurahan*. The position of *Camat* is at the same level as the secretary of *dinas/badan* and the *'kepala bagian'* at

[57] Id
[58] Government Regulation No 23/2005 regarding Financial Administration of Public Service Unit (BLU)
[59] Cahyat A (2011). Guidebook to Local Governments in Indonesia, Id.
[60] Id
[61] Id.
[62] Id.
[63] Id.

secretariat in *kabupaten/kota*, while the *Lurah* is at the same level with *'kepala seksi'* in *kecamatan*, *'kepala sub bidang'* at *dinas/badan,* and *'kepala sub bagian'* at secretariat.[64]

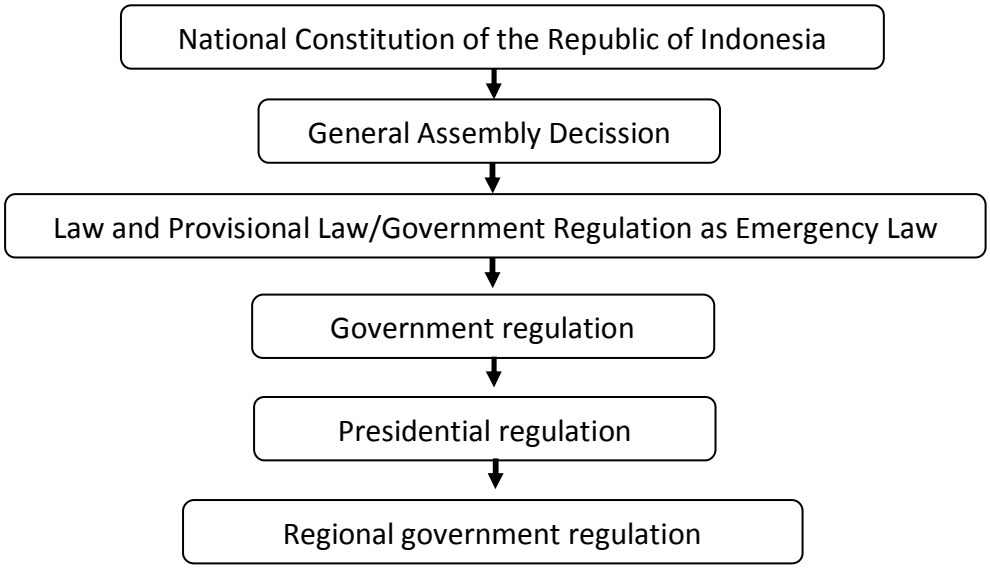
[64] Id.

2. LEGAL FRAMEWORK OF REDD+ AND BENEFIT DISTRIBUTION SYSTEM ANALYSIS

2.1 Compliance of REDD+ to the Indonesia Legal System

Governance is one of the biggest concerns for the effective implementation of REDD+, therefore, a design of a REDD-compliant benefit distribution system has to be fit with the national and sub-national governance. The most critical components of governance is a legal system. According to the current national legal system, laws and regulations in Indonesia have to refer the following hierarchy[65] (**Figure 4).**

Figure 4. Hierachy of Legislation in Indonesia



All laws and regulations in Indonesia shall be based on the principles of national constitution. The REDD+ schemes have to follow the Article 33 (2,3) of the constitution: "*Sectors of production which are important for the country and affect the life of the people shall be controlled by the state. The land, the waters and the natural riches contained therein shall be controlled by the state and utilized to the greatest benefit of the people.* Hence, each policy and practice of economic source and natural resources management shall be based to the spirit of the article 33 of the national constitution. The control of the state over forest has not to be ignoring the prosperity of community around forest. The national constitution mandate the state to control the forest with the spirit of togetherness and also has to accommodate various interests, not only the interest of the foresters, but also the interest of farmers, breeders,

[65] Law 12/2011 on Legislation hierarchy

traditional community, and other communal groups. Several laws related to fiscal, forest, tenure, and natural resources have to be considered to operate REDD+ schemes in Indonesia (**Table 3**).

Table 3. Laws related to the implementation of REDD+ schemes

No	Law	Substance
1.	Law 12/2011	Legislation Composing
2.	Law 41/2009	Sustainable Food Agricultural Land Protection
3.	Law 31/2009	Meteorology, Climatology, and Geophysics
4.	Law 32/2009	Environmental Management and Protection
5.	Law 4/2009	Mining of Mineral and Coal
6.	Law 26/2007	Spatial Planning
7.	Law 17/2004	Ratification of Kyoto Protocol to the UNFCC
8.	Law 32/2004	Regional Governance
9.	Law 33/2004	Fiscal balance
10.	Law 7/2004	Water Resources
11.	Law 1/2004	State Treasury
12.	Law 17/2003	State Finance
13.	Law 41/1999	Forestry
14.	Law 20/1997	Non-Tax State Revenue
15.	Law 5/1994	Ratification of UNCBD
16.	Law 6/1994	Ratification of UNFCC
17.	Law 5/1990	Biological Resources Conservation
18.	Law 5/1960	Basic Rule of Agrarian

Source: Nurrochmat (2011a); Gintings (2011)

Table 3 indicates that the implementation of REDD+ in Indonesia has to rely on various laws, i.e. Meteorology, Climatology, and Geophysics; Environmental Management and Protection; Spatial Planning; Ratification of Kyoto Protocol to the UNFCC; Regional Governance; Fiscal Balance; Forestry; Water Resources; Ratification of UNCBD; Ratification of UNFCC; Biological Resources Conservation; Basic Rule of Mining; and Basic Rule of Agrarian.

The Regional Government Law 32/2004 mandated to the central government to distribute various government authorities to the region. Decentralization is meant to enable region to administer and manage their governmental affairs. It is necessary to emphasize that the implication of “shifting power” is not only the implementation of “consultation” function of central tasks that implemented by officer in the region, but also transfer of responsibilities and authorities to regional government or entities in the regions. The regional government,

therefore, has to manage their natural resources based on their local specifics. Despites government regulations at the national level, local rules are also playing pivotal role in determining a successful implementation of the REDD+ schemes. An integrated national and sub-national approach is needed to integrate national efforts and locally relevant regulations. The REDD+ schemes would be more successful when respect to the local contexts. Therefore, in addition to the national regulation, the regional regulations are also recognized in the Indonesia legal system. The regional regulations are aimed to manage regional autonomy based on local specifics, include: provincial government regulation, district/city government regulation, and village regulation.[66]

According to the national constitution, the regional governments hold some powers and authorities based on the following principles:

- The Unitary State of the Republic of Indonesia shall be divided into provinces and those provinces shall be sub-divided into regencies and cities, which each province, regency, and city possess a regional government, as regulated by laws.
- The governance of province, regency, and city shall administer and manage their governmental affairs by themselves according to the autonomy principle and tasks of assistance
- The regional governments shall carry out the widest possible autonomy, except in governmental affairs that by the laws shall be determined as being the affairs of the central government
- The regional governments shall have the right to determine regional regulations and other regulations to carry out autonomy and tasks of assistance
- The structures and procedures of administering of the regional government shall be regulated in laws.

The implementation of REDD+ scheme is subject of consultation with regional governments because it relates to the matters of "the regional autonomy, relationship between central and regional government, formation, expansion, and merger of regions, management of natural resources and other economic resources, and any matters related to the fiscal balance between the center and the regions." Besides technical problem over forest management, another important issue has to be considered by the state related to REDD+ is tenurial arrangement. According to forestry law, forest ownership consists of "state forest" and "private forest". State forest is forest on land bearing no ownership right. State forest can be in form of customary forest, where the status of customary forest established as long as the fact that the related traditional community is exist and admitted the existence. The arrangement of the rights over forest is a fundamental factor to ensure that local community can manage their forest resources in sustainable way. In Indonesia forestland allocation was formerly regulated by a concept of "Forestland-use Agreement" known as TGHK ("*Tata Guna Hutan Kesepakatan"*). This concept shall be integrated with the Regional Spatial Plan (RTRW) regulated by Law 26/2007. According to the spatial plan law, principally land-use management has to be

[66] Nurrochmat DR (2011a). Review infrastructure framework and mechanism related to SFM as important option in reducing emission from deforestation and forest degradation. ITTO Project Report. Indonesia Ministry of Forestry.

implemented with environmental concepts and considering the optimal utilization. Spatial plan on the national, provincial or regency/city levels shall be conducted integrally. In fact regional spatial plan ("RTRW") could not be implemented successfully. Many obstacles faced in implementing RTRW, which were mostly caused by conflict of interest among sectors and/or regions.[67]

Besides considering the mentioned laws, the implementation of REDD+ has to be in line also with the Environmental Protection and Management Law 32/2009. This Law shall become basis for the further rules related to environment sustainability, included biological resources and ecosystem conservation. Biological resources conservation is directed to natural resources management that ensures the optimal utilization. Sustainable renewable resources mean the continuity of supply and increase the quality of the value and diversity. The law regulated also basic principles of environmental management such as right on information, right to complain, right to claim, as well as environmental audit.

Law 5/1990 on biological resources and its ecosystem conservation (KSDHE) refers to the principles of sustainability, ability and utilization of biological resources and its ecosystem in harmony and balance. It supports to increase people prosperity and the quality of human life throgh the utilization of sustainable biological resources and its ecosystem. The implementation of REDD is also related to Law 6/1994 on United Nation Framework on Climate Change (UNFCC). It rules the rights and obligations concerning the mitigation of climate change referred to the convention of the United Nations Framework on Climate Change. Finally, each problem of land-use will strongly relate to the Law 5/1960 on the Basic Rules of Agrarian. The law mentioned that *land, water, and outer space are an area in the Indonesian territory and is an area that the utilization is regulated by the government.* According to the law, the utilization of lands, included REDD+ scheme has to refer to the interests of the state; interests of the religion activities and other religious needs, interests of the needs of human live, social, cultural and various other things prosperity; interests of the developing production of agricultural, animal husbandry and fishery and in the other same purposes; and interests of the developing industry, transmigration, and mining.

2.2 Disharmony of Laws and Technical Regulations

There are several technical implementative regulations were enacted to prepare and implement REDD+ in Indonesia (**Table 4**).

[67] Id

Table 4. Implementative regulations related to the implementation of REDD

No	Decree/Regulation	Substance
1.	Government Regulation (GR) No. 6/2007 jo. GR No. 3/2008	Forest Governance, Forest Planning Management and Forest Utilization.
2.	Government Regulation (GR) No. 55/2005	Fiscal Balance
3.	Presidential Decree 19/2010	Establishment of the Task Force on REDD+
4.	Forestry Minister Regulation P.30/2009	Procedure to Reduce Emission from Deforestation and Forest Degradation (REDD).
5.	Forestry Minister Regulation P.36/2009	Procedure of License on Utilization of Carbon Absorption/Stock in Production and Protection Forest.
6.	Forestry Minister Regulation P.68/2008	The Demonstration Activity of REDD
7.	Forestry Minister Regulation P. 49/2008	Village Forest
8.	Forestry Minister Regulation P. 18/2009	Community Forest
9.	Forestry Minister Decree No. 07/2008	Criteria and Standard of License on Utilization of Environmental Services in Production Forest
10.	Forestry Minister Regulation P. 32/2007	Procedure on Determination, Collection and Payment of License Fee on Forest Utilization in Production Forest.
11.	Forestry Minister Regulation No. 20/2012	Forest Carbon
12.	Presidential Regulation 80/2011	Trust fund
13.	Presidential Regulation 61/2011	RAN-GRK: National Action Plan on Greenhouse Gasses Emission
14.	Presidential Regulation 71/2011	Greenhouse Gasses Emission Inventory

Source: Gintings (2011) and other relevant regulations

The implementation of REDD+ in some cases is not an easy task because it relates to a complex legal system and sometimes also faces with conflicting regulations. **Table 5** pointed out several disharmony of laws and regulations rellated to REDD in Indonesia.

Table 5. Disharmony of laws and regulations related to REDD+

No.	Substances	Laws & regulations	Contents & Problems
1.	Minimum area of forests in a province and regency/city	Law 26/2007: 17(5) Law 41/1999: 18(2)	Contents: Minimum area of forests in a watershed area/island/province is 30%. Problems: If a watershed area covering more than one regency or province, how to define a minimum area of forests? If a regency or province covering more than one island, how to define a minimum area of forests?
2.	Location of REDD+	Government Regulation 3/2008, Paragraph 25,29,33 and 50 Forestry Minister Regulation P.30/Menhut-II/2009 Paragraph 5-10 (1)	Contents: REDD could be implemented in certain area as far as suitable with the criteria of REDD location. Problems: Those regulation created ambiguity because the criteria of REDD location did not state clearly. The problem would be more complicated since REDD involved not only deforestation and forest degradation, but also governance and institutional aspects of forest management.
3	Time period of the utilization permit of environmental services	Government Regulation 6/2007 Paragraph 28 (1) jo. Government Regulation 3/2008 Paragraph 29 (1) and 50 (1) Forestry Minister Regulation P.30/Menhut-II/2009 Paragraph 13	Contents: The time period of utilization permit of environmental services for carbon is 30 years (Forestry Minister Regulation P.30/2009: 13) Problems: In the case of protected forest, it needs further explanation. Government Regulation 6/2007: 28 (1) stated that the maximum time utilization permit in protected forest is only 10 years.
4.	Carbon sequestration (RAP) and carbon stocking (PAN) in protected forests.	Law 41/1999 Paragraph 27 (2) Government Regulation 6/2007 Paragraph 25 Government Regulation 3/2008 Paragraph 25 (1) Forestry Minister Regulation P.36/Menhut-II/2009 Paragraph 3.	Contents: Implementation of carbon trading scheme with additionality concept in protected forests. Problems: Less additionality in protected forests. Usually protected forests are primary forests.
5.	Use of forest area for mining	Law 41/1999 Paragraph 38 Law 4/2009 Government Regulation 24/2010 Paragraph 4(1)	Contents: Use of forest area for other forest activities may be implemented for strategic purposes. Problems: No clear definition and further explanation of strategic purposes.

6.	Inventory of Green House Gases (GHG) Emissions	Law 32/2009 Paragraph 45; paragraph 63 (2) point "e", and Paragraph 63 (3) point "e"	Contents: Each province government has to conduct natural resource inventory and GHG emission inventory. Problems: Inventory of GHG Emission is extremely difficult to be implemented by province government. No clear explanation about the scope, whether based on the temporary changing of stock carbon (degradation) or permanent landuse change (deforestation).
7.	Measurements of emission	Law 32/2009	Contents: Each region shall implement carbon emission inventory. Each region shall provide funds for forest protection and nature conservation. Problems: Regular measurement of GHG is not an easy task and it is also relatively expensive.
8.	Environmental Impact Analysis (AMDAL)	Law 32/2009	Contents: Environmental Impact Analysis (AMDAL) Problems: The law focused on environmental Impact Analysis (AMDAL), but pays less attention to the other programs.
9.	Zonation	Government Regulation 26/2008	Contents: Zonation of Forest Area Problems: Zonation could not be implemented effectively because of incomplete forest inventory and not confirm with people needs.
10.	Decentralization of authority in forestry matters	Law 41/1999 Paragraph 66 Law 32/2004	Contents: Decentralization of forestry matters from central to the regions. Problems: No clear scope of authorities among central, province and regency/city.
11.	Forest Inventory at the Management Unit (FMU)	Law41/1999 Paragraph 13	Contents: Forest inventory shall be implemented at national level, watershed area, and Forest Management Unit (FMU). Problems: FMUs are not established right now.

Source: Nurrochmat (2011a)

3. INSTITUTIONAL FRAMEWORK FINANCE

'Benefit Distribution System in REDD+ is important because if we are going to embark on a 'change of behavior' via REDD+, this will be our first step forward'.[68] The REDD+ schemes could be implemented successfully if they are supported by approriate institutional framework finance. The successful implementation does not mean only the effectivenes of the scheme, but also have to equitable and benefit to the stakeholders. There are some proposals to develop institutional framework finance of REDD in Indonesia, however, none is clearly defined in the practical implementation. A proper instutional framework finance in the national and sub-national level has to be formulated by considering benefits and constraints of funding mechanisms, benefit distribution system, and fund allocation.

3.1 National Level

To operate institutional framework finance of REDD+ in national and sub-national level, it is very important to consider three critical aspects of decentralization that are administrative, fiscal, and politic.[69,70] Fiscal decentralization is one of the most important issues in developing institutional framework finance of REDD+. In addition to fiscal decentralization, administrative decentralization is also important to note becaue it relates to transfer of authority to governmental institution in the region to implement public services function. The other pivotal issue has to be considered in the formulation of institutional framework finance of REDD+ is political decentralization. It refers to transfer of authority to the region in determining public policies. Political decision to devolve authority from central government to the region can only be well implemented if regional government has adequate capacity in administrative, fiscal, and political management.[71] Therefore, it needs strong and clear legal basis of administrative, fiscal, and political aspects to establish appropriate institutional framework finance of REDD+. In Indonesia context, since administrative, fiscal, and political decentralization cannot be separated, Fiscal Balance Law 33/2004 is an integral part with the Regional Government Law 32/2004. **Table 6** shows the fiscal balance of natural resources utilization between central and regional government.

[68] Personal communication with a member of Task Force REDD+, Jakarta, June 12, 2012.
[69] Nurrochmat DR (2005). Strategi Pengelolaan Hutan. Upaya Menyelamatkan Hutan yang Tersisa. Pustaka Pelajar, Yogyakarta.
[70] Nurrochmat DR, *et al*. (2012). Ekonomi Politik Kehutanan. Mengurai Mitos dan Fakta Pengelolaan Hutan (Edisi Revisi). INDEF.
[71] Inman and Rubinfield (1997) in Litvack J, Ahmad J and R Bird (1998). Rethinking Decentralization in Developing Countries. The World Bank. Washington, D.C.

Table 6. Fiscal Balance of Natural Resources Utilizations

Source of Revenue	Central (%)	Region (%)
State Revenue from natural resources (forestry, general mining, and fishery)	20	80
Reforestation Fund	60	40

Source: Law No. 33/2004 Article 14 (a-d)

To ensure the effectiveness, efficiency, and equitability, a proper institutional framework finance of REDD+ shall involve four instruments of policy, i.e. regulative, fiscal, administrative, and administrative instruments. The first policy instrument has to be measured in the formulation of the institutional framework finance of REDD+ is **regulative infrastructure.**The performance of forest governance is highly influenced by government rule, technical implementation, and landuse. Governance is a process whereby societies or organizations make their important decisions, determine whom they involve in the process and how they render account. Since a process is hard to observe, tend to focus our attention on the governance *system* or framework upon which the process rests - that is, the agreements, procedures, conventions or policies that define who gets power, how decisions are taken and how accountability is rendered. Governance is not only about *where to go,* but also about *who should be involved in deciding*, and in what capacity. There are four areas or zones where the concept is particularly relevant to the different implementation of REDD+ schemes:[72]

1. REDD+ scheme related to a governance in 'global space', or global governance, deals with issues outside the purview of individual governments.
2. REDD+ scheme related to a governance in 'national space', i.e. within a country: this is sometimes understood as the exclusive preserve of govern*ment*, of which there may be several levels: national, provincial or state, indigenous, urban or local.
3. REDD+ scheme related to an organizational governance (governance in 'organization space'): this comprises the activities of organizations that are usually accountable to a board of directors. Some will be privately owned, others may be publicly owned.
4. REDD+ scheme related to a community governance (governance in 'community space'): this includes activities at a local level where the organizing body may not assume a legal form and where there may not be a formally constituted governing board.

The indicators of good governance could be derived from fifth principles of good governance defined by the United Nations Development Program (UNDP) are 1) legitimacy**,** 2) direction**,** 3) performance**,** 4) accountability**,** 4) fairness.[73] The regulatory framework of REDD+ shall be positioned in the context of sustainable forest management. The rules of REDD+ governance were featured by some laws and regulations. The most important laws related to REDD+ governance are Law 32/2004 on regional governance and Law 33/2004 on Fiscal Balance between the center and regional governments. Those laws are very important for the legal

[72] Adapted from Graham *et al.* (2003)
[73] [UNDP] United Nations Development Program (1997). Governance and Sustainable Human Development.

basis of REDD because they contained the principles of hierarchical authorities as well as tasks and obligations of the different levels of governments.

REDD+ is one of proposed mechanisms in supporting sustainable forest management (SFM). In the context of SFM, the implementation of REDD+ shall follow Forestry Law 41/1999. At the level of Government Regulation (GR), the most important GR related to REDD is GR 6/2007 jo. GR 3/2008 on Forest Planning and Formulation of Forest Planning Management, and Forest Utilization. As operational regulations there are some ministerial regulations related to forest environmental services, included REDD+. The most relevant regulations for the implementation of REDD are the Forestry Minister Regulation P.68/Menhut-II/2008 on Implementation of Demonstration Activities of Reducing Carbon Emissions from Deforestation and Forest Degradation (REDD), Forestry Minister Regulation P.30/Menhut-II/2009on Procedures for Reducing Emissions from REDD, and P. 36/Menhut-II/2009 on Procedure of Business Permit Mechanism for the Utilization of Carbon Sequestration and/or Carbon Stocking in Production Forests and Protection Forests.[74] Those forestry minister regulations were enacted following the decision of the 13th Conference of Parties (COP) of UN Convention on Climate Change (UNFCC) in 2007 in Bali.

Although they seem alike, the terms deforestation and forest degradation have different meanings. Deforestation is the permanent change of forested areas into non-forested areas as a result of human activity, while degradation is the reduction in the quantity of forest cover and carbon stocks for certain period of time caused by human activities. Reducing emissions from deforestation and forest degradation is termed REDD, which is forest management efforts for the prevention or reduction in decreased quantity of forest cover and carbon stocks through various activities to support sustainable national development. One effort to attain forest environmental services benefit is through implementing REDD+ scheme. This scheme implies a trade in services derived from forest management activities that resulted in reduced emissions from deforestation and forest degradation. One of the most important things that need to be observed prior to implementing REDD+ scheme is to identify the reference emission. Reference emission is the level of emissions from deforestation and forest degradation in the absence of REDD+ schemes and can be set based on historical trends and future development scenarios. All activities related to the implementation of REDD are administered by the National Registrar, the agency or institution that has the task to record all REDD activities. REDD implementers can receive incentives from their REDD+ activities in the form of financial support and/or technology transfer or capacity building.The maximum length of REDD+ implementation period is 30 years and can be extended in accordance with the existing regulations. REDD+ schemes can be performed on various types of forest areas, both inside and outside forest areas[75] (**Table 7**).

[74]The section of the Government Rules on REDD are mostly summed up from the Forestry Minister Regulations of P. 68/Menhut-II/2008, P.30/Menhut-II/2009, and P. 36/Menhut-II/2009.

[75] Nurrochmat DR (2011a). Review infrastructure framework and mechanism related to SFM as important option in reducing emission from deforestation and forest degradation. ITTO Project Report. Indonesia Ministry of Forestry.

Table 7. Types of areas, units and implementer of REDD in Indonesia

Areas	Units	Implementers
Inside forest area	Working Area of Utilization of Timber in Natural Forest (IUPHHK-HA)	Private
	Working Area of Utilization of Timber from Plantation Forest (IUPHHK-HT)	Private
	Working Area of Utilization of Timber from Ecosystem Restoration in Natural Forests (IUPHHK-RE)	Private
	Working Area of Utilization of Community Forest(IUPHH-HKM)	Community
	Working Area of Utilization of Timber from Community Plantation Forest within Plantation Forest (IUPHHK-HTR)	Community
	Customary Forest	Community
	Village Forest	Community
	Production Forest Management Unit (KPHP)	State
	Protection Forest Management Unit (KPHL)	State
	Conservation Forest Management Unit (KPHK)	State
	Conservation Forest	State
Outside forest area	Right forest or people forest (HR)	Citizen/people

Source: Forestry Minister P.30/Menhut-II/2009.

Determination of Reference Emission Levels (REL) in Indonesia is regulated by the following provisions:

a. Implementation of REDD+ in Indonesia is carried out using a national approach with implementation at the sub-national (provincial or district/city or management unit). Thus the reference emission (REL) is set at national, sub-national and on-site (local) levels.
b. Reference Emission (REL) at the national level is set by the Ministry of Forestry, while emissions in the sub-national level is set by local governments (provincial or district/city) and confirmed with a national reference emission.
c. Reference Emission (REL) at REDD+ location is specified by REDD implementer and confirmed by the national and sub-national reference emission.

The REDD+ implementation also requires data and information about changes in forest cover and carbon stocks, as measured based on: 1) measurement of changes in forest cover and carbon stocks using the IPCC Guidelines or the IPCC Good Practice Guidance for Land Use, Land Use Change and Forestry (GPGLULUCF), and 2) implementer scan choose the approach and the level of tiers given in the IPCC according to the level of readiness/capacity starting from tier2 and gradually to the use of approach and the highest tier (level3).

The implementation of REDD+ could not be separated with landuse policy. The main legal basis of landuse policy in Indonesia is Law 26/2007 on Spatial Plan. In Forestry sector landuse changes were caused by several activities, among others are land clearing and conversion of forests. Land clearing permit in forest areas is done through Timber Utilization Permit (IPK) scheme in the framework of preparing Industrial Plantation Forests (HTI) and the release of production forest area that can be converted to development uses outside of the forestry sector, such as plantations. Development of plantation within the ex-forest area can be carried out through partial forest land use change scheme through exchange of forest area and release of forest area.[76] Article 19 of Law 41/1999 explains the changes in forest land use and function. As implementing regulation of Forestry law, Government Regulation Number 10/2010 concerning Procedures for Changes in Forest Land Use and Function was issued. This Government Regulation justifies the meaning of forest land use change as the change of forest area into non-forest area. Forest land use change is defined as a partial or whole change of forest function within one or several groups of forest into other forest functions. Land use changes through forest land exchanges can be performed only in definitive production forest; and/or limited production forest. Exchange of forest land can be performed for permanent developmental activities for non- forestry purposes, eliminating enclave in order to facilitate forest management area or improving forest boundaries. The forestry law confirms that the exchange of forest land can only be performed if it meets the fixed provisions guaranteeing forest area of at least 30% of the watershed area, islands, and/or provinces with proportional distribution; and maintain feasible carrying capacity of forest area to be managed. If the forested area is less than 30% of the watershed area, islands, and/or provinces with proportional distribution, then the exchange of forest land with non-forest land is performed using the ratio of at least 1:2, except for forest land exchange to accommodate victims of natural disasters and for limited public interests can be done with a minimum ratio of 1:1. If the total forested area is above 30% out of the total watershed area, islands, and/or provinces with proportional distribution, then exchange of forest land with non forest land can be done using the ratio of at least 1:1. Although theoretically development of plantation is possible through exchange of forest, in practice it is very difficult to find area large enough to be exchange into plantations. Therefore, the scheme of developing plantation through forest exchange is very rare. Plantation development scheme most commonly practiced today is the release of forest. The release of forest area can be executed for non-forestry development activities.

According to the Forestry law, release of forest area can only be performed on convertible production forests. However, convertible production forests do not apply to provinces having a total forest area of less than 30%, except through exchange of forest land. Thus, the development of plantation over ex-forest land under the release of forest land scheme without providing replacement can only be done in convertible production forest, which is usually known as APL (other land uses) or KBNK (non-forestry cultivation area), in provinces with forest area of more than 30%. In general, estate investors will choose this scheme because the plantation status is no-longer forest, thus can be use as concession rights for bank's collateral.

[76] Nurrochmat DR (2011). Pendanaan SFM & Mitigasi Perubahan Iklim di Sektor Kehutanan. Workshop Opsi Pendanaan (Financing Option) Mitigasi Perubahan Iklim di Sektor Kehutanan. Jakarta, 20 September 2011.

Furthermore, investors can grow unlimited plantation commodities in terms of total number and species composition for the plantation.[77]

The second instrument has to be considered in developing institutional framework finance of REDD is **administrative infrastructure**. It involves an effective bureaucracy in the practices of forest administration related to inputs, processes, and outputs.[78] Bureaucracy is the way that the administrative execution and enforcement of legal rules is socially organized.There are three indicators for the effective bureaucracy, i.e.[79]

- Clear division of authority
- Clear division of tasks and responsibilities
- Clear procedure of works

The administrative infrastructure related to REDD+ in the context of sustainable forest management covers three main aspects covering tasks and authorities of the central and regional government, fiscal administrations, and forest services. Attention of the government to participate in suppressing the rate of green house gases increase through reducing deforestation and forest degradation is reflected through the issuance of Forestry Minister Regulation P.68/Menhut-II/2008 concerning Demonstrative Activities of Carbon Emissions Reduction from Deforestation and Forest Degradation and Forestry Minister Regulation P.30/Menhut-II/2009 on Procedures for Reducing Emissions from REDD.[80] Licensing procedures for formulating DA REDD regulated in the Minister of Forestry Regulation No. P.68/Menhut-II/2008. While the licensing procedures for the implementation of REDD is regulated in the Forestry Minister Regulation P. 30/Menhut-II/2009.

Although the procedures for DA REDD and REDD licensing have been enacted, however, those regulations are not able to be operated. Both regulations contained only general term of the licensing procedures of DA REDD and REDD but they lacked detail of implementation, such us responsible unit for certain REDD project. Since there are many different kinds of REDD schemes, therefore the unit who responsible for the licensing would be also different. Those regulations did not mentioned the responsible unit for the various REDD's location related to the different forest functions or schemes related to the forms of business unit (problem of unclear procedure). In developing infrastructure of REDD the four aspects of regulative, administrative, fiscal and informative could not be separated. Therefore, Law 33/2004 on Fiscal Balance, Law 32/2004 on Regional governance, and Law 41/1999 shall be put as integral legal basis of forest governance and thus also infrastructure framework of REDD. Fiscal balance law deals with the fund raising mechanism of the region among other by regulating sources of regional income. This law also regulated fund distribution mechanism from central to the regions. According to fiscal balance law, the region received most portion of income distribution from forestry sector.

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[77] Nurrochmat DR (2011a). Review infrastructure framework and mechanism related to SFM as important option in reducing emission from deforestation and forest degradation. ITTO Project Report. Indonesia Ministry of Forestry.
[78] Id.
[79] Weber M (1947) reprinted 1997. The Theory of Social and Economic Organization. Free Press.
[80] Nugroho B (2010). Kelembagaan AR/CDM dan REDD: Tantangan dan Agenda. Disampaikan pada: Capacity Building on Carbon Forestry Mechanism. Bogor, 2-4 Februari 2010.

In addition to regulative and administrative infrastructures, the third instrument has to be considered in formulating institutional framework finance of REDD+ is **fiscal infrastructure**. Besides Law 33/2004 fiscal on forestry sector is also regulated by Law 41/1999 and some other related laws. Law 41/1999 on forestry basically regulated many tarrifs in forestry business.Tariffs are fiscal instruments most frequently used and influential in determining the performance of forest management. In an effort to ensure the existence of forest areas, the sustainability of forest function, optimal utilization of forest products, control of forest used by forestry sector itself and by other sectors, as well as to ensure the fulfilment of life of the community and the lives of flora and fauna, provision of clean air, water, or other environmental services, it is necessary that the operational activities of management and utilization of forest should be regulated by the forestry tariff instruments. In terms of legislations in the Republic of Indonesia, the implementation of forestry tariffs instrument is largely embodied in the form of Non-Tax State Revenue.[81]

As part of the forestry sector, REDD+ scheme would be associated with various regulations concerning forestry tariffs or fees. In the implementation level, imposition of forestry tariffs including environmental services, not only refers to a specific legislation but also greatly associated with the other sets of rules. Forestry tariff imposition in the form of non-tax state revenue from forest management activities, utilization of forest products, as well as the use of forests are strategic instruments in the effort to ensure the sustainability of forest functions and enhance the contribution of forestry sector for the national and local revenues. Based on the type, rate or levy can be broadly divided into three groups, namely: taxes, retribution, and non-tax state revenue.

One of the most important source of revenue for the country is tax, of which approximately 90% of state revenue derived from taxation. Tax is a levy imposed by the government (central or local) to the tax payer without remuneration that can be directly appointed.[82] Taxes can be divided into two categories, namely: direct taxes and indirect taxes. Direct taxes are taxes whose burden should be borne by tax payers, while indirect taxes are tax burdens that can be shifted to others. Examples of direct taxes are individual income tax and corporate income tax or corporation tax. While example for indirect taxes include mining tax, property tax, sales tax on luxury goods. As with taxes, retribution is a levy imposed by the government and must be paid by the tax payers or the people, who imposed with provisions. However, different from taxes, retribution is imposed on services provided by government. Therefore, remuneration of retribution can be directly assigned, such as the use of space, natural resource extraction, forest use, licensing of forest concessions and so forth. Thus, retribution can also be defined as a levy imposed by government to the retribution payers on goods or services supplied by the government. Retribution is divided into three categories, i.e. retribution for license, retribution for business services, and retribution for social services. Retribution can be classified as non-tax state revenue, because other state revenues can be either a fine, confiscation, printing money,

[81] Nurrochmat DR (2011a). Review infrastructure framework and mechanism related to SFM as important option in reducing emission from deforestation and forest degradation. ITTO Project Report. Indonesia Ministry of Forestry.

[82] Suparmoko M and DR Nurrochmat (2005). Urgensi Implementasi PDRB Hijau di Sektor Kehutanan. Laporan Kajian. Badan Planologi Kehutanan. Departemen Kehutanan, Jakarta.

inflation, grants and so forth. Non-tax revenues are state revenues that are not derived from tax revenue. Non-tax revenues are regulated by Government Regulation and collected from each department and non-department institutions. The existing levy from forestry sector is mostly non-tax revenues.[83]

The forth policy instrument has to be considered in formulating institutional framework finance of REDD+ is **informative infrastructure**. This infrastructure is critically needed because one of the most important elements in communicating policy on REDD is information. The information is the basic and most common political instrument for regulating human action, which affects people's decisions and actions in two completely different political levels, i.e. public awareness and power. Information is needed to see how the interests. Moreover, the stakeholders can also make themselves a picture of the real situation. So, it could say that *"the most important aspects of information are clarity, consistency and truth in terms of corresponding to reality"*.[84]

There were many indubitable evidences that interest is one of the most important factors in driving force of environmental politics, included REDD+ schemes. The confusion, contradictions, selfishness, or hypocrisy characterize the political process. Interests are based on action orientation, adhered to by individuals or groups, and they designate the benefits the individual or group can receive from a certain object, such as a forest. Interests are geared to the benefits gained by the political player or stakeholder. To reveal the key interests, the three dimensions of ecology, economy and social factors can be of help.[85] The REDD+ schemes could be implemented successfully if they involved in the policy agenda-setting. There are two most important elements of agenda-setting, i.e. awareness and information. The agenda-setting process is an ongoing competition among proponents of an issue to gain the attention of the media, the public, and policy makers. The REDD+ scheme would be successful when it is supported by proper information on REDD+ in the media agenda, the public agenda and the policy agenda.[86]

3.1.1 Parties Involved

Government's commitment to reduce global climate change impact caused by the increase of carbon dioxide concentration, in order to voluntarily decrease glasshouse gas up to 26% in 2020 with own effort and without action plan or 41% (with international effort), is stated in PERPRES No. 5/2010 on RPJMN 2010-2014. The regulation affirms sustainable development in all aspects and area of national development, and covers activities related to mitigation and adaptations steps towards climate change. At least there are 12 parties can be identified involving in implementation of REDD+ in Indonesia. Parties involved and their job descriptions can be seen on the following table:

[83] Nurrochmat DR (2011a). Review infrastructure framework and mechanism related to SFM as important option in reducing emission from deforestation and forest degradation. ITTO Project Report. Indonesia Ministry of Forestry.
[84] Brewer *et al.* (1983) cited in Krott (2005). Forest Policy Analysis. Springer Verlag.
[85] Grundmann 1998; Krott (2005). Id.
[86] Adapted from Dearing and Roger (1996). Agenda Setting. Thousand Oaks. SAGE.

Table 8. Parties Involved in Implementation of REDD+ in Indonesia[87]

No.	Party	Job Describtion
1	International/National Entities	• Make payment for every sold REDD+ certificate
2	REDD+ National Commision	• Conduct REDD+ training • Manage data and information of REDD+ implementation • provide advice on technical and institutional qualification of REDD+ location • issuing trade certificates recommendation
3	RDDD+ Local Commision/ Working Group/Task Force	• Conduct REDD+ training at sub-national level • Manage data and information of REDD+ implementation at sub-national level • Provide input / technical considerations to the National REDD+ for performance verification of emission reductions generated • Provide input / technical considerations to the National Commission for the development of recommendations REDD+ trade certificate
4	Ministry of Forestry	• Conduct monitoring and reporting of emission reductions that are targeted at national level • Issuing of trade certificates • Establish rules for a nominal fee for each certificate sold REDD+ • Receive allocation of REDD+ Redistribution Funds/Dana Bagi Hasil (DBH) to the central government as the National Safeguard Fund (Dana Jaminan Nasional) REDD+ • To coordinate efforts to prevent leakage at the national level • Set up mechanisms of reward and punishment in the sub-national level based on performance achieved • Providing accurate relevant data
5	Ministry of Finance	• Establish rules for the regulation of Redistribution Funds from REDD+ • Receive payments from the international rsources • Distribute REDD+ Redistribution Funds to provincial and district government
6	Bappenas	• coordinating national REDD+ activities • developing and monitoring of REDD+ national strategy
7	Climate Change National Board	• Facilitating activitis relating to REDD+ climate change

[87] Kementerian Kehuatanan (2010). Bagaimana Mekanisme distribusi: Peran dan Manfaat REDD + yang Efisien dan Berkeadilan, in Policy Brief Vol. 4 No. 6/2010. p.4

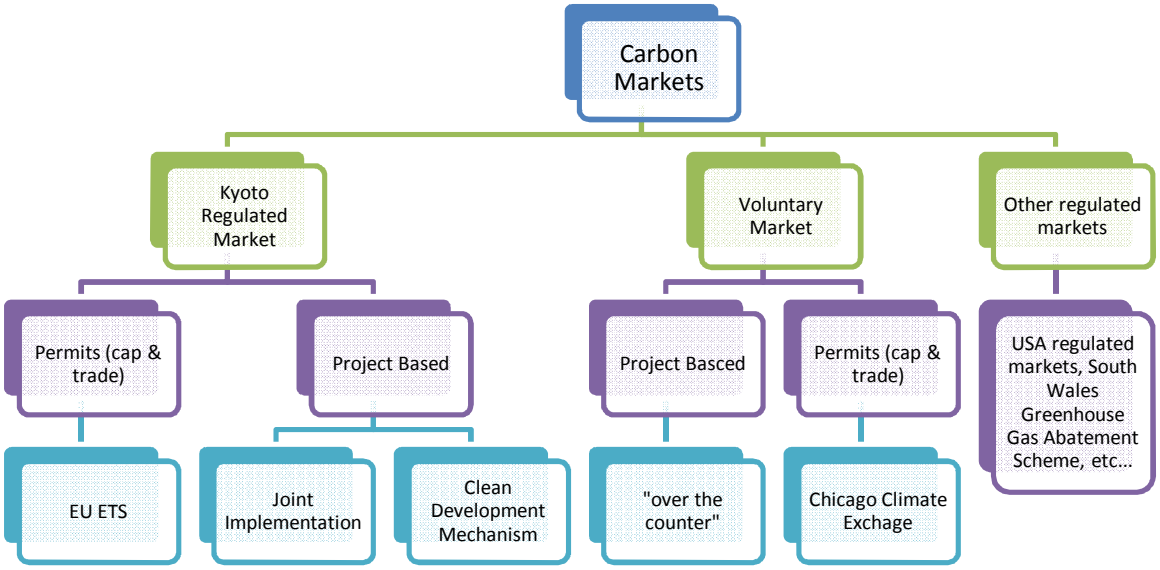
8	Province/District goverment: *Dispenda*	• Monitoring and reporting on emition reduction as targeted at sub-national level • Receive REDD+ Redistribution Funds allocation from Cenral Government (Ministry of Finance) • Distribute REDD+ Redistribution Funds allocation to related agencies through financing programs • Distribute REDD+ Redistribution Funds allocation to communities through financing programs
9	Administrator	• Selling resultant REDD+ credits into the international market • Make a deal with the international entities • Undertake activities to reduce emissions from deforestation and degradation • Monitoring, verification, and reporting on the achievement of emissions reductions • Receive payment for every sold REDD+ certificate • Implement a social obligation to contribute to the distribution of forest communities through direct and indirect incentives
10	Community	• Implement efforts to reduce emissions as agreed in the REDD+ proposal • Receive incentives for emission reduction activities that have been implemented
11	Presidential Work Unit for Development Supervision and Control/Unit Kerja PresidenBidang Pengawasandan PengendalianPembangunan (UKP4)	• Responsible for setting up the REDD+ institutional framework in order to implementation of LoI with Norway, in terms of preparation: national REDD + strategies, institutional, funding, MRV, and the selection of pilot project
12	Independent Assestment Agency	• Receive a mandate from the REDD+ Commission to verify the achievement of emission reductions

3.1.2 REDD+ Source of Funds and Its Mechanism

Financing Mechanisms for REDD+

There are three types of carbon markets: (1) the market that aims at achieving the commitments under the Kyoto Protocol (Kyoto regulated marked); (2) the regulated market outside the Kyoto Protocol, and the market that is trading voluntary emission reductions (voluntary markets). In each market, two modalities of trading options can be distinguished: (i) permits or allowance trading, and (ii) project-based trading. Forest-related mitigation options are included in the Kyoto-regulated market (CDM Afforestation and Reforestation) and in the voluntary market (planting forests and avoiding deforestation).

Figure 5. Types of Carbon Markets[88]



The REDD+ financing has been proposed as the three current mechanisms for forest carbon offsets have proved to have a limited impact:

- By March 2009 the CDM, the only mandatory scheme covering forest-based carbon offsets, has been able to approve only two Afforestation and Reforestation or A/R projects. There are about 30 projects in the pipeline suggesting that there is a potential supply for A/R which has not been possible to meet by the Mechanism. Three problems have made CDM financing cumbersome in forestry: (i) there is a lengthy process of 1-2 years in getting CDM projects fully formulated, validated and approved, (ii) transaction costs are so high that smaller projects are not viable, and (iii) particular characteristics of forestry projects related to additionality, leakage and permanence which are not required in the well functioning energy sector part of the CDM markets. For these reasons many feasible projects for CDM have in fact been introduced to the voluntary markets.
- The non-Kyoto regulated markets in the United States and Australia (New South Wales) cover forest carbon offsets but they are still small compared to the Kyoto regulated CO2 markets.
- The voluntary over-the-counter (OTC) markets are currently the only source of carbon finance for avoided deforestation. Forestry-based credits account for 36% of the total

[88] Simula M (2009). REDD Finance Mechanisms, TFD Background Paper, p.5. Accessible at http://unfccc.int/files/methods_science/redd/application/pdf/tfd-redd-finance-background-paper.pdf

voluntary market (USD 331 million in 2007) and have been able to also incorporate small-sized projects[89].

Avoided deforestation which involves forest conservation through various measures had access to the early Joint Implementation (JI) and Activities Implemented Jointly (AIJ) carbon offset schemes in Europe and the United States, respectively. These schemes were implemented in the 1990s and were targeted at the private sector. They demonstrated that a potential demand exists and that implementation capacity can be rapidly built up by the private sector[90]. Even though in the short run the unregulated market is likely to play a critical role in developing new ways of implementation, it cannot provide a substantial solution and therefore other mechanisms for REDD+ financing have been proposed. REDD+ activities in developing countries can be financed through three main options[91]:

(i) a voluntary fund could operate at the national (i.e. uni- or multilateral) or international scale raising funds e.g. from Official Development Assistance (ODA) and other public and private sources;
(ii) a direct market mechanism for REDD credits would be traded alongside existing certified (or verified) emissions reductions (CERs), and could be used by companies in Annex I countries to meet emissions targets in their national cap-and-trade systems; or
(iii) a hybrid/market-linked mechanism would generate finances through either an auction process or by establishing a dual-market in which REDD credits are linked to but are not fungible with existing CERs. Norway's proposal to auction Assigned Amount Units (AAUs), the Center for Clean Air Policy's "Dual Markets" approach and Greenpeace's TDERM are examples of market-linked mechanisms.

Recent developments and the weaknesses and strengths of each option suggest that a combination of these approaches may be needed to address the specific forest and socio-economic conditions and particular needs of developing countries. A common critical requirement for all the options is good governance to make contractual, performance based REDD+ financing effective in practice.

Market-based Approach Implementation

The role of market-based approach to be implemented on sub-national or project level is one of the contentious issues in the REDD+ financing options. It has been seen problematic for a number of reasons such as (a) interfering in the developing countries' sovereignty, (b) possible conflicts or difficulties related to the property rights of the forest carbon, (c) slowness of the complicated but necessary policy and institutional reforms which would lead to long delays in the implementation, etc. On the other hand, advocates for the market-based approach argue for (i) possibility for a rapid implementation start, (ii) large-scale funding potential as ODA and

[89] Hamilton K, Sjardin M, Marcello T and Xu G (2008). Forging a Frontier: Status of Voluntary Carbon Markets 2008. Katoomba Group's Ecosystem Marketplace and New Carbon Finance. 8 May 2008.
[90] Costa MP (2008). Avoided Deforestation as a GHG Mitigation Compliance Activity. EcoSecurities Group Plc.
[91] Global Canopy Program (2008). The Little REDD Book. A guide to governmental and nongovernmental proposals for reducing emissions from deforestation and degradation. Oxford.

other public sources may not be able to match the needs in a sustained way, (iii) possibilities for effective risk management as problems of implementation are easier to address at local than national level, etc. However, even in this case the governments' role would be crucial to create an enabling environment for the markets (a) to set up necessary national-level rules and rights for actors, (b) to contain other land use pressures on forests (incl. revision of land-use related fiscal and other incentives), (c) to map and plan land use and identify priority areas for REDD implementation, (d) to establish reference levels and monitoring systems of deforestation, degradation and leakage, etc.[92]

Recognizing these issues, a "nested" approach has been proposed *by Centro Agronómico Tropical de Investigación y Enseñanza (CATIE)* and supported by several Latin American countries drawing on the pioneering experience of Costa Rica. It aims to address project-level risk within national-level accounting mechanisms, i.e. individual carbon projects would not be credited unless the overall country emissions reductions were below the national reference level. This represents a joint public and private sector engagement in implementing REDD+. Obviously, both private sector investors and intermediaries (financing institutions, traders, certifiers, verifiers, consultants, etc.) in developed countries have an economic interest to promote the market-based approach for REDD+ financing. A key argument against market-based approaches has been possible risk of flooding the international carbon market with REDD+ credits if they are fungible with other carbon credits. The theoretical potential supply of REDD+ credits is large, their delivery costs are estimated to be low[93] and they could depress the international carbon prices having a negative impact on reducing carbon emissions elsewhere and in other activities. As a solution to this problem, Costa (2008) has proposed raising emission reduction targets, creation of (temporary) market quotas for REDD credits, or, as proposed by *Ogonowski et al.* (2007), creation of dual-markets[94]. To address the problems related to the market-based approaches, Greenpeace has proposed a Tropical Deforestation Emissions Reduction Mechanism (TDERM) which would be a hybrid market-linked fund which would trade REDD credits that would not be fungible with the current CDM market and the price of these credits would be set either by auctioning or by setting a price linked to the price of Kyoto credits.

In order to address the inherent and varying constraints in developing countries and the need build up implementation capacity, a phased approach for REDD financing has been proposed by the Angelsen *et al*.[95]

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[92] Costa MP (2008), *supra.*

[93] The costs would vary between countries and forestry situations. The lowest cost estimates based on opportunity costs start from less than USD 0.10/tCO2. Stated in Woods Hole Research Centre. 2007: The Costs and Benefits of Reducing Carbon Emissions from Deforestation and Forest Degradation in the Brazilian Amazon. 26 pp.

[94] The Dual Markets approach specifies the creation of a new carbon market for emissions reductions from deforestation and degradation that is linked with the overall reductions achieved by developed countries in the post-2012 timeframe, but is only partially fungible with the post-2012 global carbon market. Developed countries would commit a percentage of their post-2012 target to come from the REDD market. For example, if a country committed to an overall 30 percent reduction, they could also commit that 5 percent of that reduction would be generated through financing REDD activities in developing countries—the other 25 percent would come through domestic reductions or through purchasing reductions in the non-REDD post- 2012 carbon market. *(Ogonowski M, Helme N, Movius D & Schmidt, 2007. Reducing Emissions from Deforestation and Degradation: the Dual Markets Approach. Center for Clean Air Policy. Working paper. 20 pp.)*

[95] Angelsen A. (ed.) 2008. Moving Ahead with REDD Issues, Options and Implications. CIFOR. Bogor

- PHASE 1: An initial support instrument that allows countries to access immediate international funding for national REDD strategy development, including national dialogue, institutional strengthening, and demonstration activities.
- PHASE 2: A fund-based instrument that allows countries to access predictable REDD finance, based upon agreed criteria. Continued funding under this instrument would be results-based, but performance would not necessarily be monitored or measured only on the basis of emissions and removals against reference levels. Performance would be related to the implementation of National REDD Strategy Policies and Measures (PAMs).
- PHASE 3: A GHG-based instrument that rewards performance on the basis of quantified forest emissions and removals against agreed reference levels. In this phase transition from global facility to integration with compliance markets would take place.

Phase 1 would be financed by voluntary contributions, Phase 2 by a global facility which could be a unitary fund or a clearinghouse that records eligible bilateral and multilateral contributions. To ensure predictability, international REDD financing should be clearly identified and funding commitments firm, verifiable, and enforceable. International REDD finance would complement domestic funding by developing countries in accordance with their respective capabilities, taking into account preexisting national efforts and expenditure in sustainable forest management, forest protection, and forest inventories.

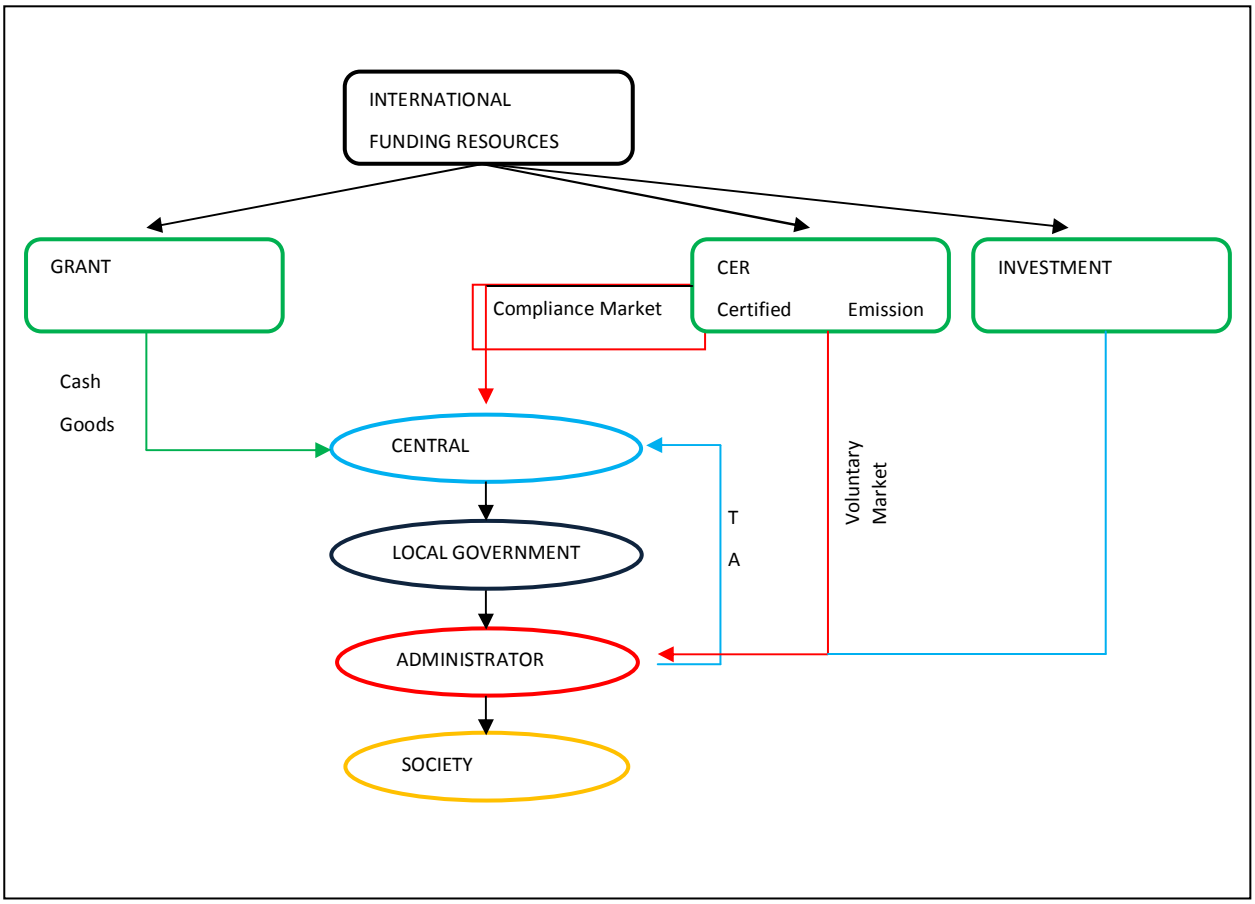
The proposal by Angelsen *et al*. (2009) includes elaboration of Phases 2 and 3 in detail including how eligibility for country participation in different phases could be determined and how financing mechanisms could evolve. Financing would start with initial voluntary contributions in Phase 1, then including various options in Phase 2 (e.g. involving various types of international levies), and finally in Phase 3 providing large-scale international finance including from private sources via global compliance carbon markets and/or domestic emission-trading schemes. The proposal contains many elements of what could constitute an "ideal" approach to REDD financing as it addresses (i) capacity building, (ii) flexibility for entry by countries in different stages of development, (iii) performance-based payments starting with implementation of policies and measures to "deliver" climate mitigation, and (iv) integration of large-scale financing from a variety of sources, including from the private sector through carbon offset markets.

Mechanism and distribution of REDD+ payments could be classified from the source of funds used for or acceptance of REDD+ activities, namely (1) *Grants*, (2) *Funds from the sale of CERs*; or (3) *Investment fund*. These funding sources will affect the mechanisms and REDD payment distribution as in **Figure 6**. It can be seen that if the funding comes from international entities of grant funds, the fund flow mechanism through the central government, and distributed to local governments, then to administrator, from administrator then distributed to the public/community. Community that is intended respondent is affected communities, communities that are directly related to REDD+, institutions such as universities and NGOs to conduct a study of forestry. Administrator have an obligation to pay taxes (income tax and VAT), as compensation for the use of forests for REDD+ efforts. The second strand that is when the money comes from a pure investment, then these funds could be channeled directly to the

administrator, and administrator have an obligation to pay taxes on investments made in the form of income tax and VAT.

Different conditions occur if the funding comes from the sale of CERs, it must be distinguished here whether the market is going is voluntary market or tied market (compliance market). If the market is going is voluntary market, the delivery mechanisms and distribution of funds could follow as funds from the investment, but if the market is the market compliance mechanisms of distribution of funds through the central government, and then distributed to local governments, adminsitrator and the public/community.

Figure 6. REDD+ Funding Resources and Mechanism



3.1.3 Grants

Government Regulation No. 10/2011: a Legal Basis for Grants Acceptance

Government is authorized to receive grants. Authority are exercised by the Minister of Finance as the representative of the recipient, and may be endorsed to the Minister/Head of Agency or other designated official. Acceptance of the grant carried out without political ties or bonds that may be detrimental to the State, such as:

a) Acceptance of a grant that required for a particular political alliance;

b) Acceptance of the grant:

   i) binding the government to make foreign loans for activities that are not priorities and / or does not meet the criteria for eligibility of activities;

   ii) result in an obligation to provide matching funds and / or other requirements which are economically and financially not feasible, and the financial burden of the State;

   iii) result in the maintenance costs are very expensive;

c) Receipt of grants for activities that are inconsistent with the direction of national development.

Based on the principle of universality in the State finances, basically, any grants received by the government constitutes acceptance of the State, so it should be noted in the State Budget. In order to support the realization of good governance in the administration of the State, the management of foreign grants must be organized in a transparent, accountable, efficient and effective and meet the precautionary principle. In this context, the Government has issued Government Regulation/Peraturan Pemerintah (PP) No. 10/2011 on Procurement of Foreign Loans and Grants Acceptance. PP No. 10/2011 is the replacement of PP No. 2/2006, to improve the effectiveness and efficiency of utilization of foreign loans and grants. The government regulation on receiving the grant, aimed at opening the widest possible inclusion of a grant to the Government whether from domestic or foreign, but while maintaining prudence aspect, transparency, and accountability in the process of acceptance. In order to fulfilling those principles the Ministry/Agency/Local Government should be authorized to seek grants as much as possible but still considering the principles of good grant acceptance.

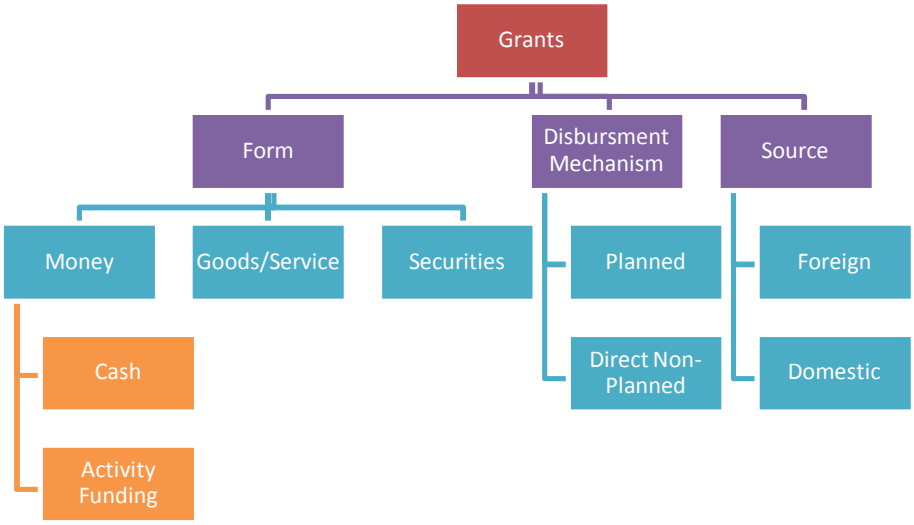
Previously, the complex bureaucratic process in the acceptance and management of grants, may pose a disincentive for prospective grant donor because it seemed complicated. Therefore, in PP No. 10/2011, the mechanism of grant acceptance is simplified. The simplification is implemented through the grant mechanism which is divided into Planned Grants mechanisms and Direct Grants mechanism with registration and administration process. Acceptance of the provisions of PP No. 10/2011 is expected to bridge the different perspectives from the donor candidates who think that grants acceptance as a complex process, and the Government who wants to maintain the administrative procedure in this process.

Forms and Types of Grants

Grants can take form of cash; money to fund activities; foreign exchange, the goods/services and/or securities acquired from the grantor in the country and abroad. Grants received by Government in cash, directly deposited into the State Treasury or the account specified by the Minister of Finance as part of state revenue. Its use is entirely determined by the Government through the APBN (state budget mechanism). Grants in the form of money to finance the activities is grants received by the Government with its designations are specified in the Grant Agreement. This mechanism is implemented by the Ministry/Agency or local government grant recipients, through the mechanism of APBN. Grants in the form of goods/services are received government grants which is its goods/activities procurement implemented by the Giver of

Grant/Donor. This grants are intended to support the activities of the Ministry/Agency, the Regional Government. The grant is valued in the currency of rupiah at the time of goods/ services handover, to be recorded in the Central Government Financial Statements. Grants in the form of securities may be form by ownership stake in the company, valued in the currency of rupiah based on an agreed nominal value at the time of the handover by Donor and Government, to be recorded in the Central Government Financial Statements, and need not be included in the document execution budget. Governments may receive grants in the form of money to finance, through the Trust Fund. Receipt of grants by type of grant is categorized by planned and/or direct/non-planned grants.

Figure 7. Grants Clasification[96]



Mechanism of Planned Grants Acceptance

1. Based on Medium Term Development Plan/Rencana Pembangunan Jangka Menengah (RPJM), Minister of Planning making plan for medium and annual term activities, which include:
    a. grants utilization plan, which contain policy direction, strategy, and use of grants
    b. List of Grant Activity Plan/Daftar Rencana Kegiatan Hibah (DRKH), which includes an annual plan of activities of Ministries / Agencies, Local Government worth to financed with a grant, and has received indications of Donor.
2. Minister/Head of Agencies proposed activities to be funded with a grant to the Minister of Planning.
3. Minister for Planning assesses the proposed activity, based on the fiber RPJM grant utilization plan.
4. Assessment results poured in DRKH, and submitted to the Minister of Finance.
5. Minister of Finance proposed activities funded by a grant to the Donor.

[96] Based on Government Regulation No. 10/2011 regarding Procurement Procedures for Acceptance of Foreign Loans and Grants Minister of Finance Regulation (PMK) No. 191/PMK.05/2011 "Grant Administration Mechanism"

6. Grant Negotiation planned by the Finance Minister or officials who are authorized, with the involvement of elements of the Ministry of Finance, Ministry of Planning, and Ministry/technical institution concerned.
7. Foreign Grants Agreement/Naskah Perjanjian Hibah Luar Negeri (NPHLN) signed by the Minister of Finance or an authorized officer and the grant giver.
8. NPHLN is then registered by the Ministry of Finance.

Mechanism of Direct/Non-Planned Grants Acceptance

1. Minister/Head of Agency reviewed the intent and purpose of the grant.
2. Minister/Head of Agency consulting to Minister of Finance, Minister of Planning and Minister/Head of other relevant institution about direct/non-planned grants receiving plan in the current year, prior to the signing of the Grant Agreement.
3. Grants negotiations conducted by the Minister/Head of the agency or officer authorized.
4. Foreign Grants Agreement/Naskah Perjanjian Hibah Luar Negeri (NPHLN) signed by the Minister of Finance or an authorized officer and the grant giver.
5. NPHLN shall be registered by the Ministry of Finance.

3.2 REDD+ Financing Mechanism Through CERs

Voluntary and Compliance Market Mechanism

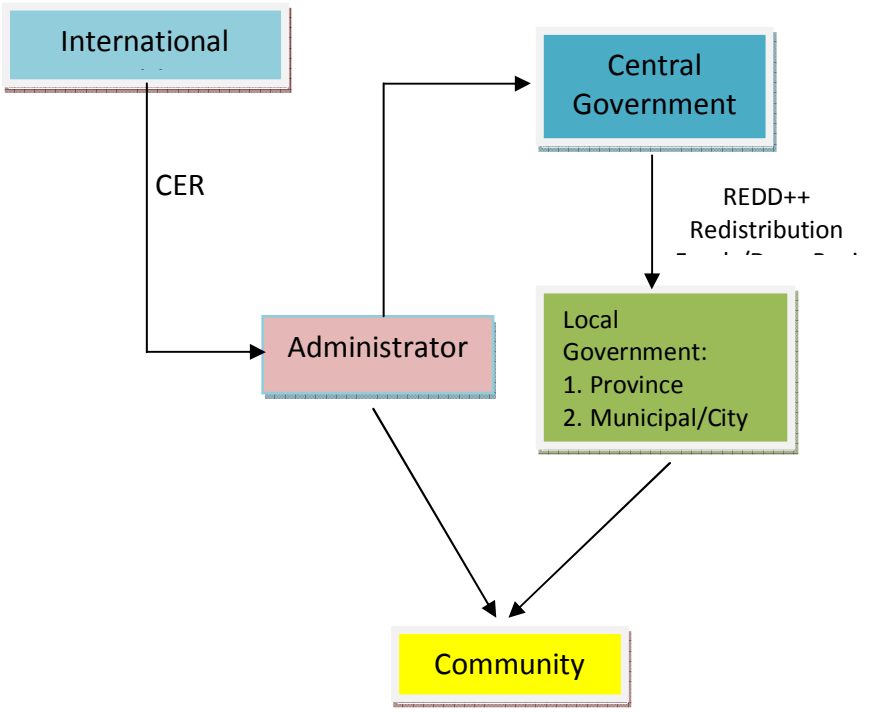
The REDD+ funding could be based on market-based funding or under funding assistance. Market based funding consists of Voluntary Market[97] and Compliance Market[98] mechanisms. Mechanism and distribution of REDD+'s payments are expected to be efficient and well targeted. The design of this mechanism depends on the type of market are facing. Before the Compliance Market approved in the conference COP UNFCCC, the Voluntary Market can be implemented as an effort to prepare legislation and institutional aspect of REDD+. In the Voluntary Market, international entity may have to deal with the owners of the land or the holder of a license for utilization of forest, with or without a third party, as a developer.[99] In the case of forest area, the government as owner of land may impose levies on various instruments of economic rents generated from the business of carbon sequestration or storage. Mechanisms for the voluntary market schemes that can be seen in the following figure.

[97] Voluntary market: the market that uses a carbon emissions trading mechanism, but runs out of international agreements, and pure of individual initiative.

[98] Compliance market: the carbon market under the rules of an international agreement setting targets for emissions reductions in developed countries to purchase emission reduction credits from emission reduction projects undertaken in developing countries.

[99] Ginoga K, Nurfatriani F and Indartik (2010). Mekanisme insentif dan pendanaan REDD+ . Dalam REDD+ & Forest Governance. Pusat Penelitian dan Pengembangan Perubahan Iklim dan Kebijakan, Bogor. pp : 53-74.

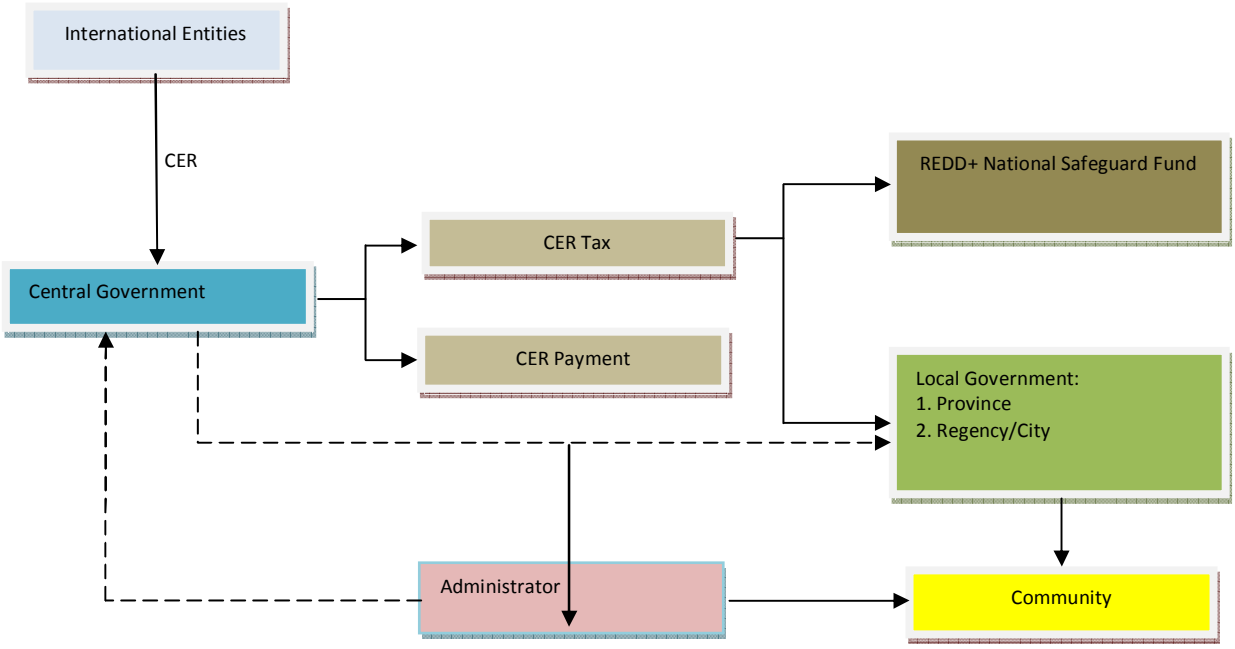
Figure 8. REDD+ Incentive Distribution through Voluntary Market[100]



In the Voluntary Market schemes, which in this case the buyer is an international entity, can make payments directly to the Administrator based on the reduction of carbon emission certificates generated (REDD+ certificates/Certified Emission Reduction or CERs). In the Compliance Market scheme, the acceptance of sold CERs are enter into the Central Government before being routed back to the Administrator after being cut for business license fees and levies on CERs certificate sold.The revenue derived from the sale of REDD+ certification is the right of Administrator. If the REDD+ location is in the forest area, then the Administrator has the obligation to pay rent to the state in the form of REDD+ activities license fees and levy on REDD certificates being sold. This license fee is paid once the concession period, while the levy on CERs based on carbon volume sold (per ton C equivalent). In Compliance Market, the role of a central government for funds from bilateral and multilateral negotiations will be managed centralized and then distributed to the parties involved in REDD +. Stream of payments for market compliance scheme are as follows:

[100] Badan Penelitian dan Pengembangan Kehutanan (2010). Policy Brief: Bagaimana mekanisme distribusi Peran dan Manfaat REDD+ yang Efisien dan Berkeadilan, Bogor

Figure 9. REDD+ Incentive Distribution through Compliance Market[101]



Mechanism for the distribution and proportion of REDD+ license fee is following Government Regulation No. 55/2005 regarding Financial Balance. Proportion between Central Government and Local Government to the results of REDD+ license fees is 20% for Central Government and 80% for Local Government, with details of 16% to 64% for Provinces and Districts. Part to the Central Government is allocated to REDD+ National Safeguard Funds. While the mechanism for the distribution and proportion to levies on REDD+ certificate being sold is following the proportion of Redistribution Fund, amounting to 60% for Central Government and 40% for the Region. This proportion is on the basis that the implementation of REDD+ based on a national approach involving a multi institutional cooperation. REDD+ administrator has an obligation to contribute to the community around REDD+ implementing location, so there needs to be a benefit allocated to community. Part of the revenues of REDD+ can be given back to the community in the form of alternative livelihoods, such as plant breeding aid, fishery, animal husbandry, handicraft and so on. In addition, the benefit is also can be given in the form of infrastructure development, education, and health infrastructure. Local Government also has to contribute to the society from receiving of REDD+ Redistribution Fund/DBH. Assistance is provided through funding programs that are allocated in the budget of each local government unit. Such programs aimed at empowering community around REDD+ location form of the creation of alternative jobs that do not depend directly on forests.

The main prerequisite to ensure the implementation (practicability) of REDD+ mechanism distribution is the presence of a strong regulatory mechanism concerning the payment and distribution of REDD payments, at least in the form of Government Regulation (PP). This

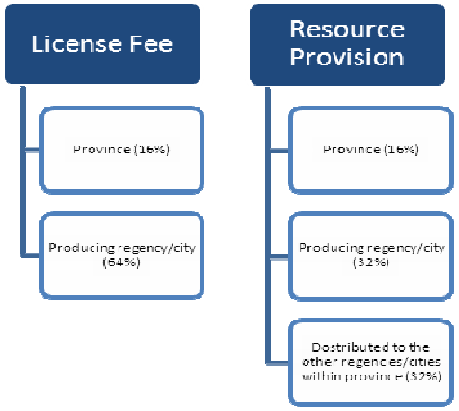
[101] Badan Penelitian dan Pengembangan Kehutanan, Id.

regulation is needed by considering the number of parties involved, including several ministries and the widely impact to community affected by this program. In addition, besides these regulations, the clarity of institutional management of forest lands also needed to be clear and clean. Conflicts over forest land will lead to inefficiency and a reluctance of investment. It is also to ensure that communities live in or around the forest that had been dependent on forests will get a mutual benefit or maybe even better than they have been received so far. The role of the parties involved need to be clarified through regulation given the level of Government Regulation, recalling parties and interest involved in this activities. Strengthened understanding also needed for REDD+ mechanism itself, REDD+ payment transactions, and the rights and obligations between the parties involved in order to obtain clarity in making the payment mechanism and develop agreements with international entities.

3.3 Provincial Level

The institutional framework finance of REDD+ in the provincial level has to follow the Fiscal Balance Law 33/2004.According to the fiscal balance law, the local government (region) shall receive bigger share from the state revenue from natural resources, included forest products. In forestry sector for instance, local government receives 80% of the revenue from Forest Resources Provision (PSDH) and 40% of special fund in form of Reforestation Fund (DR). Fiscal balance received by regions is further distributed with detail as with the **Figure 10**.

Figure10. Distribution of Fiscal Balance from province to regencies/cities



Source: Law No. 33/2004 Article 15 (1-2)

Figure 10 pointed out that generally province government receives 16% of the revenues from license fee of the natural resource business permit such as forest concession permit (IHPH) and natural resources provision, e.g. PSDH. The other 64% of revenue from the license fee is given to the producing regency or city. While, the producing regency or city receives 32% of the revenue from natural resources provision and the other 32% is distributed evenly to all regencies or cities within the same province. Since there is no special regulation of the benefit distribution of REDD+, then the vertical distribution of revenue from REDD+ will be also follow

the existing Fiscal Balance Law 33/2004, especially if the benefits are coming from the "government to government" or "G to G" schemes.

Budgeting and Implementation of Grants by Local Government

Grants is one of Local Region Receipts. There are three resources of Local Region Receipts; Domestic Revenue/*Pendapatan Asli Daerah* (PAD), Balancing Fund/*Dana Perimbangan*, and Other Validity of the Domestic Revenue/*Lain-Lain Pendapatan Daerah yang Sah*. Grants is one variable composing Other Validity of the Domestic Revenue. The government provides grants that come from foreign grants to local governments to carry out activities with the following criteria:

a. Activities into local government affairs;
b. Activities in order to support the conservation of natural resources, environment and culture;
c. Activities in order to call for support for research and technology;
d. Activities within the framework of humanitarian assistance.

Ministry/Agency composing Plan and Budget Grants as part of the Ministry/Institution Work and Budget Plan (RKAKL), including activities conducted by the deconcentration and assistance task, to be included in the DIPA.In accordance with the principles of governance, in implementation of deconcentration, the Government may delegate its authority to the Governor and or Government Official in local area, including those with financing coming from foreign grants.Continuation of Grants to local government set forth in Continuation Grant Agreement (NPPH) between the Minister of Finance or their proxies with the Head of Local Government. NPPH is a integral part of NPHLN, and is effective after the NPHLN is entry in to force. Receipt of grants by local governments is managed and implemented in a transparent and accountable through the APBD mechanism. Based NPPH, Head of Local Government compose a Comprehensive Plan, followed by the Annual Plan in coordination with the Ministry / Agency. Based on the Annual Plan, the KPA-PHD composing Grant Allocation Plan, which is the basis for the later menjad DIPA-PHD.Plan activities that are funded by grants and 'pendamping' funds or other obligations, should be budgeted in the DPA-SKPD each year. The activity plan shall be in accordance with the activities specified in NPHLN, and should receive consideration from the Ministry/Agency and Donor. In the case of Local Government not budgeted/include grants and *'dana pendamping'* (participation funds) in the DPA-SKPD, grant disbursements can not be done.

On the basis of DPA-SKPD and consideration of the Ministry/Institution, Local Government Head, or their proxies submit the Grant Disbursement Request attached with the Absolute Responsibility Statement and related documents to the KPA-PHD. Transfer of continuation grant funding through Special Account to separate accounts as part of RKUD.Local governments maintain that the use of grant funds in accordance with the intent, purpose and provisions required to avoid ineligible expenditure. In the event of irregularities and/or misuse of grant funds from the intent and purpose, the distribution of grants is terminated. In terms of distribution of grant funds are terminated, the Local Government shall fulfil the intent and purpose of the grant with funds from its own APBD.

REDD+ Activity Financing Through Balancing Fund

The main components of local government revenues are the own-source revenues called Domestic Revenue/*Pendapatan Asli Daerah* (PAD) and the transfer from central government called Balancing Fund/*Dana Perimbangan*. The revenue comes mainly from taxes and levies in service activities and vehicles ownership and is collected by local governments directly, whereas the latter come from taxes and levies in natural resource extraction activities and personal income tax and is collected by central government which then partly shared with the local governments. Therefore, resource rich regions could claim that they transfer a significant amount of their income to the national level and other regions although they are still remain significantly better off than their poor neighbors.

The proportion of PAD to the total income can be used as an indicator of the independency of local government revenue. Local governments with high proportion of PAD have a better control over their cash flow management compared to them who rely mostly on the national transfer. It is often the transfer from national government does not go smoothly and has been causing delayed payments[102]. In the last five years, the proportion of PAD to the total local governments' revenues is 17 per cent[103]. The transfers of the national government can then make up by far the biggest part, around three-quarter, of the total local governments' revenue[104]. population and plenty of service sector economic activities, such as all the provinces in Java, generate high PAD. Region with plenty of high value natural resources but low service sector economic activities, e.g. kabupaten Kutai in East Kalimantan, generate high income from national government transfer but low PAD.The transfers come in three forms. They are the General Allocation Fund/*Dana Alokasi Umum* (DAU), the Special Allocation Fund/*Dana Allokasi Khusus* (DAK), and the Redistribution Fund/Dana Bagi Hasil (DBH). While the DAU is generally being used for covering the salary of all public servants (PNS) in the region which commonly called "apparatus expenditure", the DAK and DBH are generally providing funds for so called “development activities”. The difference of the two is that while DAK is earmarked budget, DBH is not. Therefore, regions are in favor with DBH than DAK to allow them greater flexibility in spending their budget. Yet, it is only the resource rich regions and the regions with many people paying income tax, who could earn significant amount of DBH. Besides Balancing Fund, another components composing Government transfers to Local Region are Domestic Infrastucture Development Fund/*Dana Pembangunan Infrastruktur Daerah* (DPID), Domesctic Incentive Fund/*Dana Insectif Daerah* (DID), Grants, and Emergency Funds.

Contribution of Natural Resources Redistribution Fund especially Forestry Redistribution Fund is very dominant in Regional revenues, especially to the region where the forest located. This Regional reveneu sourced from Non-Tax State Revenue/*Pendapatan Negara Bukan Pajak* (PNBP). Forestry Redistribution Funds are expected to fund the implementation of infrastructure development, protecting the environment in post-exploitation stage, reducing

[102] BPK (2008), Pemeriksaan dana perimbangan (fiscal balance fund audit), Majalah Triwulan BPK-RI April-Juni 2008, Badan Pemeriksa Keuangan Republik Indonesia, Jakarta

[103] Departemen Keuangan (2011). Anggaran Pendapatan dan Belanja Pemerintah Daerah tahun 2011 (Local governments' budget plan 2011), Departemen Keuangan Republik Indonesia, Jakarta.

[104] Departemen Keuangan, Id.

the external social impact of community around exploited area, as well as providing a more adequate public services. Based on Government Regulation No. 55/2005, Redistribution Fund (DBH) is a fund sourced from the APBN that are allocated to Regions based on a percentage to local needs in order to fund the implementation of decentralization. Generally, Redistribution Fund (DBH) shall meet some criteria:

a. It must have non-tax revenues,
b. Its nominal is the percentage of non-tax revenues,
c. Allocations in the budget based on the estimated non-tax revenues in one year,
d. Distribution to the regions based on the realization of non-tax revenues in one year.

Forestry Redistribution Funds allocations arrangement in PP No. 55/2005 Section 27 as follows:

a. Technical Ministries provide the 'producing areas' and the basis for calculating Forestry Redistribution Funds at the latest 60 days before the budget year in after consultating with the Minister Home Affairs.
b. In the case of Natural Resources are on adjacent territories or located on more than one area, the Minister Home Affairs set 'producing areas' of Natural Resources is based on considerations of related technical Minister not later than 60 days after considerations from the technical Minister accepted.
c. Decree of the Minister Home Affairs referred become a basis for Forestry Redistribution Funds calculation by the technical Minister.
d. Technical Ministries' provisions referred above shall be submitted to the Minister of Finance.
e. Minister of Finance shall determine the allocation of Forestry Redistribution Funds estimation for each region no later than 30 days after receipt of the provisions from the technical Minister.

There are three types of Forestry Redistribution Funds derived from Non-Tax States Revenues (PNBP) of Forestry's Sector:

a. Provision of Forest Resources/*Provisi Sumber Daya Hutan* (PSDH), the levies imposed as a replacement of the intrinsic value of the results collected from State forest,
b. Reforestation Fund/*Dana Reboisasi* (DR), the funds collected from license holders of Forest Utilization of Natural Forest forming of wood in the framework of reforestation and forest rehabilitation,
c. Forest Utilization Permit Dues (IIUPH), which levies a lisence fee is charged to the Holders of Forest Utilization Permit for a particular forest area which is done once at the time permission is granted.

Considering the REDD+ program is a government priority, then to increase the financing of activities related to REDD+ in the region, it is needed to review the calculation of Forestry Redistribution Funds calculation by adding the portion of Regional. With CERs selling mechanism there will be an additional portion af Non-Tax State Revenues accepted by State from the 'producing area'. This additional revenue could be redistribution back to this area to finance their natural resources protection activities and to improve community life around 'producing areas'.

In accordance with article 39 of Law No. 33/2004, Special Allocation Fund (DAK) allocated to specific local governments to fund special activities that become regional affairs. Specific activities funded from DAK is part of a program that became a national priority and a matter for the region. Priority program mentioned is contained in the Government Working Plan/*Rencana Kerja Pemerintah* (RKP). Technical ministrise propose a specific activities and determined after coordinating with the Interior Minister, Minister of Finance and Minister of Planning. After that, technical Ministers deliver specific activities that have been assigned to the Minister of Finance. Meanwhile, article 51 of Government Regulation No. 55/2005 states that the DAK is allocated to a specific regional to fund special activities that become a part of the priority regional program. Based on those regulation, specific activities of REDD+ program can be funded from Special Allocation Fund/DAK because REDD+ is a program that became a national priority. For this purpose, Minister of Forestry may propose and establish a specific activities related to REDD+ after coordination with the Minister for Home Affairs, Minister of Finance and the Minister of Planning/Head of Bappenas. The Minister of Forestry delivers specific activities that have been assigned to the Minister of Finance, to be calculated of its Special Allocation Fund allocation.

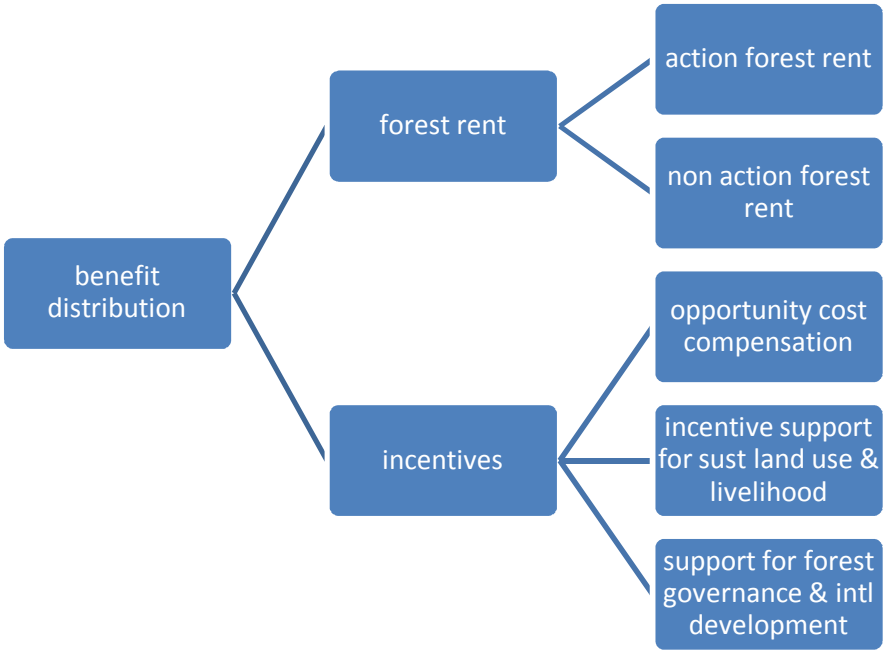
3.4 Disbursement Mechanism

Benefit Distribution System is a mechanism how REDD+ funding can be used and distributed fairlyto all stakeholders. It is also quite brave because, unlike carbon monitoring and other technical challenges, Benefit Distribution System is also potentially raises sensitive issues. It is become quietly comlex and sensitive because:

1) With 21% target by its own efforts and 46% by international support mechanism, this target can only be achieved if the government takes steps to ensure that REDD+ effectively implemented, which include: the development of REDD+ comprehensively; strategies to generate and sustain reductions in emissions at the local level to develop the necessary capacity to measure and report emissions reductions, and management system that meet the requirements of international investors and qualified forest management.
2) REDD+ can not be separated from the UNFCCC negotiations. Although the principles are quite clear, the details remain to be determined. It is therefore not possible at present to determine, how REDD+ should be implemented inIndonesia. However, study and further work is needed to identify the most appropriate approach.
3) Stakeholder involved. This activity not only involving community around project area, there are international entities acted as buyer in CERs mechanism, a private sector administrator, multi institutional organization, academic entities, NGOs and so on.

There are different ways in which benefits in the forest sector may be distributed. These can be grouped into two different benefit sharing types: forest rent and incentives (**Figure 11**).

Figure 11. BDS in Forest Sector



Forest rent

Forest rent includes the distribution of money between stakeholders from revenue or 'rent' derived from the management of a forest resource[105]. Forest rent benefits may be linked with an 'action' on behalf of the recipient, or may not require an action at all:

1) Action-linked forest rent benefits

Rent is shared with subnational or local level forest rights holders according to the level of resource input provided by these rights holders. For example if a community group owns the rights to a 30% share of a forest asset, and provides the labour required to manage and harvest this asset, they may be entitled to approximately 30% of the forest rent in return[106].

2) Non-action-linked forest rent benefits

Stakeholders who hold forest right but do not provide inputs to the management of the forest asset can receive non-action-linked forest rent benefit. Rent is distributed to 'affected stakeholders' who are negatively impacted in some way by the forest management activities[107]. The amount of forest rent transferred may be negotiated

[105] The difference between the market price for a natural product (e.g. a forest product) and the costs of bringing it to market represents economic rent. In: Karsenty A (2000). Economic instruments for tropical forests: The Congo Basin Case. Instruments for sustainable private sector forestry series. International Institute for Environment and Development-CIFOR

[106] Id.

[107] Id.

according to the perceived economic value of the damage or loss caused to the affected stakeholder or according to a preset benefit sharing model[108].

Incentives

Incentives are not directly linked to forest rent, but are monetary or non-monetary benefits transferred to a stakeholder to enable or motivate a particular behaviour[109]. Forest based incentives may also be 'action' or 'non-action' linked[110].

1) Action-linked incentives

In cases where forestry activities have specific objectives, incentives to motivate these activities are often described as benefits[111].

Support for sustainable land use and livelihoods: actions which support land use and livelihoods can be given incentives, even if those actions does not directly located in a public land. For example individual landowners may be offered incentive payments for protecting their forest land, farmers may be offered incentives to establish fruit tree agro-forestry system, community who live in the water sources area may be given incentive to conserve the water sources, etc[112].

Support for forest governance and institutional development: Forest funding programs can support improved forest governance and institutional development for communities, civil society and government[113]. This can create an important long term benefit for forest stakeholders in the future.

2) Non-action-linked incentives

Compensation for opportunity costs: Forest rights holders may have to provide a monetary or non-monetary transfer to other forest stakeholders (e.g. local communities) to refrain from an activity or to cover a loss[114]. For example a forest rights holder may need to provide a payment to a local community to incentivise them to refrain from their preferred economic activity which if carried out, would conflict with the rights owner's forest management plan.

Theoretically compensation covers opportunity costs, but in reality is usually a negotiated amount, formalized through an agreement between the forest rights holder and the stakeholder group receiving the compensation[115]. These compensation benefits are often transferred from the rights owner to stakeholders in accordance with the terms of a contractual agreement.

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[108] Id.
[109] Id.
[110] World Bank, 'Sharing the Benefits of REDD+, Assessing Options for effective mechanism to share benefits', prepared by PricewaterhouseCoopers LLP (Unpublished), p. 6-17.
[111] Id.
[112] Id.
[113] Id.
[114] Id.
[115] Id.

Types of Benefits

The benefits distributed through BDS may not always involve a direct monetary payment and the total benefit delivered may be a combination of many different forms of benefits[116]. Table 9 provides a categorization of forest benefits between monetary and non-monetary benefit types, with illustrative examples of each.

Table 9. Types of forest sector benefits distributed through BDS[117]

Benefit type	Monetary/non-monetary	Form of distribution
Rent		
Forest rent (e.g. direct profit from the sale of timber or non-timber forest products)	Monetary	• Cash payments
	Non- monetary	N/A
Incentives		
Compensation of opportunity costs (e.g. where forest land owners protect forest rather than convert to crop production, the monetary or non-monetary compensation value should be equal to the per hectare commercial value of the crop)	Monetary	• Cash payments • Tax relief
	Non- monetary	• Goods and materials (e.g. seedlings and fertilizers) • Capacity building & training (e.g. forest management) • Social infrastructure and infrastructures (e.g. schools, rural irrigation) • Access to loans on preferential terms • Access to microfinance on preferential terms
Incentives and support for sustainable land use and livelihoods (e.g. funding and capacity building for the establishment of fruit tree agro forestry for smallholder farmers)	Monetary	• Salaries • Cash payments • Tax relief
	Non- monetary	• Formal land titles • Formal access/concession rights • Goods and materials (e.g. seedlings and fertilizers) • Capacity building and training (e.g. forest management) • Increased market access for premium products (e.g. forestry / agricultural commodity certification) • Price guarantees • Cost sharing arrangements • Access to loans on preferential terms • Access to microfinance on preferential terms
Support for forest governance and institutional development (e.g. provision of training to district forestry officers in how to improve support services for communities and the enforcement of community forestry law)	Monetary	• Improved salaries for government staff, non-governmental organizations and community groups to increase retention and reduce relative appeal of bribes
	Non-monetary	• Capacity building and training (e.g. organizational development, financial management, anti-corruption measures, community support) • Provision of capital inputs needed for more effective forest law enforcement (e.g. vehicles) • Formalization of forest governance working groups at national or sub-national level • Organization of regular forest governance and community forestry workshops and consultations • Additional employment benefits for forest department staff

[116] Id.

[117] Peskett L (2011). Benefit Sharing in REDD+ (unpublished). Summary of Costenbader J. (2009). Legal Frameworks for REDD: Design and Implementation at the National Level, IUCN Environmental Policy and Law Paper No. 77 Bonn, Germany: IUCN, Gland, Switzerland in collaboration with the IUCN Environmental Law Center.

Benefit sharing mechanism participants may be divided into to the following categories:

- Funders
- Benefit sharing mechanism beneficiaries
- Managers or administrators
- Implementing agencies [118]
- Independent verifiers

Table 10 provides a summary of these participant categories, the role they play within a benefit sharing mechanism and the stakeholder groups, which may fall within each category.

Table 10. BDS Participants*[119]*

Category	Role	Stakeholder type
1. Funders	Provide funding to cover: • Benefit sharing mechanism establishment costs • Administrative costs • Monitoring costs • Benefit payments • Funding expansion and replication	• Bilateral or multilateral development partners / donors • International NGOs • Private foundations • Private sector (through donation, investment, purchase of ecosystem service rights or tax contributions) • State owned enterprises (in some countries)
2. Beneficiaries	Provide resource inputs, services or access rights to forests in exchange for either: • Forest rent • Compensation for opportunity costs • Incentives and support for sustainable land use and livelihoods • Support for forest governance and institutional development	• Community groups • Individual households • Private land owners • Private sector business
3. Managers or administrators	• Provide fund management services • Administer contractual arrangements with beneficiaries • Monitor, report and possibly verify benefit sharing mechanism performance (verification may be carried out by independent party) • Continually improve benefit sharing mechanism governance & operations based on monitoring findings • Assess long term impacts of benefit sharing mechanism • Contract out parts of the benefit sharing mechanism management process to external providers where appropriate	• National governments and ministries • Local/regional governments • Autonomous trust bodies • Private sector actors • NGOs

[118] The key difference between 'implementing agencies' and 'managers or administrators' is that implementing agencies do not manage benefit sharing mechanism funds but do provide benefit transfer services such as capacity building, land tenure clarification and construction of public infrastructure. For example an implementation agency may be a national NGO which trains communities in small business management, as mentioned in World Bank, 'Sharing the Benefits of REDD+, Assessing Options for effective mechanism to share benefits', prepared by PricewaterhouseCoopers LLP (Unpublished), p. 8-16.

[119] World Bank, 'Sharing the Benefits of REDD+, Assessing Options for effective mechanism to share benefits', prepared by Pricewaterhouse Coopers LLP (Unpublished), p. 8-16.

4. Implementing agencies	• Provide training and capacity building services • Operate monitoring systems • Assist with mapping & demonstrating community land rights (e.g. through collaborative GIS mapping) • Capacity building and training • Develop public infrastructure for the benefit of benefit sharing mechanism beneficiaries	• Government training and capacity building services • Municipal authorities • Lawyers • GIS specialists • Private sector • NGOs • Community groups
5. Independent verifiers	• Verify monitoring & reporting findings from fund manager or administrator • Potential training and capacity building role for fund manager or administrator should this be required	• Verification consultants/ consultancies with specialism in REDD+ or forest sector verification • NGOs with specialism in REDD+ or forest sector verification

Key Elements to Ensure REDD+ Benefit Distribution System Works[120]

Benefit distribution from carbon services payment mechanism will be implemented properly if it meets the following key elements:

Transparent

Transparent measures the degree of openness in the conduct of all activities of the organization, can be a disclosure of information, communication, including in his budget. This principle also ensures that all interested parties involved and get the same information (symmetric information). Stakeholder involvement from early on in the various processes with access to good information, and management (governance) institutions there is also an important consideration in the assessment of transparency. Transparency is an important instrument in building trust (trustbuilding) from stakeholders. Trust is the foundation of any relationship or interaction with stakeholders. With a trust, created a situation conducive easier and easier to perform conflict resolution.

Justice

Distribution payment shall be effective and equitable, which means that each party obtain the proportion of payment in accordance with the rights and obligations. And the need for clearly defined rules governing the provision of rewards and punishment to the performance by each party involved. The deal also needs to be drawn more clearly and explicitly elaborate on the responsibilities and rights of various parties involved. Existing rules, both formal and informal benefits and risks need to ensure a proportionate and fair share of the stakeholders. Equitable distribution of benefits is often an indicator of long-term sustainability of a payment mechanism. Thus distributive justice related to the allocation of benefits from the environmental fee, and procedural justice related treatment of individuals or stakeholders in decision-making must be ensured. In addition, interactional justice in relation to receipt of a fair interpersonal treatment, which is equivalent in respect of each individual stakeholder. The

[120] Gintings A. Ng, Ginoga KL, Sumedi N, Djaenudin D, Nurfatriani F, Indartik dan M Lugina (2011). Pengumpulan Informasi dan Kompilasi Mekanisme Pembayaran Jasa Lingkungan Melalui Penelusuran Literatur dan Internet serta Komunikasi Langsung dengan Stakeholder. Kerjasama UN-REDD dan Badan Litbang Kehutanan, Jakarta

design of REDD payment distribution mechanism (voluntary and compliance market schemes). The design needs to be addressed nationally so that the results can be implemented as fair as possible.

Ease

Payment distribution mechanism should be efficient, is straightforward. Then will serve as an effective incentive in the activities of carbon services. Institutionally not only qualified but also considering the simplicity of form. Institutional building within the organization also needs to be simpler both in process and structure. From the research of Ginoga *et al.* (2010), all respondents would like the system of payment that is not too complicated and bureaucratic.

Expediency

Benefit means a long-term sustainability in terms of nature conservation, prosperity and quality of life. This element considers the allocation of the economic aspects of the real embodiment for equitable society based on principles of mutuality and balance to prevent the occurrence of economic inequality, social conflict, and culture. Similarly, in terms of political expediency in the form of recognition of local institutions including the rights of indigenous peoples, an important consideration. The fulfillment of these principles can improve the motivation of the parties concerned to implement the distribution of payments. So in the long run will ensure the sustainable management of forest resources.

Democratic

Implementation of activity shall accommodate the aspirations and interests of the parties involved. In conducting negotiations on the agreement of each party have the same opportunity. Degree of democratic accountability shall also consider recognition of basic rights of both individuals and groups, especially for indigenous people. Democracy also measured the level of the right to obtain information, and the right of organization assembly and expression are equal. Successful implementation of REDD+ in Central Sulawesi province will greatly depend on the process or its implementation mechanisms. There are several indicators that can be used or prepared their existence as a key element used in the analysis of the advantages and constraints in the activity. There are three indicators in the REDD+ BDS implementation concept namely “equity, effective, and efficient” commonly called “3E”.

Equity (Justice)

Principles of justice which is used in the BDS is that the benefits and costs are divided out and fair. There are trade-offs in the equity principle with effectiveness. Stakeholders will gather both financial dan non-financial profit from certicates sold that affecting in better forest management. Moreover, additional benefits from REDD+ will also flow to the community according to their performance.

Effectiveness

The principle of effectiveness is how the implementation of REDD+ program can provide positive incentives and contribute to the decline in forest carbon emissions. Effectiveness also

shows how far REDD+ BDS support requirements that include performance, permanence of the emissions reduction and prevention of leakage.

Efficiency

The principle of efficiency is defined as administrative procedures to ensure effective BDS in time and cost that ensures minimization of operational costs and maximize revenue BDS to be distributed so that it will optimize the effectiveness of REDD+.

3.5 Definition of the Current Available BDS

The REDD+ could be implemented effectively under a firm forest tenure regime. Therefore, the formation and operation of Forest Management Unit (FMU) is a must. Due to different characteristic of each region, the homogenization of the institutional form of FMU shall be avoided. Instead of homogenization, the "generic" institutional form of FMU should be a "delegation", and then further development of institution shall be flexible according to the local specific. If the regional government, i.e. regional forestry administration, has strong capability then the format of institution shall close to the "devolution". On contrary, if the capability of regional government is poor, so the proper institutional format of FMU would seem as "deconcentration".

As was explained in the previous parts, there are four important aspects have to be prepared and clearly regulated to reach benefits of REDD+ in the implementation level, i.e. defining the funding options, the financing mechanisms, the benefit distribution system, and the spending allocation of REDD+ benefits. Prior to defining Benefit Distribution System (BDS) of REDD+, it is primarily important to define the payment mechanisms of REDD+. There are three elements of payment mechanismes have to be defined clearly:

1) Transferred rights
2) Reasons for compensation
3) Enabling mechanisms

Transferred rights

The transferred right is "product" (goods or services) has to be transferred with certain amount of payment or compensation. It is very important that **"the product" traded in a forest carbon market is not carbon**. In this context, "carbon" itself is not marketable product because there is no scarcity. So, what are the tradable products in a forest carbon market? In a forest carbon market, generally the transactions are dealing with several forms of "environmental services". The tradable products or "transferred rights" of the "environmental services" in a forest carbon transaction could be classified into three categories:

1) Carbon stocking function
2) Carbon sink function
3) Alternatives of land use

Taking the case of land price as comparison, the "hectare" is the unit size of land but it is not the determinant factor for the price of land because the price of the same size of 1 ha land in a down town is definitely different with the land in a remote area. The land price in a down town is higher than in a remote area because it is more scarce in term of business opportunity. Following the way of thinking, measurement of the volume of carbon is important to define the unit size of certain "transferred rights" in forest carbon market, but the volume of carbon it self does not determine the unit price of carbon. The unit price of carbon is determined by various interests, not only environment but also socio-economic and political interests. So, the price of carbon in metric ton CO_2 equivalent shall be different from place to place. Ecologically, there are three reasons for giving compensation or payment for "forest carbon", i.e.

1) Beneficiaries pay for environmental services
2) Polluter pays principles
3) Compensating development rights

Each form of those three compensations refers to a unique principle and therefore, shall be considered in defining approprite payment mechanisms for REDD+.

Beneficiaries pay for environmental services

The principle of beneficiaries pay for environmental service fits with the forest role as carbon stocking function (a form of the payment of forest environmental service or "PFES"). This principle is suitable for financing "intact forests" such as protected forests or conservation forests. So, the transferred rights have to be paid for intact forests is "carbon stocking function" as environmental services. Consequently, instead of paying additionality of carbon stock before and after project, the payment of "PFES" shall be given for the total stock of carbon in cetain period. This PFES principle is very important to preserve primary forests from further deforestation or degradation and therefore, has to be considered as one of the most important options of REDD+ payment as well as the option of basis calculation for REDD+ benefit sharing.

Polluter Pays Principle

One of the most important mechanisms of REDD+ is "carbon offsetting scheme", which follows to the principle of polluter pays. Under the scheme, the industrial emitter countries (annex 1 of Kyoto Protocol) have to reduce their emission to the accepted level within certain period. Those annex-1 countries or emmitter producing industries can reduce their emission through improving their technology and/or making emission "offseting scheme" through planting trees or forests as "carbon sinker". Usually, the implementation of REDD+ scheme through "carbon offsetting" fits to the afforestation or reforestation programs because the payment will be based on "additionality" of the carbon sinking or stocking before project (performance based). Consequently, the amount of benefits sharing will be depend on the performance or project outcome.

Compensating Development Rights

In many cases, the implementation of REDD+ has impact negative economic consequences or "opportunity costs". Besides referring to the principles of environmental services (carbon stocking function) or polluter pays (carbon offsetting), there is also another principle for REDD+ option scheme, i.e. Purchasing Development Right (PDR). The scheme of PDR might be suggested when government (or other parties) alarmed at the loss of certain function of lands (forests, farms, etc.) and the government (or other parties) funded the acquisition and retirement of development rights in order to preserve those lands in perpetuity - Stein *et al.* (2001). Through PDR programs, the government (public or other parties) provides a cash payment to a landowner for the value of the development rights associated with a land parcel**. The owner still owns the land, but is compensated for relinquishing the right to develop it.** In the context of REDD+, by regulating mechanism for PDR the carbon buyers may prohibit the forestland owner (government or private) to cut trees, but the buyers will pay compensation to forestland owner, certain amount of money, equals to the income should be obtained from harvesting timber. In the context of country such as Indonesia, the payment of PDR has to consider not only the price of timber but also total opportunity costs or total benefit losses because of the operation of REDD+. To ensure the effectiveness, efficiency, and equitability principles of REDD+ scheme, the benefits shall compensate also the potential loss of economic linkages and multiplier impacts (employment, output, and income) of the other alternatives of land uses.

3.6 Issues, Options, Recommendations and Actions for BDS REDD+

There are twelve most important issues concerning the benefits distribution system (BDS) of REDD+ in Indonesia:

1) Formulating the legal framework of REDD+ BDS
2) Clarifying the authority towards REDD+ BDS
3) Strenghening the forest tenure
4) Improving the procedure and administration of REDD+ BDS
5) Defining beneficieries and forms of REDD+ benefit sharing
6) Evaluating the legal consequences of REDD+ BDS
7) Implementing FPIC (free, prior, informed, and consent) of REDD+ BDS
8) Ruling allocation of REDD+ benefit sharing
9) Measuring the transaction costs of REDD+ BDS
10) Regulating spending allocation of REDD+ benefits
11) Implementing REDD+ BDS participatory monitoring
12) Providing grievance mechanism of REDD+ BDS

BDS ISSUE-1	BDS LEGAL FRAMEWORK OF REDD+
ISSUES TO BE ADDRESSED	The Government of Indonesia (GoI) enacted Presidential Decree of 19/2010 to form a Special Task Force for REDD+ institution in Indonesia (also known as 'REDD+ Task Force Part 1'), which mandates ended on June 30, 2011. On September 2011, the mandates of the REDD+ Task Force was renewed (known as the 'REDD+ Task Force Part 2'), under the Presidential Regulation (Perpres) 25/2011. As part of their mandates, the REDD+ Task Force Part 2 is finalizing the REDD+ National Strategy (STRANAS), National 'Body'or Agency of REDD+, Coordination with align ministries, forming a legal framework for REDD+ as well as directly assisting bottle necks in REDD+ related activities. During this 'waiting' period for the Task Force to be able to deliver the assignments, align Ministries have enacted various of regulations for REDD+. For example, the Ministry of Forestry has enacted MoF Regulation 68/2008 on REDD Demonstration Activities; MoF Regulation 30/2009 on Procedures for REDD; MoF Decision 36/2009 on Procedures for the Granting of Utilization of Carbon Sequestration or Sinks in Production Forest and Protected Forest. BAPPENAS has enacted RAN-GRK and RPJM, the Ministry of Environment has also enacted some related regulations.
OPTIONS	1) Use the existing REDD+ legal framework in Indonesia. 2) Wait until the REDD+ Task Force succeeded in formulating the enhanced REDD+ legal framework. 3) During the waiting period, all ministries and agencies has to document, list and synchronize all REDD+ related regulations as well as coordinating all align ministries before they enact their own REDD+ regulations.
Recommendedprinciple orpolicy to beadopted	Option 3 is recommended. During the waiting period, it is useful to keep track on how and what regulations are being made by align ministries in regards to REDD+. The legal framework working group within the Task Force REDD+ can give an update to each align ministries of what is needed and what is not needed to be regulated/or already regulated by other ministries.
Actions required to confirm policy options	It is useful for GoI to publicize their current positions, for example, how things are going in Central Kalimantan, the implementations of Presidential Instruction 10/2011 on Moratorium on New Permits and Improvements of Primary Forests and Peatland Governance to keep the public informed and the momentum going.

BDS ISSUE-2	AUTHORITY TOWARDS REDD+ BDS
ISSUES TO BE ADDRESSED	It is understood by the GoI as well as the shareholders of REDD+ that REDD+ related to multi sectoral issues. They encompass 18 different align ministries in Indonesia (among others: Ministry of Forestry, Ministry of Environment, National Agency for Development Planning/BAPPENAS, Ministry of Agriculture, Ministry of Industry, Ministry of Trade, Ministry of Public Works, Ministry of Labor, Ministry of Foreign Affairs, Secretary of State, Ministry of Energy and Mineral Resources, Ministry of Housing, National Land Agency, etc). From the REDD+ National Strategy document, it seems that coordination efforts and supporting implementation of REDD+ will be done by the upcoming National Agency of REDD+. But, in the meantime, there are two hurdles: first, the REDD+ National Strategy did not clearly state the date of the establishment of the National Agency of REDD+. This is important because work on the ground (such as the pilot province's activities, mainstreaming of REDD+ to RPJM, other REDD+ related projects, etc) are on-going, and they cannot wait for too long in order to be coordinated and organized under one roof.

	Second, the division of labor between the new National Agency of REDD+ with the agencies and align ministries who currently holds the mandate of REDD+ activities needs to be clear and well communicated, due to the high traffic of information which might confuse parties, coordination and communication are the key factors to have a well-managed REDD+ activities.
OPTIONS	1) The authority follows the existing REDD+ legal framework in Indonesia 2) Wait for the establishment of REDD+ National Agency 3) During the waiting period, ministries and agencies have to document, list and synchronize all REDD+ related activities as well as improving coordination amongst all align ministries, in a routine basis.
Recommendedprinciple orpolicy to beadopted	Option 3 is recommended. During the waiting period, it is useful to keep track on how and what activities are being made by align ministries in regards to REDD+. The Task Force REDD+ can give an update to each align ministries of the current situation in the establishment of National Agency of REDD+.
Actions required to confirm policy options	There is an urgency to establish the National Agency of REDD+, firstly because REDD+ activities on the ground have already rolled off, the momentum is already created and reached its peaks, and public expectation to see 'success' of REDD+ activities are high. Secondly, the current government administration only has two more years to wrap things up until 2014. If until 2014 REDD+ National Agency is not yet established under an act of law of some kind, it will be hard to lock the commitment of the next administration to REDD+ related activities. Thirdly, Indonesia will be the first nation in the world who established a National Agency of REDD+, which will show to the world the Indonesia's commitment on combating deforestation and forest degradation and keeping safe our forests. A detailed workplan on when and what steps taken to quickly established the National Agency of REDD+ is needed. There is also a need to involve legislative members in the Task Force REDD+ work. The more involvement of the legislative members in the design of the National Agency of REDD+, the more political support the National Agency of REDD+ will get in the future.

BDS ISSUE-3.	**CLARITY OF FOREST TENURE**
ISSUES TO BE ADDRESSED	Forest area, according to the Forestry Law 1999, is a legal classification of an area designated by the government for fixed forest and does not reflect the reality on the ground – forests exist outside of this Forest Area and, conversely, there are denuded areas within the Forest Area. The Forestry Law 1999 contains provisions relating to the sustainable use and multiple functions of forests. However, this law and its implementing regulations are problematic. Firstly, it has to be understood that there are people who live in and outside the forest of Indonesia. They are the 'adat' (customary) people, or the non-adat people, who have lived for generations as forest dependent people—even in the conservation forests. Secondly, it gives subsidiary position to adat forest as well as to the adat people and local people's 'ownership' living in and surrounding the forest. Hence, tenure security has very little clarity both in the forest and its immediate surroundings. Tenure security is a key underlying issue for REDD+, and in particular for whether REDD+ will present more risks than opportunities for these forest dependent people. Where tenure security is weak, REDD+ is likely to be more risky for local communities who could face the prospect of being alienated from lands which are conserved only for their GHG emission mitigation potential without allowing for community ownership and use. Uncertain or unresolved tenure arrangements at the local level might lead to a lack of

	support for REDD+ projects, or even social tensions, which could adversely impact the permanence of REDD+ projects. Social tensions could also discourage REDD+ investment due to concerns from investors about the reputational risks of being associated with projects which have, or are perceived as having, adverse social costs. National interest, a vague notion of development and the state's right of control enshrined in various laws and regulations relating to land and forests –including a recent REDD+ Regulation – have subordinated constitutional and legislative provisions protecting customary rights in Indonesia[121].
OPTIONS	1) Use existing legal framework on forest tenure in Indonesia. 2) Promote total land tenure reform. 3) Improve existing legal framework comprehensively, tenure security, and access to forests.
Recommended principle or policy to be adopted	Option 3 is recommended. Enhancing tenure security of forest dependent communities can help to address legal uncertainties surrounding REDD projects. It will not only empower forest dependent communities but will also benefit governments, REDD project developers and investors[122]. The 'one map' policy initiated by Task Force REDD+ will also play an important role in securing forest tenure. Each align ministries will have to compare and contest as well as coordinate their map as 'one map' in order to have a uniformed and standardized Indonesia map, for granting licenses, permits and ownership rights.
Actions required to confirm policy options	It is recommended that customary land ownership in and around forest areas is mapped, documented and registered as part of REDD+ projects. The boundaries of authority can be established pursuant to existing laws and regulations. New laws should allow for groups to register boundaries of authority. At present, customary ownership boundaries cannot be registered in the national land administration authority (BPN)[123]. The existing option of registering individual title requires communities to dismantle or abandon customary rules governing land use and ownership in order to gain security of tenure. New laws should allow for groups to have a number of choices in relation to register the wide variety of rights in Indonesia. This would allow communities to gain security of tenure while at the same time protecting their traditions of holding land communally or subject to community interests. Certainty of land tenure will be pursued through[124]: ▪ Instruction by the Government to the Home Affairs Ministry and the National Land Agency to implement a survey of land occupied by indigenous peoples and other communities. ▪ Support the National Land Agency to resolve land tenure disputes using existing statutory out-of-court settlement mechanisms. ▪ Harmonization and revision of natural resources management regulations and policies to ensure the principle and processes of Free, Prior, and Informed Consent (FPIC) are internalized in the issuance of all permits for the exploitation of natural resources.

[121] Id.
[122] Id.
[123] Id.
[124] REDD+ National Strategy, id, p. 18.

BDS ISSUE-4.	BDS PROCEDURES AND ADMINISTRATION
ISSUES TO BE ADDRESSED	Unclear procedure and/or administration of BDS REDD+ is another important issue. It has to be understood that each region in Indonesia might have own social structure and different culture. This has to be accounted for when designing specific BDS for different areas in Indonesia. One BDS which work for the localities in Central Kalimantan for example, might be different with a BDS which will be accepted in Central Sulawesi. At the sub-national level, each provincial government may create a REDD+ institution to organize and implement its Regional REDD+ Strategy and Action Plan, developed from the REDD+ National Strategy[125]. Regional REDD+ Agencies will coordinate the following thematic activities[126]: (i) measurement, reporting and verification of emissions reduction; (ii) assurance of the effectiveness of REDD+ funding; and (iii) periodic reporting on developments in regional programs/ projects/activities to the national REDD+ Agency. Districts also can establish REDD+ institutions to consistently and efficiently coordinate all aspects of district-level REDD+ activities and report results to the provincial level. Data and information collected locally on developments in REDD+ program activities and projects will inform the national REDD+ Agency. The implementers of REDD+ Programs/Projects/Activities are organizations which have fulfilled specific criteria and procedures to register and implement REDD+ activities with the national REDD+ Agency upon the recommendation of a sub-national REDD+ institution[127]. Groups and bodies as diverse as business entities, civil society organizations, local government institutions, and community groups can function as implementers. The requirements for registration of REDD+ programs/projects/activities are based on principles determined by the national REDD+ Agency and must be in line with local policy and custom[128].
OPTIONS	1) Using the existing BDS in Indonesia, mostly through formal government payment system (from the Province-District-Sub District-Village-Community). 2) Imitating BDS best practices in Indonesia and other countries, then apply them to the regions. 3) Adapting existing local payment system in Indonesia, BDS best practices in Indonesia and other countries, as well as the social structure in each areas, then carefully design a BDS which is acceptable and has least corruption possibility for each area.
Recommended principle or policy to be adopted	Option 3 is recommended. Considering most of the important factors mentioned in the REDD+ National Strategy as well as studies done by expert in the area, BDS is a very sensitive issue -especially for the local people living in and outside the forest area. UNDP (2010) recorded that 80% of people living in and outside forested areas are considered poor.
Actions required to confirm policy options	Uniformity of BDS for REDD+ will be impossible, because each region in Indonesia has its own uniqueness. A BDS action plan for each district will be the first step to figure out how is the benefit going to be distributed.

[125] Id.
[126] Id.
[127] REDD+ National Strategy, id.
[128] Id.

BDS ISSUE-5.	**BENEFICIARIES & FORMS OF REDD+ BENEFIT SHARING**
ISSUES TO BE ADDRESSED	Defining beneficiaries and forms of REDD+ benefit sharing is definitely important issue for the succesfull implementation of REDD+. Regional governments are among the parties with the potential to receive benefits from REDD+ projects if VER/CER can be achieved as a result of their policies and public sector investments. Community members will receive payments either individually or collectively in line with their roles played within the context of having rights over resources and provision of services. The benefits distributed also to people working as paid staff members for programs or projects. Members of communities that contribute to the achievement of VER/CER from REDD+ projects will also receive payments.
OPTIONS	1) Making fixed procedures of BDS for all REDD+ projects nationally. 2) Delivering full athority of the BDS REDD+ arrangement to the regional government and/or local entity. 3) Considering different BDS for REDD+ projects, specifically paying attention to each beneficiaries in the project, as each location and each projects are unique. Only the general principle of BDS REDD+ are determined by the central government.
Recommended principle or policy to be adopted	Option 3 is recommended. As each REDD+ project is unique, in a specific locations with a different set of social rules, the BDS and beneficiaries in each project will not be exactly the same. However, those should not challenge the national interests.
Actions required to confirm policy options	A clear, detailed and accessible BDS is needed for each REDD+ projects. In designing the BDS, it is very important to include all stakeholders in the REDD+ projects and make sure that all of them are aware and in agreement with the BDS design.

BDS ISSUE-6.	**LEGAL CONSEQUENCES OF BDS**
ISSUES TO BE ADDRESSED	One pivotal issue concerning the implementation of REDD+ is measuring and considering the legal consequences of BDS REDD+ based on the following[129]: ▪ All parties with rights over the area of the REDD+ program/project/activity location have the right to payment; ▪ Services/remuneration/benefits provided to individuals other than workers will be distributed by the implementers of REDD+ activities. The provision of these 'service-based' benefits is collective when services are provided collectively; ▪ Communities contributing to the achievement of Verified Emissions Reductions or Certified Emissions Reductions (VER/CER) in cases, where land ownership and forest preservation is collective are not remunerated as individuals as would be the case with workers; ▪ Systems and mechanisms for benefit sharing must be transparent and accountable to prevent misallocation of benefits. It is very important to clarify land rights status and land use rights before and after REDD+. Then, it is also important to identify the potential for loss of income for regions where REDD+ programs/projects/activities are to be located. Within this context, it is necessary to identify the stakeholders who contribute to carbon absorption functions or the reduction of carbon emissions in regions in which REDD+ has project sites to ensure the proper distribution of service-based benefits. The implementation of benefit payments to deserving parties will be done on the basis of performance evaluations and VER/CER measurement (results- or performance-based payments).

[129] REDD+ National Strategy, 2012, id.

	REDD's impacts on forest communities will depend on two factors[130]: (1) the incentives offered to the different entities affecting deforestation and forest communities' livelihoods, and (2) the mix of benefits, rights and participation for forest communities associated with different incentives and the entities using them.
OPTIONS	1) Use current legal system and REDD+ regulation standards offered by donors, developers or current carbon market standards. 2) Wait for the national REDD+ Agency to take form and enact REDD+ regulations 3) Measuring legal consequences of the current BDS REDD+ standards and promoting a more rational, equitable, and suitable BDS REDD+ for Indonesia.
Recommended principle or policy to be adopted	Option 3 is recommended. To be a successful implementation of REDD+, it is very important to understand clearly the legal consequences of REDD+. Therefore, it requires to measure legal consequences of the current BDS REDD+ standards prior to the implementation of REDD+ and then, promote a more rational, equitable, and suitable BDS REDD+ for Indonesia.
Actions required to confirm policy options	Aside from coordination and support from law enforcer agencies, there is also a need to work together with the legislatives and political parties in order to gain political support. Any form of coordination, such as working group or MoU between Task Force REDD+ and legislatives bodies will help gaining political support for promoting a more rational, equitable, and sustainable BDS REDD+ standards in Indonesia, as well as strengthening law enforcement in REDD+ related activities.

BDS ISSUE-7.	**FPIC (FREE, PRIOR, INFORMED, AND CONSENT) OF REDD+ BDS**
ISSUES TO BE ADDRESSED	FPIC can be described as the establishment of conditions under which people exercise their fundamental right to negotiate the terms of externally imposed policies, programs, and activities that directly affect their livelihoods or wellbeing, and to give or withhold their consent to them. The right to FPIC can therefore be viewed as an additional component to any effective, ongoing consultation process, or as an extension to sound community engagement strategies. The more participatory the process of change is, the less emphasis and time is needed to secure 'consent', as communities will have already actively defined the processes and outcomes of any proposed change. The most frequently referred to summary of FPIC is the one endorsed by the United Nations Permanent Forum on Indigenous Issues (UNPFII) at its Fourth Session in 2005. Elements of Free, Prior, and Informed Consent[131] ▪ **Free** should imply no coercion, intimidation or manipulation; ▪ **Prior** should imply consent has been sought sufficiently in advance of any authorization or commencement of activities and respect of time requirements of indigenous consultation/consensus processes; ▪ **Informed** – should imply that information is provided that covers (at least) the following aspects of: the nature, size, pace, reversibility and scope of any proposed project or activity; the reason/s or purpose of the project and/or activity; the duration of project; the locality of areas that will be affected; a preliminary assessment of the

[130] Springate-Baginski and Wollenberg (eds.) 2010. REDD, forest governance and rural livelihoods: the emerging agenda. CIFOR. p. 12.

[131] UN Permanent Forum on Indigenous Issues (UNPFII). 2005. *Report of the International Workshop on Methodologies Regarding Free Prior and Informed Consent and Indigenous Peoples*. Document E/C.19/2005/3, submitted to the Fourth Session of UNPFII, 16–17 May. Available at: www.un.org

	likely economic, social, cultural and environmental impact, including potential risks and fair and equitable benefit sharing in a context that respects the precautionary principle; personnel likely to be involved in the execution of the proposed project (including indigenous peoples, private sector staff, research institutions, government employees, and others); and procedures that the project may entail. ▪ **Consent** Consultation and participation are crucial components of a consent process. The parties should establish a dialogue allowing them to find appropriate solutions in an atmosphere of mutual respect in good faith, and full and equitable participation. Indigenous peoples should be able to participate through their own freely chosen representatives and customary or other institutions. The inclusion of a gender perspective and the participation of indigenous women are essential, as well as participation of children and youth as appropriate. This process may include the option of with holding consent. Consent to any agreement should be interpreted as indigenous peoples having reasonably understood it. FPIC will act as a social safeguard for REDD+ in Indonesia. Hence, it is crucial to have it introduced and disseminate issues related to climate change, REDD+ and FPIC not only to the local people, but also to the local government and legislators.
OPTIONS	1) Conducting business as usual. 2) Introducing and disseminating FPIC to all related REDD+ stakeholders, by considering the stakeholder characteristics and suitable communication.
Recommended principle or policy to be adopted	Option 2 is recommended. FPIC is important in REDD+ areas, because in almost all of Indonesia's forest, there will be local people or adat people who have already settled years (sometimes centuries) in those forests. Organizing REDD+ activities or project of any kind, without asking or giving their Free Prior Informed Consent will not guarantee a smooth acceptance from the local/adat community.
Actions required to confirm policy options	▪ Identify needs and wants of the REDD+ stakeholders. ▪ Develop the FPIC, guidelines, mechanism and its implementation in REDD+ areas of Indonesia.

BDS ISSUE-8.	**ALLOCATION OF REDD+ BENEFIT SHARING**
ISSUES TO BE ADDRESSED	Determining allocation of REDD+ benefit sharing amongst stakeholders. The benefit sharing allocation, both vertically and horizotally, has to be defined clearly prior to the starting of REDD+ project.
OPTIONS	1) Allocation of benefit sharing is fully defined by stakeholders/community. 2) Allocation of benefit sharing is fully determined by regulations. 3) The general principle of BDS is defined by regulations, but technical detail should be made at local level.
Recommended principle or policy to be adopted	Option 3 is recommended. The general principle of REDD+ BDS has to be defined by regulations, but the technical detail should be made at local level. It is important to regulate the general principles to avoid sectoral conflicts and to ensure the REDD+ BDS design does not challenge the national interests. The technical details, however, has to meet the local needs and respect with local specifics.
Actions required to confirm policy options	▪ GoI should review participatory monitoring methods with ademonstrated history of success. ▪ GoI should prepare the general principles for participatory REDD+ monitoring.

BDS ISSUE-9.	**TRANSACTION COSTS OF REDD+ BDS**
ISSUES TO BE ADDRESSED	Implementation of REDD+ is costly. The transaction costs of REDD+, included preparation costs, implementation costs, monitoring, and other costs, have to be calculated prior to the implementation of the REDD+. It is very important to calculate the transaction costs before REDD+ project implemented because in many cases the transaction costs are very high, much higher than the financial benefits will be received from REDD+ project.
OPTIONS	1) Transaction cost is part of the consequence of the REDD+ implementation, no obligation for donors or buyers to consider the transaction costs of the supliers. 2) Transaction cost has to be beared by donors or buyers. 3) Transaction cost has to be measured and has to be used as the basis for price negotiations in carbon trading/carbon projects and consideration for REDD+ BDS.
Recommended principle or policy to be adopted	Option 3 is recommended. Transaction cost is one of the main considerations to accept or refuse certain proposal of REDD+ project. Therefore, the transaction costs have to be measured and have to be used as the basis for price negotiations in carbon trading/carbon projects and consideration for REDD+ BDS.
Actions required to confirm policy options	▪ Measuring the opportunity costs of each proposed REDD+ project sites. ▪ Measuring costs of preparation, implementation, monitoring, reporting, and verifification of REDD+ in each specific REDD+ project site.

BDS ISSUE-10.	**SPENDING ALLOCATION OF REDD+ BENEFITS**
ISSUES TO BE ADDRESSED	The spending allocation of the REDD+ benefits is one of the major concerns for the sustainability of REDD+. The sustainability of development and leakage of the REDD+ project are strongly influenced by whether the benefits from REDD+ are spent properly.
OPTIONS	1) Right for spending of the REDD+ benefits is fully defined by beneficiaries at local level. 2) Spending allocation of the REDD+ benefits is regulated by law or other state regulations. 3) General principle for spending allocation of the REDD+ benefits has to be defined by law or other state regulations, however the technical details have to be devolved at the local level.
Recommended principle or policy to be adopted	Option 3 is recommended. It is important to regulate the general principles for spending allocation of the REDD+ benefits by law or government regulations to avoid bias of narrower interests of region or short-term interests of regional head. However, the technical details of the spending allocation of REDD+ benefits have to be devolved at the lowest level.
Actions required to confirm policy options	▪ Measuring the leakage and linkage of each REDD+ projects (e.g. output, income, and employment) ▪ Improving knowledge and capacity of local people and REDD+ BDS institutions at local level. ▪ GoI shall define the general guidance for the spending allocation for REDD+ benefits.

BDS ISSUE-11.	REDD+ BDS PARTICIPATORY MONITORING
ISSUES TO BE ADDRESSED	Participatory monitoring in REDD+ can create spaces and opportunities for more inclusive, better-informed decision making. The term "participatory monitoring" applies to monitoring activities that involve local people, who may have not received specialist, professional training and who have varying skills, expertise, societal roles and interests[132]. Participatory monitoring is an ongoing process, where local forest users systematically record information about their forest, reflect on it and take management action in response to what they learn[133]. Monitoring systems that involve local people in scientifically-designed projects have many advantages, such as enriched data, lower total costs and a better chance of being sustained. Some types of information can only be provided by local people, such as changes or events that have occurred over long timeframes, information about traditional use and community perceptions about the forest.
OPTIONS	1) Full participatory monitoring in all locations and forms of BDS REDD+. 2) Improved participatory monitoring; bringing the advantages of community engagement and ensuring the involvement of a critical stakeholder at the local level. 3) Non-participatory monitoring by parties and persons from outside.
Recommended principle or policy to be adopted	Option 2 is recommended. Full participatory monitoring does not fit for all situation. It is ideal for the situation of the educated or enlighted participants. Thus, improved participatory monitoring is needed to bring the advantages of community engagement and to ensure the involvement of a critical stakeholder at the local level.
Actions required to confirm policy options	▪ Improving knowledge and capacity of local people. ▪ GoI should review participatory monitoring methods with a demonstrated history of success. Based on this review, GoI should prepare principles for participatory REDD+ monitoring.

[132] Evans K, 2008. Participatory monitoring in tropical forest management: a review of tools, concepts and lessons *Learned'* Bogor, Indonesia: Center for International Forestry Research (CIFOR), p. 1-5.
[133] Id.

BDS ISSUE-12.	GRIEVANCE MECHANISM OF REDD+ BDS
ISSUES TO BE ADDRESSED	Any BDS, however well designed, will inevitably give rise to complaints by those, who think that they have not been rewarded appropriately and/or are losing out to free-riders, who receive benefits but have made no contribution to forest protection andreducing carbon emissions. With the current situation of tenure, boundaries overlaps and adat community rights problems, grievance mechanism has to be considered in the implementation of REDD+ BDS.
OPTIONS	1) Grievance mechanism that is entirely managed by government. 2) Grievance mechanism, which is independent and specific for REDD+ related activities. 3) Grievance mechanism that includes civil society participation, under the National REDD+ Agency
Recommended principle or policy to be adopted	Option 3 is recommended. Given the importance of managing complaints to ensure that the BDS rewards those who deserve to be rewarded on the basis of emissions reductions and to generate information that can be used to improve the BDS, a credible grievance mechanism is required. GoI should consider establishing a grievance mechanism that allows complaints to be managed transparently and efficiently and how Indonesian civil society organizations can be most appropriately integrated into such a mechanism. The National REDD+ Agency would be an ideal place for host such grievance mechanism, although in the National REDD+ Strategy this role (of adjudication of grievance) were not explicitly mentioned.
Actions required to confirm policy options	▪ Identify all potential complains concerning BDS REDD+ ▪ The GoI should undertake a more detailed analysis of the appropriate institutional structure of a participatory grievance mechanism. This should lead to a communications strategy through which information on the proposed grievance mechanism is widely disseminated to all stakeholders.

3.7 BDS at Forestry Sector

The BDS at forestry sector basically refers to the LULUCF. It could be devided into two forms based on the output of activities:

Reducing negative change

There are two activities of REDD+ including in this category, i.e.

- Avoided deforestation
- Avoided forest degradation

Enhancing positive change

Several activities could be categorized in the REDD+ to enhance positive change, among others are:

- Afforestation and Reforestation (A/R)
- Forest restation
- Land/Forest rehabilitation

Table 11. LULUCF and REDD+

Changes in:	Reduced negative change	Enhanced positive change
Forest area (hectare)	Avoided deforestation	Afforestation and reforestation (A/R)
Carbon density (carbon per hectare)	Avoided degradation	Forest restoration and rehabilitation (carbon stock enhancement)

Source: adapted from Lasco in Rodel (2009) in Sukadri (2009)

Defining Benefit Distribution System (BDS) of REDD+

The benefits of REDD+ could be distributed through two ways:

1) **Vertical distribution**

   Distribution of the REDD+ benefit vertically, from upper level to lower levels: central government, province, district, village, and community.

2) **Horizontal Distribution**

   Distribution of the REDD+ benefit horizontally amongst the shareholders, e.g. government, developer, and community.

Defining Fund Allocation

There are three most important factors have to be considered in allocating funds of REDD+, that are:

1) Sustainability of the environmental functions
2) Avoiding leakages
3) Compensating economic linkages

The benefit distribution sharing of REDD activities in the various type of forest business units and forest functions has been regulated by the Forestry Minister Regulation P. 36/Menhut-II/2009 (**Table 12**).

Table 12. Regulation on the Benefit Distribution Sharing of REDD+

No	License	Benefit Distribution Sharing		
		Government	Community	Developer
1.	Forest Concession (HPH)	20%	20%	60%
2.	Industrial Forest Plantation (HTI)	20%	20%	60%
3.	Ecosystem Restoration *(HPH Restorasi)*	20%	20%	60%
4.	Community Forestry Plantation (HTR)	20%	50%	30%
5.	Community Forest *(Hutan Rakyat)*	10%	70%	20%
6.	Community Forestry (HKm)	20%	50%	30%
7.	Costumary Forest *(Hutan Adat)*	10%	70%	20%
8.	Village Forest *(Hutan Desa)*	20%	50%	30%
9.	Forest Management Unit (KPH)	30%	20%	50%
10.	Special Purpose Forest (KHDTK)	50%	20%	30%
11.	Protection Forest (HL)	50%	20%	30%

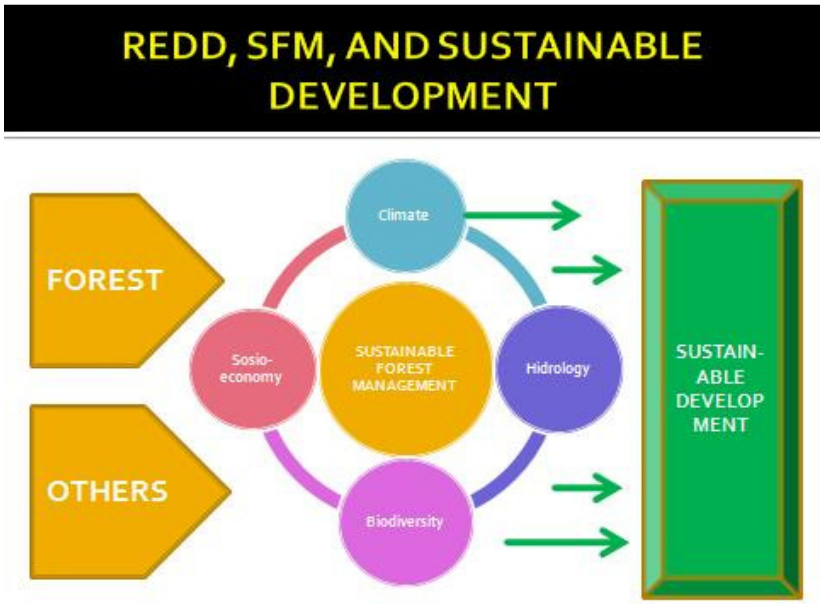
Source: Forestry Minister Regulation P. 36/Menhut-II/2009

Although the profit distribution of REDD activities has been regulated, however, the regulation is not able to be implemented because of lack technical details and ambiguities in some matters. The sharing of profit will be never happened when there are no technical details and unclear responsible units for the permit mechanisms of REDD in each forest function as well as type of business permits. There are also some difficulties in interpreting profit sharing for cross types of REDD activities, e.g. REDD with community forest scheme located at a protection forest.

3.8 BDS at Agriculture Sector

Basically benefit distribution of REDD+ in the agricultural sector has to refer the change of land use from the baseline of carbon stocking in certain types of land cover. Thus, it is primarily important to understand the carbon stock of land cover types before implementing REDD+ project in agricultural sector. It is important to note that forest area conversion does not always result a negative change of carbon stock because under Indonesia legal system (Forestry Law), the term of “forest area” is any area appointed and/or established by the government as permanent forest. In this definition the term of “forest area” does not refer to the land coverage of forests. In reality, an area appointed as “forest area” could be “non-forest cover” area, e.g. barelands, grasslands, agricultural plantation, or even settlement. Furthermore, it has to be understood that sustainable forest management and forest conversion should be put as an integral part of the sustainable development strategies (**Figure 12**).

Figure12. The role of forests and other land uses in supporting sustainable development[134]



3.9 Eligibility, Principles And Performance In The Distribution System

To transform potential economic values of ecological function of forests, schemes of green trading mechanism is needed. There are three important schemes of green trading mechanism that are Payment for Environmental Services (PES), Purchasing Development right (PDR) and Liability Rule (LR). At the operational level, those schemes could be implemented through various mechanisms, such as Clean Development Mechanism (CDM), Reducing Emission from Deforestation and Forest Degradation (REDD), Debt for Nature Swap (DNS), Incentive-Disincentive Mechanisms between Upstream and Downstream Regions (IUD) and other relevant mechanisms. Those mechanisms, however, cannot guarantee a transaction. Transaction could be realized by a mutual agreement between respective parties or by enforcing a set of "green" regulation consistently.

The downstream region has an obligatory task to support upstream region in preserving watershed area. It is important to note that to manage watershed area effectively inter-sectoral and inter-region cooperation is needed. A better watershed management will increase added value, directly or indirectly, in the downstream regions. Therefore, by implementing PES the downstream regions cannot be free riders towards the utilization of environmental services anymore. Generally, the government still contributes to the main source of funding for nature conservation. Nurrochmat (2011) promotes three concepts for operationalizing green fiscal policies: 1) Payment for Environmental Services (PES), 2) Liability Rule (LR), and 3) Purchasing Development Right (PDR).

[134] Nurrochmat (2011). Pendanaan SFM & Mitigasi Perubahan Iklim di Sektor Kehutanan. Worksghop "Opsi Pendanaan (Financing Option) Mitigasi Perubahan Iklim di Sektor Kehutanan". Ruang Rimbawan I – Manggala Wanabakti Jakarta, 20 September 2011.

Table 13. Basic concepts to operationalize green fiscal policies include REDD+ schemes

Concepts	Definition	Potential application for REDD+ schemes	Rights of transfer and key Indicators
Payment for Environmental Services (PES)	The concept of PES related to the amount of payment for environmental services shall be given by the consumer region/country to the producing region/country.	Payment for carbon sequestration and/or stocking function of forests or vegetations given to the producing region/country by non-producing region/country.	**Right of transfer:** a bundle of environmental services. **Key indicator:** environmental function.
Liability Rule (LR)	Liability Rule related to the rule of payment by responsible party. This rule has been widely accepted and in industrial communities this concept are often called as "polluter's pays principle (PPP)". Following this principle a polluter industry must spend more cost to install waste treatment and pay compensation to people or any parties as the victims of pollution.	The polluters or emitters shall pay compensation to the victim regions. Basically, "carbon-offsetting scheme" (Kyoto Protocol) follows the concept of liability rule.	**Right of transfer:** a bundle of risk due to pollution and/or emission. **Key indicator:** level of pollution and/or emission.
Purchasing Development Right (PDR)	Purchasing Development Right means that a certain amount of compensation shall be given to the land owner for a broader public purpose.	A forestland owner has right to cut his trees for income generating. Government can prohibit the forestland owner cutting his trees, but the government will pay certain amount as compensation for income generating should be gained by forestland owner from trees cutting.	**Right of transfer:** a bundle of right to develop or using land. **Key indicator:** equitable benefits as compensated right.

Source: Adapted from Nurrochmat *et al.* (2011)

Some consequences have to be anticipated in the implementation of the various sechemes of REDD+, among others are[135]:

- The payments for environmental services (PES), Clean Development Mechanism (CDM), and carbon forestry interventions have tended to reinforce existing power structures and allow elites to capture benefits.

[135] Springate-Baginski and Wollenberg (2010). REDD, forest governance and rural livelihoods: the emerging agenda. CIFOR, Bogor, Indonesia.

- The tradeoffs exist between efficiency and equity in CDM and voluntary markets. The distribution of projects and certified emission reductions (CERs) has been geographically uneven. Weak collective action has allowed the wealthiest to accumulate benefits. Non-utilitarian values (i.e. appreciation of forests for characteristics not related to use) have often gone unrecognized and uncompensated. However, the tradeoff between efficiency and equity can be resolved. Brown suggests that levies on certain kinds of CDM projects, geographical quotas and voluntary standards for sustainable development would help CDM improve social equity.[136]
- The early results from REDD demonstration sites show that the level of compensation is low relative to community expectations and the return from other land use options. Low levels of compensation might suggest that there is a lack of incentive to participate in REDD.[137] The exeption, however, found in Mexico and Uganda. There, people participated in PES despite low levels of financial compensation because they probably took part of the non-income benefits and incidental environmental services they gained.[138]
- The poor would be more likely to take part if the opportunity costs of participation were lower.[139]An improvement of the collective organization of local groups could play important roles in reducing transaction costs and allowing collective bargaining over terms of engagement in REDD schemes gained.[140]

3.10 Linking Corruption, Illegal Logging, and Deforestation

A UN Food and Agriculture Organisation (FAO) identifies forest corruption as a sub-category of a wider set of illegal forest activities, highlighting its detrimental financial, environmental and social costs[141]. Acts of corruption linked to the forest sector are often associated with interactions between public and private actors where financial or status-related incentives are offered (or sought) to deviate from an agreed framework of rules and regulations. Although such deviation is generally considered to prejudice attainment of forest conservation goals (since there is a means, albeit illegal, to circumvent formalised conservation rules), for some analysts it also helps explain why, in certain circumstances, corruption may serve to slow rates of deforestation: some actors may prefer to stick to the formal rules rather than pay the added cost of a bribe to harvest trees illegally. Some of the main links between corruption and deforestation described in recent literature are listed in Table below.

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[136] Brown in Springate-Baginski and Wollenberg (2010). REDD, forest governance and rural livelihoods: the emerging agenda. CIFOR, Bogor, Indonesia.

[137] Sunderlin in Springate-Baginski and Wollenberg (2010), id.

[138] Martin in Springate-Baginski and Wollenberg (2010), id.

[139] Wulan (2012). The Opportunity Cost Study of the Major Land Uses inCentral Sulawesi. ConsultantReport. UN-REDDProgramIndonesia, Jakarta.

[140] Martin in Springate-Baginski and Wollenberg (2010). REDD, forest governance and rural livelihoods: the emerging agenda. CIFOR, Bogor, Indonesia.

[141] FAO (2001). Illegal activities and corruption in the forestry sector, *State of the World's Forests 2001*, Food and Agriculture Organization of the United Nations, Rome.

Table 14. Links between corruption and deforestation[142]

Stage in process	Corrupt activity	Possible impact on deforestation
Land planning	Interest groups bribe public officials to skew design and implementation of land use plans	Contributes to deforestation by undermining land use allocation process and enforcement of land use plans
	Large-scale farmers bribe politicians in exchange for agricultural subsidies	Contributes to deforestation by reducing agricultural productivity (farmers deliberately use land inefficiently to attract subsidies)
	Corruption limits private investment in agricultural land	Protects forests by limiting investments in extension of agricultural land
Harvesting	Loggers bribe forestry officials to harvest without legal permits, or to speed up the issuance of such permits	Contributes to deforestation by foregoing legal system for allocating harvesting rights
	Logging operators bribe local officials to obtain logging permits not recognised by the forestry regulatory framework	Contributes to deforestation by facilitating forms of harvesting not allowed within the legal system for forestry
	Logging concessionaires pay bribes so that over-harvesting is not monitored	Contributes to deforestation by foregoing the established system for monitoring logging activity
Transportation	Loggers bribe public officials to allow transport of illegally logged timber	Contributes to deforestation through facilitation of exit-routes for illegally harvested timber

3.10.1 Possible Corruption Challenges for REDD+

Much of the literature published on REDD (+) since the beginning of 2009 makes reference to the importance either of addressing improved forest governance or controlling forest-linked corruption in order for REDD schemes to achieve their objectives. Skutsch *et al* (2009) highlight, for instance, the importance of robust monitoring and verification measures since the risk of cheating in carbon markets is "always present"[143]. They note that a main challenge will be to facilitate the functioning of bureaucracies which do not seek to consume for themselves the benefits derived from carbon stocks. Despite the recognition of the importance of practically addressing and researching forest-linked governance and corruption challenges in the context of REDD, relatively few studies have so far attempted to provide detailed explorations of these challenges, or potential policy approaches for them. Recent literature reviewed for this study nevertheless revealed an already well-defined set of possible corruption risks for REDD+ (Table 15).

[142] Tacconi, *Id.*

[143] Skutsch MM, E Zahabu, BS Karky, (2009). *Community forest management under REDD: policy conditions for equitable governance*, Paper prepared for XIII World Forestry Congress, Buenos Aires, 18-23 October 2009.

Table 15. Possible corruption risks for REDD+ Activity[144]

Governance Level	Corruption Risk
National	• Agricultural or timber conglomerates bribe national politicians to undermine establishment of national REDD mechanism • REDD project developers bribe national politicians or senior officials to promote fraudulent REDD schemes • Politicians and senior officials extract rents from REDD revenues • Officials responsible for reconciling REDD projects with national accounting take bribes from project developers to doble-count prohect • Agricultural or tumber conglomerates bribe national officials responsible for fotest protection to ignore violations of conservation laws
Sub-National	• Agricultural or timber conglomerates bribe sub-national politicians and public officials to opt out of REDD implementation, or weaken REDD policies, in their areas • Agricultural or timber conglomerates bribe sub-national officials responsible for forest protection to ignone violations of conservation laws
Local or Project	• REDD project host bribes official monitors either to overstate avoided emissions or understate problems of permanence/additionality of the project • REDD project host intentionally increases emissions in lead-up to implementation in order to benefit from higher credits • Local administrator extract rentas from environmental service scheme aimed at benefiting local communities

3.10.2 Anti Corruption Mechanism

When considering the corruption challenges it may face, it is important to recall both that REDD+ is still in its infancy, and that its implementation is intended to be phased-in following measured improvements in forest governance. From this perspective, the pilot schemes, scoping studies and development frameworks presently moving forward offer a potential window of opportunity to consider how serious instances of corruption involving REDD resources and projects may largely be avoided. Given the cumulative knowledge available with regard to previous forest governance reforms, the intention is that REDD should contribute to an overall improvement in forest governance – including a potential reduction in forest-linked corruption.

[144] Bofin P (2011). REDD Integrity: Addressing governance and corruption challenges in shemes for Reducing Emissions from Deforestation and Forest Degragation, p.12

Whether opportunities are grasped for REDD+ to act as a catalyst for improved forest governance depends on a wide range of factors that is beyond the scope of this study to address. Whether potential corruption risks in the context of REDD+ will be mitigated will depend on the maturity and depth of attempts to develop appropriate policy responses on the part of development institutions and their REDD+ partners, at country level and beyond. There is evidence that issues of governance that could contribute to mitigating corruption risks are being considered in proposals submitted to the World Bank's FCPF and to the UN-REDD Program. A study prepared by the World Resources Institute (WRI) notes that these proposals contain reference to, among other issues: stakeholder consultation; transparent and accountable REDD+ revenue management; participatory and transparent monitoring, reporting and verification mechanisms; consideration of reforms to improve vertical and horizontal coordination; clarification and reform of laws, including tenure laws; third party monitoring of forest management activities; and independent auditing and participatory oversight of financial management rules, including benefit sharing[145]. At the same time, the WRI study highlights that only a few concrete procedures, processes, and rules are contained in the proposals analysed to ensure that good governance is maintained in practice. The depth of analysis surrounding problems of weak law enforcement and land tenure, according to WRI, is relatively low, while provisions for assessing governance are not considered to move beyond basic concepts such as promoting transparency, accountability and responsible decision-making. Some recent literatures have attempted to elucidate national measures that could help mitigate REDD+ corruption risks (Table 16).

Table 16. Possible National Anti Corruption measures for REDD[146]

Type of Measure	Posibility
Measures to improveregulatory and institutionalframework	Land use planning process; allocation process for logging concessions; development of REDD framework (regulations plus institutions); Statutory oversight institutions; framework for broad stakeholder participation (including forest communities, civil society, private sector); formalisation of ownership or profit rights from forest uses.
Measures to improveaccountability andtransparency	Land use planning; creation of REDD baseline data; development of REDD framework (regulations plus institutions); regulatory framework for forests; allocation process for logging concessions; MRV system for non-carbon benefits (including field-based monitoring); demand-side accountability institutions; statutory oversight institutions; data on donor support to REDD projects; data on private sector involvement in REDD projects.
Measures to improve lawenforcement	Capacity building to state prosecutors, formal anti-corruption institutions, judges and court officials.
Measures to reduce rentsfrom deforestation	Reform of national forestry taxation system; addressing rents from land uses that replace forests (e.g. palm plantations).

[145] Davis C, (2010). Governance in REDD+ Taking stock of governance issues raised in readiness proposals submitted to the FCPF and the UN-REDD Program, Background paper for Expert Workshop: Monitoring Governance Safeguards in REDD+, 24-25 May 2010, Chatham House, London.

[146] Tacconi, *Id*.

3.11 Best Practices of Benefit Distribution System

There are five common incentive-based strategies have been used to balance the public needs for reducing deforestation and forest degradation with the livelihoods needs of forest communities[147], i.e.

1) Payments for environmental services (PES),
2) Voluntary carbon markets ('carbon forestry'),
3) Clean Development Mechanism (CDM),
4) Integrated conservation and development programs (ICDPs), and
5) Community forestry (social forestry, joint forest management, and participatory forest management).

These incentive-based strategies include measures such as[148]:

- Performance-based payments or other benefits in exchange for reducing carbon emissions or sequestering carbon, good forest and land stewardship, meeting conservation targets, managing forests sustainably (including fire protection) and restoring forests.
- More secure tenure through formal legal recognition of local rights to forests, forest land or forest products and rights to shared benefits. This strategy assumes that people will protect and invest in forest if these activities yield direct benefits.
- Alternative livelihood options and alternative sources of forest products that reduce pressure on forests. Examples include practicing agriculture on nonforest land, resettling forest dwellers, restructuring local economies, creating substitutes for natural forest products (e.g. woodfuel from woodlots), providing transition support payments and training.
- Higher land use efficiency to intensify production on non-forest lands and reduce pressure on forest lands. This strategy bears the risk that any land use generating high returns may expand into forest areas.
- Sanctions and policies that create disincentives, especially for illegal logging or unsustainable forest management. These strategies are also useful where they support communities' own efforts to regulate forest use sustainably.

The payments and benefits offered in these measures can take the forms of[149]:

- Compensation for opportunity costs, transaction costs, implementation costs, or other disincentives;
- Transition payments (e.g. resettlement funds);
- More livelihood opportunities; and
- Public infrastructure, such as health, education or roads or access to assets (e.g. land) that will lead to benefits in the future.

[147] Springate-Baginski and Wollenberg, eds. (2010). REDD, forest governance and rural livelihoods: the emerging agenda. CIFOR, Bogor, Indonesia.
[148] Id.
[149] Id.

The main strategies discussed in the workshop were payments for environmental services and reform of tenure. The workshop presentations showed that there are significant experiences and research-based understanding about these programs that can inform REDD+.

3.12 International Best Practices

There were several international best practices on benefit distribution system (BDS). One of the most important lesson learns from the international best practices on BDS is the acceptability indicators of the REDD+ schemes. **Table 17** describbes the lesson learns of some indiators of REDD+ schemes that were implemented in the Amazon Fud and Socio-Bosque programs.

Table 17. Lesson Learns from the Amazon Fund and Socio-Bosque Programs

Scheme	Transparency	Fairness	Simplicity	Usefulness	Process*
Amazon Fund	Publishing annual report of budget. Online access for budget information.	Proportion of benefit sharing between AFB and community is 50:50	It is not easy to get donors to fund conservation activities.	Reducing the dependency of community to the Amazon forest.	Facilitation process undertaken by the NGOs. Reducing conflicts of interest among parties. Penentuan 50 % oleh Amazon Fund satu arah (top down). Mostly top- down process.
Socio Bosque Program	It involves various stakeholders included indigenous peoples. Having a clear consensus agreement covering liability of participants, obligation of governments, incentives, sanctions and use of social funds.	The rights and obligations are clearly described. The amount of incentive was based on forest area. Benefits are not distributed in cash, but through facilities for health care, education and infrastructure.	The concept is quite simple, but it takes time to distribute benefits. Long chain of benefits distribution.	Since the beginning of the implementation of Socio Bosque in 2008, the number of hectares of conserved forests and paramos has increased from 178,000 to 629,476 in 2010.The conserved forests have increased from 178,000 ha in 2008 to 629,476 ha in 2010. About 27% of incentive is used for conservation.	The project managements are directly elected by members. Budget allocation is decided by the community.

Source: Gintings *et al*. (2011), *modified

Martin in Springate-Baginski and Wollenberg (2010) suggests that local institutions bring their own challenges to PES schemes and can have higher transaction costs and limited capacities. While, Brown notes that working at smaller scales is complex and costly. A lack of knowledge, capacities and ineffective communication constrained PES in Mexico. Local institutions that facilitated community participation were not always the best for implementing PES. Local institutions also were not always easy for outside entities to observe or assess for accountability.

The capacities of local institutions tended to be limited relative to what PES proponents wanted to achieve. Local institutions did not act in isolation and needed to be understood in relation to other institutions, such as local government, ethnic associations, development organizations, or neighboring communities. The costs and lack of local capacities raise questions about how REDD can be implemented effectively in the short term whilst still taking local conditions and needs into account. It also indicates that working with existing local institutions, both constitutionally mandated local government structures and informal customary institutions, is often preferable to the dangers of creating new ad hoc local organizations that can confuse local political structures and tend to stagnate without long-term external support.[150] Fairness is one of the most acceptability indicators of the REDD+ scheme proposed by Gintings *et al* (2011). Similar to Gintings, Springate-Baginski and Wollenberg (2010) also refer to the social equity as an important aspect of REDD+. She explained that the social equity means fairness in the processes and outcomes related to social justice and how costs and benefits are distributed. Thus, it has to be considered as a principle that should be embodied in any schemes of REDD+.

Table 18. The REDD's impacts on local livelihoods and governance[151]

	Households	**Community**	**Local government**	**Timber industry**
REDD incentive	Paymentfor reduced deforestation	More efficient land use	Payment for conservation targets	Compensation for shift to plantations
Type of benefit	Compensation for income opportunities foregone	Payment in-kind for meeting target, e.g. improving roads	Payment for managing conservation	Transition payment covering transaction costs
Links to development results (positive and negative)	Income generation; loss of traditional forest uses?	Investment in public asset; increased settlement and marketdevelopment?	Investment in long-term ecological sustainability	New jobs created; Displacement of existing land users to make way for plantations?
Mechanism for participation in decisions	Voluntary participation; informal feedback to program implementers	Community representative in project steering committee	None. Mandated national program	Industry representative on advisory committee

[150] Springate-Baginski and Wollenberg (eds.), 2010. REDD, forest governance and rural livelihoods: the emerging agenda. CIFOR, Bogor, Indonesia.

[151] Springate-Baginski and Wollenberg (2009). Incentives+: How can REDD Improve well-being in forest communities?, CIFOR, p.6. Document can be achieved in http://www.cifor.org/publications/pdf_files/Infobrief/021-infobrief.pdf

3.13 National Best Practice

3.13.1 Berau Forest Carbon Program

Berau Forest Carbon Program is a program which its goal is to develop a district-wide carbon accounting framework that captures emissions from a range of strategies and land types, which will dramatically reduce concerns about leakage (shifting activities to other locations). By 2015 the project aims to:

1. Bring at least 800,000 hectares under effective management;
2. Avoid emissions of 10 million tons of carbon dioxide over five years;
3. Protect critical watersheds and areas of high biodiversity value (including habitat of 1,500 orangutans);
4. Create improved economic outcomes and opportunities for communities living near forests.

The Unique Approach in Berau Program

Given the trends and concerns about REDD implementation, the Berau Forest Carbon Program is being designed with the following distinctive components:

1. District-scale program

Taking a comprehensive land use view:

Clarifying and reaching agreement over responsibilities of different agencies in a single district is likely to be the most replicable model and would yield the most lessons for development of a national program in Indonesia.

Integrated approach to carbon accounting:

The goal in Berau is to develop a district-wide carbon accounting framework that captures emissions from a range of strategies and land types, which will dramatically reduce concerns about leakage (shifting activities to other locations).

2. An inclusive partnership approach

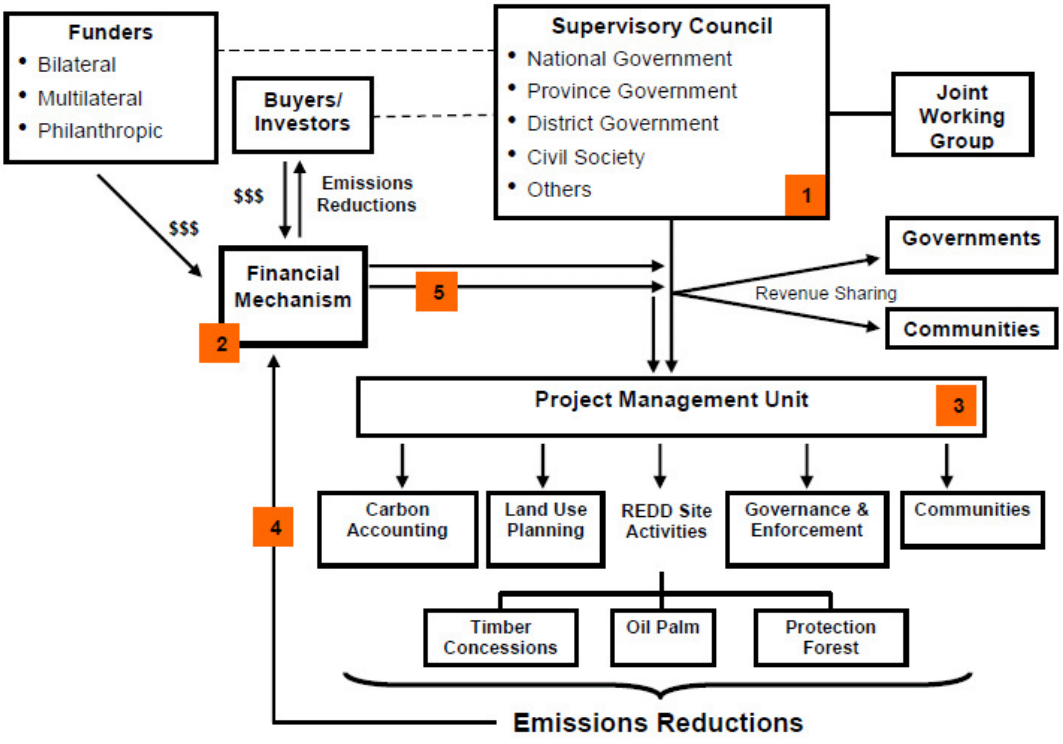
Between levels of government, between all stakeholder groups, and between scientific, academic, and charitable institutions.

3. A "No regrets" strategy for all participants

The Berau Forest Carbon Program is focused on aligning its efforts with existing goals and programs that are consistent with long-term sustainable development. As such, the program will pursue several strategies (e.g. Reduced Impact Logging). TNC and its partners are currently researching the appropriate legal and financial structures for the Berau Forest Carbon Program. Below is an initial conceptual design represented by **Figure 13**[152].

[152] http://www.law.harvard.edu/programs/about/pifs/symposia/fcfs/2010-fcfs-briefing-materials/fishbein_forest_carbon.pdf, last viewed July 6, 2012, 11:21AM.

Figure 13. Conceptual Design for Berau Forest Carbon Program[153]



Notes:

1. Program governance and decision-making: A Supervisory Council, representing key stakeholders will be created to oversee and make decisions on program implementation. A non-governing Joint Working Group will provide input from a broader group of government officials and other stakeholders whose involvement in the project will be critical to success.
2. Financial resource management: A financial mechanism (such as a trust fund) will be created to collect and manage program funding. During the demonstration phase most financing will likely come from public and private donors.
3. Program implementation and management: An institution will be identified or created to manage program activities, with oversight by the Supervisory Council. The activities managed by the institution will include:
    - Cross-cutting enabling programs: The program will invest in structures and processes that support good forest governance and effective decision making -such as carbon accounting, regulatory reforms, community involvement and improved spatial planning- that will foster sustainable land use and reduced forest loss and degradation.

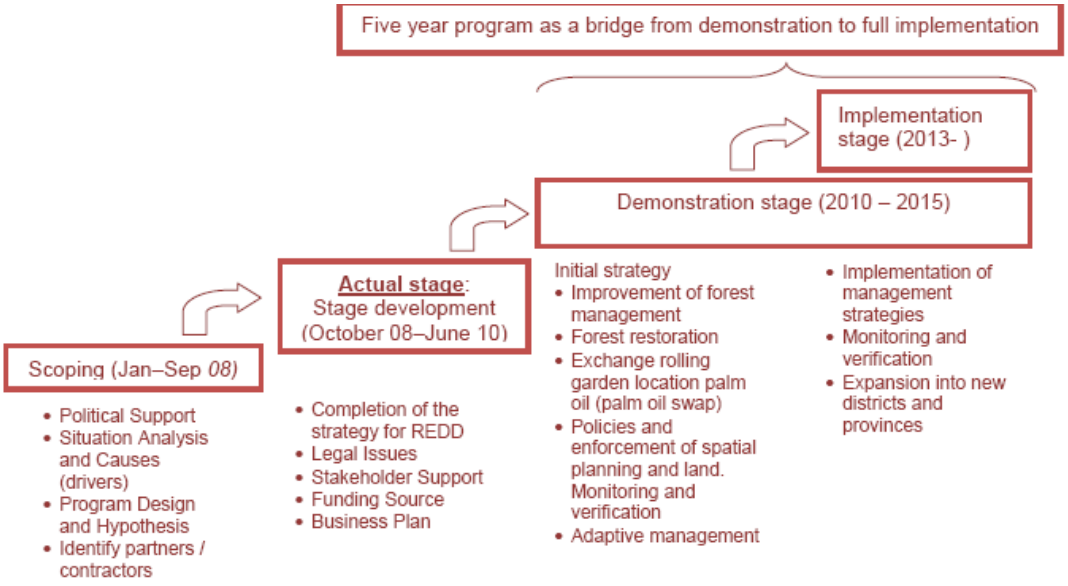
[153] http://www.law.harvard.edu/programs/about/pifs/symposia/fcfs/2010-fcfs-briefing-materials/fishbein_forest_carbon.pdf, last viewed July 6, 2012, 11:21AM.

- Site-specific demonstration activities: The program will work directly with land managers (e.g. communities, timber concessionaires, oil palm developers) to adopt practices that reduce forest loss and emissions.

4. Performance measurement: Results of individual polices and demonstration activities will be evaluated, but success of the overall program will be measured in terms of reduced emissions across the district as a whole.
5. Revenue sharing from carbon offsets: Once market rules are clarified, verified emissions reductions from the program will be bundled for marketing and proceeds will be shared with stake-holders as determined by the oversight body through its participatory planning process.

The program implementation is divided into 4 phases during 2008-2015, as follows:

Figure 14. Implementation timeframe for Berau Forest Carbon Program[154]



Berau Emission Reduction Strategies

There are four strategies implemented in Berau Program in order to reach its goal to reduce emission. These four strategies, like other studies conducted before, are based on the unique characteristic of the location of the program and what the community around the location needs. Those four strategies are:

1. Improve forest management within timber concessions:

   Sustainable forest management is a vital tool in lowering emissions and improving forest health in Berau. The Nature Conservancy has been working since 2006 to promote sustainable harvesting practices through the Responsible Asian Forestry and Trade Program (RAFT), funded by USAID. So far, eight of the district's 13 timber concessions are working

[154] Id.

with the Conservancy to improve their forest management by setting aside High Conservation Value Forests, adopting Reduced Impact Logging techniques, and tracking their timber. These efforts will be significantly expanded upon through educational and training initiatives, including an existing Reduced Impact Logging Learning Network.

The Berau program will develop additional financial incentives and contractual arrangements for concessionaires to move towards improved management, certification, and marketing of sustainably harvested wood. These approaches may include multi-party agreements, purchasing guarantees, and/or government policies that would grant preferential access to credit and markets for the best-performing concessions.

2. Develop incentives for improved management of protection forest:

   The program will pursue a two-track approach of supporting policy development while also piloting incentive agreements with managers of highly threatened protected forests – either communities or companies. Restoration of degraded and cleared lands within protected forests provides an additional opportunity within a REDD+ mechanism. Lesan Community Forest, an 11,000 hectare protected area long prized as home to a substantial orangutan population and recently zoned as protection forest, will serve a perfect case study for development of incentives for ongoing management and protection.

3. Create a model for redirecting oil palm development to degraded lands:

   The areas in Berau's spatial plan that are slated for "conversion" to non-forest uses, including to oil palm, are still more than 50% forested, indicating a significant opportunity to prevent forest loss through better siting of oil palm. The World Resources Institute and Sekala have found that a number of companies appear motivated to distinguish themselves from the overall oil palm sector and eager to cooperate in the program if it helps improve the sustainability of their production systems and, thus, their image. The key is to provide incentives to the district government and private companies for lost opportunities. This program will require significant legal work with government and communities to resolve any land tenure issues in degraded areas, scientific work to optimize strategies for reclaiming degraded land, and mobilization of local communities to ensure that they have the chance to benefit from the economic opportunity that oil palm represents. This work may be coupled with strategies to increase yields on oil palm plantations, thereby maintaining or increasing outputs while minimizing the impacts.

4. Paying for environmental services from High Conservation Value Forests and other special management areas within concessions areas planned for non-forest uses:

   The Berau Program is exploring options to create such a mechanism as conservation easement using the existing framework for environmental services licenses, or *Ijin Usaha Pemanfaatan Jasa Lingkungan* (IUPJL). The program will then identify target areas with high carbon, biodiversity or social value within timber concessions, and find a fair way to compensate concessionaires for set-asides or special management beyond legal compliance.

3.13.2 PNPM-Village Capacity in Maintaining Infrastructure: Evidence from Rural Indonesia[155]

The PNPM (*Program Nasional Pemberdayaan Masyarakat*/National Program of Community Development) examines the assumption that villagers are able to finance the necessary maintenance of infrastructure on their own. Inadequate rural infrastructure creates constraints to economic growth by limiting productive growth and impeding the development of human capital. Recognition of the rural poverty-alleviation role of infrastructure development motivated the central government, as well as donor agencies, to direct a significant amount of aid into supporting such projects.[156] Naturally, the poverty-targeting criterion plays an important part in deciding on the location of project activities. As priorities for infrastructure projects are usually given to poorer regions and villages, a problem arises. Currently, infrastructure is often provided under the implicit assumption that local people are able to pay the full maintenance.

The expenditures of the villagers are among other affected by the condition of commodity, crop, or agricultural product. The prices of these products areaffecting the power of consumption in the community. The program also discussed the resources (incomes and expenditures) of the villagers affecting their willingness to contribute some of these resources for maintaining their public infrastructure such as roads, bridges, and piped water systems. The study of World Bank on PNPM (2010) provides some policy recommendations, how the maintenance of public infrastructure should be determined:[157]

1. Institutionalize infrastructure maintenance with clearly defined roles and responsibilities for the different levels of administration.

   The study finds that there is a significant willingness on the part of villagers to contribute towards infrastructure maintenance. For most villages, there would be adequate resources to conduct routine maintenance. However, villagers may need a significant financial support to ensure that periodic maintenance is conducted properly. This suggests that villagers can take up the responsibility for routine maintenance. At the same time, district governments and outside agencies need also to step up their support of the types of maintenance activities are unlikely going to be able to afford.

2. District governments need to gradually reallocate resources towards maintenance instead of upgrades.

   The study suggests that district governments tend to use their resources to support upgrades and rehabilitation efforts instead of periodic maintenance. There is a strong case for a gradual shift from construction and rehabilitation or upgrades towards developing the necessary resources and institutions to undertake rural infrastructure maintenance activities.

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[155] Publication by The World Bank, June 2010, Jakarta

[156] About 76% of almost US$ 700 million-worth of investments channeled through the World Bank's *Kecamatan Development Program* (KDP) were for infrastructure projects, with 23% for economic activities, and 1% for education and health activities as stated in ADB, 2005, Proposed Loan, Republic of Indonesia: Rural Infrastructure Support Project.

[157] World Bank (2010). Village Capacity in Maintaning Infrastructure: PNPM, p. 65

3. Newly constructed infrastructure needs to be accompanied with a clear maintenance plan that states clearly the resources necessary to implement it.

   The data gathered show that the maintenance costs vary much more than the villagers' willingness to pay. These variations are driven, among others, by local conditions as well as the volume and design of the infrastructure. Accounting for the maintenance costs long after the fact—which may be necessary in order to estimate the resource gap that will need to be plugged—can be cumbersome, costly, and may not be particularly accurate. On the other hand, these variations are likely to be better understood by the initial implementers of the infrastructure. It is therefore crucial that new projects be accompanied with plans for sustainable maintenance that can be used and understood by the various agencies that may need to be involved in plugging the resource gap.

4. At the village level, there needs to be a designated institution responsible for maintenance.

   The study finds that villages do implement routine maintenance on their own. However maintenance can be implemented more efficiently if they are implemented at the correct time.[158] Moreover, these activities will require villager contributions and we find that villagers' willingness to contribute are positively and signifi cantly correlated with the responsiveness of an institution in immediately addressing reported infrastructure problems. This designated institution or person can therefore act to coordinate maintenance eff orts as well as respond to potential problems. Having an institution responsible for maintenance—this could well come from an existing village institution—will be instrumental in ensuring the sustainability of the maintenance efforts.

5. The assignment of maintenance activities to villagers needs to take into account the possibly unequal distribution of burdens towards poorer households.

   The study shows that maintenance costs can be reduced significantly when villagers are expected to contribute all of the unskilled labor. However having villages supply all unskilled labor may amount to a regressive "informal tax", where poorer households "pay" more (in the form of labor) for public goods. It is important to address this potential issue in the process of institutionalizing maintenance activities at the village level.

3.13.3 Small Grants Program for Operations to Promote Tropical Forests (SGP PTF) in Indonesia

The Small Grants Program for operations to Promote Tropical Forests (SGP PTF) is a joint initiative of the European Commission (EC) and the United Nations Development Program (UNDP) and being implemented through an executing agency, the SEAMEO Regional Center for Graduate Study and Research in Agriculture (SEARCA) during 2005-2007. The SGP PTF aims to promote sustainable forest management in direct partnership with local stakeholders in selected South and Southeast Asian Countries. It contributed to enabling individuals and communities dealing with forests and forestry, and society at large, to benefit in an equitable way from forest-related products and services that are produced are produced on a socially

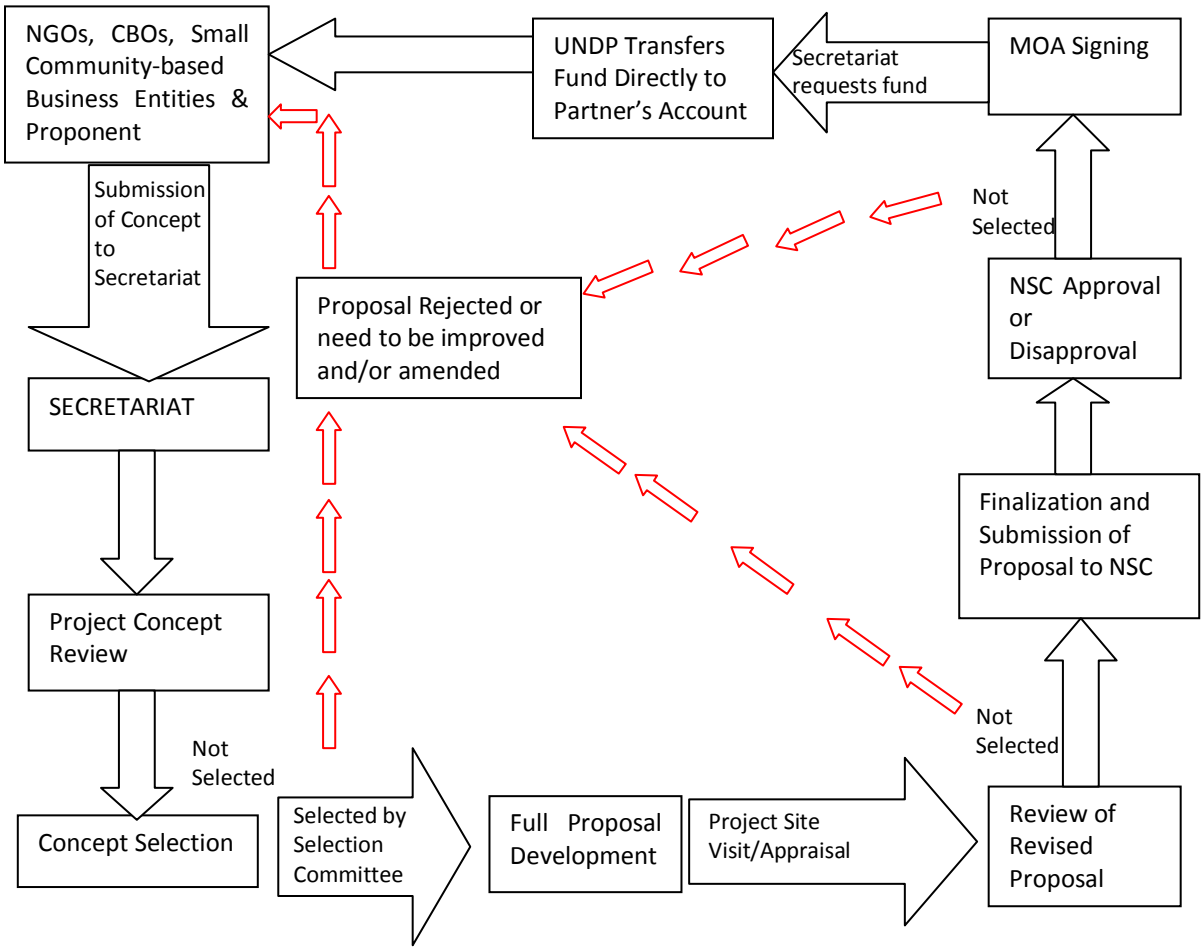
[158] Dongges Ch, G Edmonds and B Johannessen (2007). Rural road maintenance: Sustaining the benefits of improved access. Bangkok: International Labour Office.

acceptable, economically viable and environmentally sound basis. The program focuses on sustainable livelihood for forest dependent communities including customary communities. Most of the proponents aim to enhance of communities' livelihood, but many of them have to focus initially in securing basic recognition of community rights to the management and utilization of natural resources. Recognition can be in the form of local regulations such as the Governor's or Regency Head's Decrees and other forms. To support this process, grantees are involved in mappings of areas, awareness, and institutional arrangement of community organizations and partnership building with local government authorities. One of the clusters created by the proximity of the work-areas of SGP PTF is the Lore Lindu National Park.

Funding Mechanism

The funds of the project are kept by a Trustee, in this case UNDP Indonesia. Selection of approved projects is done by the National Steering Committee (NSC) which members are from the GoI, NGOs, academia and practitioners. The figure below explains the project's proposal approval:

Figure 15. SGP-PTF Proposal Approval Process[159]



[159] UNDP-EU-SEARCA: SGP PTF,2005-2007.

Benefit Distribution

Benefit distribution in SGP PTF is different from one project to another. As each proposal is different, activities and flows of benefits are also varies. The proposals which have been selected by the NSC, then gets parts of their funding based on their project's activities performance. Several grantees made remarkable strides in terms of community planning, launching of livelihood activities and engaging local governments to support resource tenure aspirations of forest communities. Active Technical Assistance on livelihoods started on selected sites based on the opportunities and priorities identified by grantees (certification in Java; product design and certification in Sulawesi; and ecotourism in Sumatra). Together with 3 proactive grants, the program began a serious documentation of experience of three provinces in negotiating for resource tenure. The experiences in these three sites would provide further insights on strengths and weaknesses in facilitation efforts on resource tenure. The country program provided orientation and training to back up financial management for selected grantees that were having problems in this arena.

Examples of BDS in PTF projects[160]:

Gender-Oriented Development of Local Economy through the Field School for Forest Community as Efforts to Reinforce the Food Security of Forest Communities.

Increased income sources for the community from a community-based forest management have not been considered as a mutual interest of various (public and private) sectors. In addition, participation has been dominated by the men. Since the communities are not much aware of the significant roles of the women among the forest communities, the needs of these women have not been accommodated in technical activities. Women have not been much involved in supporting a functional forestry community institution for forest management mechanisms, in the management scheme for the management units, and in developing businesses originating from forest products. A community in Sukabumi, West Java, working together with LATIN, an NGO, is developing their non-timber forest products (NTFP) by empowering women forest farmers groups to start their home production of cassava, peanuts, ginger, herbs and the like, to edible snacks of chips and instant drinks to increase the community's income. They carefully select the crops, which are more resilient to lack of rainfall according to the current situation in the area. The program assisted project managed to increase Rp 150 thousand (USD 16.5) per capita per month.

Impacts:

1. With the increase of community capacity to manage forest in a sustainable approach, they have a chance to be able to manage wider new forest area. This will be one of options to reduce an issue of lack of food in the area, **a sign of increased resilience to climate change impacts**. A model of community based forest management has produced a model for a sustainable forest management.

[160] SGP PTF UNDP Indonesia (2007) and Linda Sulistiawati's article on http://threedegreeswarmer.org/2011/02/climate-justice-from-the-bottom-up-case-studies-from-indonesia/ last viewed July 6, 2012, 4:31PM.

2. **Developing field school is the best method to increase women capacity in the project area**. The field school functions as a media to find a good form to encourage forest management policy based on gender dimension.
3. It is fact that market of food and drink production on the field is still in favour of large company productions instead of household based production. This should be one of consideration for decision makers to provide policy giving more chance of **household industries to be easy to compete in the market**.
4. The existence of group cooperatives which has **capacity to increase group investment** and also provide good services to the community outside the groups should give opportunities for **further development of any micro-finance development model** at village level.
5. Household based industry has resulted **employment opportunity** in the village and this can be one of solutions to decrease unemployment issue in the villages.
6. The development of household based industry in the villages will become barometer of the village economy situation. The development will **increase household income** in the village and this will impact to the increase of community's saving.
7. The availability of new options as sources of income generation and the increase of community saving ability will **reduce forest threat** in the village.

Local Economic Development and Environmental Conservation in Sumber Jaya and Way Tenong, West Lampung, Lampung

From the entire area of West Lampung District (495,040 ha, 394,084 inhabitants), Sumber Jaya Sub-district and Way Tenong Subdistrict have relatively high deforestation levels. Both sub-districts are positioned on the upper part of the Tulangbawang water catchment area. Watala, a local NGO is working in this area to increase the livelihood of the community. The communities in these sub-districts heavily depend on agroforestry products, such as coffee, pepper, and fruits cultivated around and within the protected forest areas, as well as vegetables at a lesser scale. Although market for commercial fruits and vegetables in Lampung is promising, the poor local farmers have been unable to make use of the opportunity. Existing formal financial resources have not provided them with loan services. Whenever provided, the loans are available with high interest levels and, hence, some of the farmers have to obtain loans from informal financial lenders. In such difficult situation, community members generally clear forest areas for new cultivation land or take part in illegal logging that extends the deforested area. This project supports to alleviate poverty from the communities by extending their economic options that will in turn support environmental conservation. The goal of the project is to provide wider economic options for community who live in or surround protected forest to get rid of poverty without sacrificing the environment quality.

Impacts :

1. **Open remote village community's perspective**. This project has transferred knowledge to village communities in understanding their area, their right to the area, the use of science

and technology for better living condition. The remote village has been opened their perspective by the project activities.

2. **Put community as a subject of development.** Activities of the project have put the community to be a subject of development. With the knowledge that they have, daily life pattern on using natural resources, mechanism to manage natural resources in their area, and also their future perspective on managing natural resources and its environment in a sustainable manner plus activities of this project has put the community into important actor of the community and environment development.
3. **Strengthen community's role in managing their environment.** Activities of the project, especially activities that relate with organic farming has strengthened the role of community in managing their environment, and their resilience to climate change impacts.
4. **Increase capacity of community.** Various trainings, workshops, excursion (study tours) provided by the project have increased capacity of community in the villages.
5. **Institutional strengthening and stimulating dialogue among a variety of stakeholders.** Activities of the project has strengthen organization in the village especially community groups.
6. **Provide proofs of community are capacity in managing and utilizing natural resources** in their area in a sustainable manner and environmentally safe. Outputs of this project have shown how community villages run their economic activities, utilize and manage their environment in a sustainable manner. This is a good proof to policy decision makers on Community Based Forest Management (CBFM).

3.13.4 Cinta Mekar Micro-Hydro Power Plant

The Cinta Mekar project is a 120-kiloWatt micro-hydro power plant (MHPP) designed to generate a supply of grid-connected electricity. The project is located in Cinta Mekar village, Subang, West Java, which is about 150 km from the capital city of Jakarta. Cinta Mekar, which consists of four sub-villages, is home to 646 families.[161] Prior to the start of the project, 102 households were without electricity. Most villagers are poor rice farmers expecting to benefit from being connected to the main power supply. After over two years of preparations, the plant was completed and launched on April 17, 2004. The project is referred to as public-private partnership (PPP) because it is funded and managed by public and private institutions. According to Ibeka, the total project cost of USD 225,000 was borne equally by three parties: a multilateral donor agency, UNESCAP; a private company, HIBS, and a non-governmental organization called Yayasan Ibeka. Both UNESCAP and HIBS contributed USD 75,000 each to cover the investment cost of the power plant, while Ibeka contributed USD 75,000 for micro-

[161] Ibeka (2007). *Community Private Partnership Pro-Poor Infrastructure: Cinta Mekar Microhydro Training Power Plant*, a presentation by Ibeka in the Seminar on Policy Options for the Expansion of Community-Driven Energy Service Provision held by the UNESCAP in Beijing on March 11-12, 2007.

hydro dissemination, social preparation, and a training facility provided for the village community.[162]

Ibeka's funds came from other donors and in this project HIBS provides technical assistance and the contractor to build the facilities for the MHPP. While the initial cost of investment was covered by those institutions, the plant is equally owned in a joint venture between the local community and a private company. The community is represented by the Mekar Sari Cooperative (which is comprised of local villagers), and the private company is PT HIBS. Each party claims 50 percent ownership. The joint venture sells the electricity generated by the plant to PLN, the state-owned electricity company, under a Power Purchase Agreement (PPA) for low voltage and medium voltage connection. The electricity is sold with a tariff of Rp 432 (or USD 0.045) per kWh. During operation, monthly sales revenue from the plant is approximately Rp 25 million. After depreciation and maintenance costs, the total net monthly profit is approximately Rp 10 million (roughly USD 1,000), which is shared equally by the Mekarsari coop and HIBS.[163] According to the agreement prepared in the early stage of the Cinta Mekar MHPP project, Mekar Sari's share of the profits are to be returned to the community with special priority given to the poor. The Mekar Sari Coop has returned the profit to the Cinta Mekar village in the following ways: providing electricity connection; paying fees for education and schooling for the poorest households, building a health clinic, providing seed capital for income-generating activities, village infrastructure development, and other activities.

Stakeholders

The project was initiated by Yayasan Ibeka. This local NGO focuses on rural community empowerment through application of environmentally-friendly technologies. Ibeka initiated the MHPP project development and linked all stakeholders. Ibeka also conducted capacity building activities for the village and the Mekar Sari Cooperative so that the community could be a main player in the project. The community was represented by the Mekar Sari Cooperative. The cooperative was assigned the responsibility to develop and operate the power plant together with PT HIBS. The project was elected by the UNESCAP to be part of its "5 P" program (Pro-Poor Public-Private Partnership) and a grant of USD 75,000 was awarded. The project also endorsed by the government of the Netherlands and the government of Indonesia through the Ministry of Small Enterprises and Cooperatives and the Ministry of Energy and Mineral Resources. The project is currently running as planned, producing and selling electricity to the grid. The partnership between the Mekar Sari Coop and PT HIBS continues to function smoothly. All electricity generated by the plant is sold to PLN. All profit earned by the Mekar Sari Cooperative is being distributed among the community, as planed.

By 2008, the coop paid the connection installation fee for 122 poor households, all of which now receive electricity. Scholarships have been granted to 156 children from the poorest

[162] Id.
[163] DGEEU (2009). *Bring Village to Live with Self-Management Power Plant*. Accessible at http://www.djlpe.esdm.go.id/modules/news/mbl_detail.php?news_id=1550

families in the village. A health clinic has been built, and a community radio station and a village telephone have been installed which will improve communication and information access.

Table 19. Stakeholders Mapping[164]

Actors	Involvement		Role
	Design/ development	Implemen-tation	
Yayasan Ibeka	✓	✓	• Facilitate the development and implementation process, including linking all stakeholders • Conduct dissemination and capacity building for the village community
UNESCAP	✓		• Provide grant for project investment cost
PT HIBS	✓	✓	• Contribute to project investment cost and in return own 50% share • Operate the plant (together with the village community)
Mekar Sari Cooperative	✓	✓	• Represent the village community, which is to own and operate the plant (together with PT HIBS)
PLN	✓	✓	• Purchase the electricity
Ministry of Small Scale Enterprises and Cooperatives	✓		• Endorse the project
Ministry of Energy and Mineral Resources	✓		• Endorse the project
The government of the Netherlands	✓		• Endorse the project

The success of this MHPP proves that a public-private partnership is a feasible and workable option for renewable energy projects. The determinant factors in this project's success were: (1) available public funding for the community (2) equal ownership of the venture between the two parties.[165] Early in the development stage, villagers were concerned that the project might negatively affect the water supply. They cited fears that there would be less water for irrigation and also that the river water might become polluted.[166] However, their concerns quickly subsided once the project was implemented and no such problems took place. A direct result of the MHPP project has been a far more stable supply of electricity for the village. The community has been able to generate revenue and reinvest it in village development through the provision ofhealth care, education, seed-capital and information access. Energy development throughout all of Indonesia can benefit from this project. The Cinta Mekar MHPP is an excellent example of a community-based, small-scale project that can be successfully implemented with local and affordable technology. The electricity output not only benefits the

[164] Cinta Mekar Micro-Hydro Power Plant: *Giving Power to the People*. Accessible at http://www.bicusa.org/en/Document.102200.aspx

[165] WWF, 2009, *Cinta Mekar MicroHydro Plant Adopts Community-Based Microhydro Management*. Accessible at http://www.wwf.or.id/berita_fakta/berita_fakta/?9160/Cinta-Mekar-Adopts-Community-Based-Microhydro-Power-Plant-Management-System

[166] Id.

locals, but rather can contribute to electricity supply for a broader area depending on grid availability. This project also promotes renewable energy development and has positive environmental impacts, including reduction of fossil fuel dependency and no generation of GHG emissions and local air pollution. Villagers are motivated to protect the forest along the river because it directly influences the rate of water flow.The project is considered successful by many parties and is known as the first community-based MHPP that connects and sells electricity to the grid, as well as the first PPP project. The project continues today, thus sustainable benefits are still being delivered to stakeholders.The project was aimed not only at providing electricity to the village community and the surrounding area, but also at generating income for the village community through the selling of power to the grid. The project is successful due to the community's capacity for selfmanagement. A great benefit of this project is that the community is able to use the generated income to empower themselves through investment or production activities instead of mere infrastructure development. The community has used the money to build a health care clinic, provide scholarships, supply villagers with electrical access, and offer seed capital for income generating activities. A key success factor for this project was an emphasis on community involvement in the planning, development, and implementation stages. While similar projects often view the community solely as the beneficiary, Cinta Mekar involved the community as a main player and owner, allowing the villagers to develop and manage the project. As an owner of the project, the community is integral in the decision making process.

3.13.5 Payment for Environmental Services (PES) in Cidanau Watershed

Payment for Environmental Services (PES) is payment mechanism by downstream community to the community in the upstream for conservation they carry out. The mechanism effort has been tried to develop a relation between the community in the upstream and those living in the downstream through transactional system. This relation needs to be developed in order to raise environmental concern among the communities in the upstream and downstream. It is a fact that the impact of environmental treatment by upstream community will be directly felt by the community in the downstream. The community in the upstream may not realize that unfriendly treatment on environment around them will make the community in the other stream suffer. They, therefore, have no concern about maintaining the environment, since no direct benefit they can earn. Thus, there is a need to create a mechanism that encourages the community in the upstream to maintain environment around them. In this sense, the upstream community is the provider for environmental services that should be paid by the downstream community as the receiver. The notion of the exchanged commodity is not limited only to conservation services in the upstream of river or watershed, but it can also be in the kinds of a biodiversity, carbon sequestration and landscape.[167]

[167] Wunder S (2005). Payments for Environmental Services : Some Nuts and Bolts. CIFOR's Occasional Paper No. 42. Center for International Forestry Research. Bogor.

Administratively, Cidanau Watershed is located in two regencies, Serang and Pandeglang. In Serang Regency, it covers the Districts of Padarincang, Ciomas, Mancak, Pabuaran, and Cinangka, while in Pandeglang Regency it includes only Mandalawangi District. The Cidanau Watershed comprises 21 subwatersheds, all of which flow their water into the Cidanau River. Some of the subwatersheds flow their water into Rawa Danau. Formerly, Rawa Danau was a lake functioning as an effective catchment area, since most of rainwater in the area flows into the location. The water then flow into the Cidanau River before it reaches the Sunda Strait. Besides rainwater, Rawa Danau has many wells, which also fill the area. The area of the Cidanau Watershed covers a size of 22,036 hectares and encompasses: 1) plateau in which Rawa Danau and rice field of 10,176 hectares reside, 2) sub-watershed from which the water flows to- and accumulates in- other plateau of 11,860 hectares. Based on a contour map of the location, the plateau is located at about 100 meters above sea level.[168]

The PES concept of upstream-downstream development in Indonesia is firstly introduced by GTZ-SMCP (*Deutsche Gesellschaft für Technische Zusammenarbeit* – Strategic Manpower Conversion Program) to Cidanau Watershed stakeholders in 2002, in a one-day seminar at Sucofindo office in Cilegon. The seminar, in fact, was a promotion to apply PES concept in the area in order to overcome the existing problems in the Cidanau Watershed. As the followup of the seminar, the funding agency giving an opportunity to the *Rekonvasi Bhumi* a local NGO (Non-Government Organization) in May-June 2003 to see and learn the successful PES in Costa Rica, Central America. This ended up with the decision of the funding agency to award PSDAL-LP3ES (*Pusat Studi Pengembangan Sumberdaya Air dan Lahan*/Center for Land and Water Resources Development Studies-*Lembaga Penelitian, Penerangan, Pendidikan Ekonomi dan Sosial*/*Institute for Social and Economic Research, Education, and Information (PSDAL-LP3ES)* a national NGO to implement PES in the Cidanau Watershed. Through a sequence of facilitation process, *PSDAL-LP3ES* and NGO *Rekonvasi Bhumi* succeeds to stimulate the formation of Communication Forum for the Cidanau Watershed/*FKDC*. The forum consisted of the Cidanau Watershed stakeholders such as farmers in the upstream as well as downstream of the watershed, universities, Forest Office, Agriculture Office, Gubernatorial Office, *PT Krakatau Tirta Indusri (KTI)*, and other many other government organizations and companies. The forum was then drawn up by Banten's Governorial Decree 124.3/Kep.64.Huk/2002. The government support was deemed to be the main factor that made PES model implementation effort could work.[169]

The kind of conservation effort is tree growing on farmers' land, while the payment amount will be determined by two sides, the upstream community farmers (the sellers) and downstream community (the buyers). This concept was then socialized to many institutions including Local Parliament, Gubernatorial Office, and some companies especially those using much water, and many more. As the result, the concept receivedpositive responses from most parties. Likewise,

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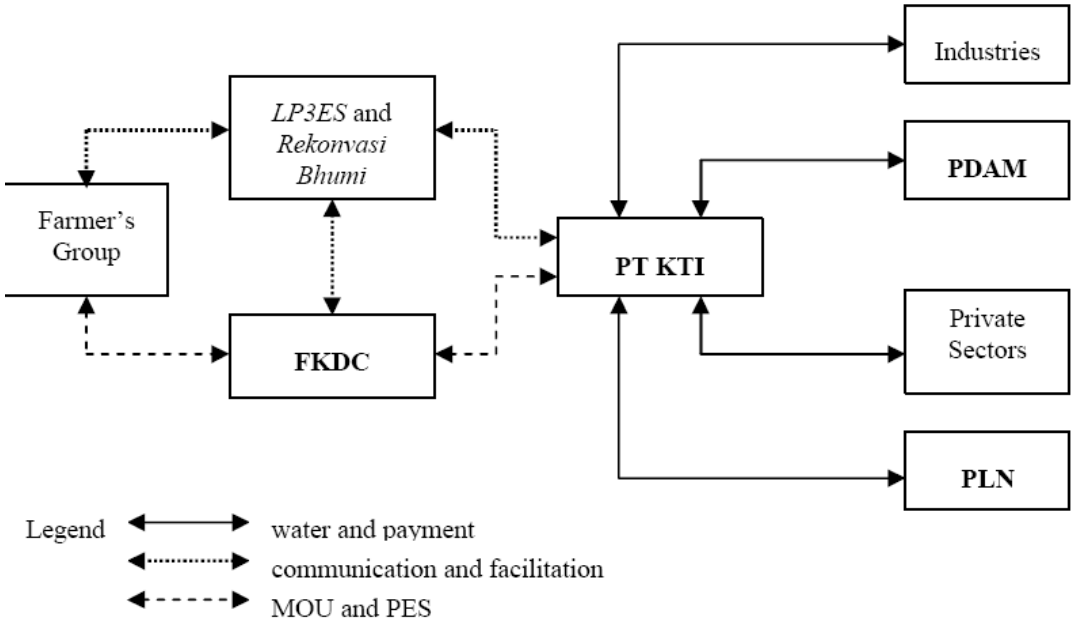
[168] Bappeda of Banten (2002). *Penyusunan Master Plan Pengembangan dan Konservasi Daerah Aliran Sungai* Cidanau (Master Plan Arrangement for Conservation and Development of the Cidanau Watershed). *Badan Perencana Pembangunan Provinsi Banten* (Provincial Development Planning Board of Banten) and *PT Formasi Empat Pola Selaras Konsultan*. Serang.

[169] Budhi GS *et al* (2008). *Concept And Implementation Of Pes Program In The Cidanau Watershed: A Lesson Learned For Future Environmental Policy*.

large companies were ready to pay more for water they use in order to pay farmers who apply conservation bid.

The implementation of PES in the Cidanau Watershed was motivated by the threat of water problems in the watershed. There are some motivating factors to implement PES, namely problems encountered in the Cidanau Watershed such as encroachment which has devastated the function of cacthment area and application of fertilizers and pesticides in farming which polluted water. Another factor very urgent to overcome is the need for continuous water supply, which has been found much fluctuated in recent years.

Figure 16. Scheme of Payment for Environmental Services in the Cidanau Watershed[170]



Although PES is deemed important to implement to solve water problems and many companies have found themselves agreed, implementation of the program is not simple. Implementation of PES was made possible as *PT. KTI* as a water company was ready to finance the implementation as a test. In the implementation test of PES, *PT KTI* financed the community in the upstream of the Cidanau Watershed to grow trees and using conservation technique in their farming, besides funding other agriculture-related business PES implementation has produced some benefit impact to environment and the farmer condition involved in the project. There are at least four components showing better condition of environment as the result of PES implementation, namely reduction of illegal logging practice, better tree growing performance, better application of conservation farming, and expectation of income generation. The program also gave benefit to the farmers in the kind of internalization of environmentally friendly attitude among farmers and economic condition of farmers related to PES implementation, which is also important to make PES implementation sustainable. However, there are some obstacles to implement PES in the future on sustainable manner, as

[170] Adopted from Budhi GS *et al* (2008). *Concept And Implementation Of Pes Program In The Cidanau Watershed: A Lesson Learned For Future Environmental Policy*.

regulation on the concept is still debatable. PES concept is still hard to accept as a new regulation, since the concept is regarded to have been accommodated by the existing regulation by some policy makers.

Such success story of PES implementation in the Cidanau Watershed needs to be taken as a lesson by government for future environmental policy. It is important to be noted that the success of PES implementation by *PT. KTI* stressed on educational aspect, in which rights and responsibilities of each side can be controlled transparently. Through this commitment, the farmers in upstream area will not procure compensation payment if they do not carry out beneficial efforts for those living in downstream. Upstream-downstream transaction mechanism is an entry point to develop local potential in order that upstream community canmanage their own resources. Besides that, proper upstream-downstream transaction mechanism and assistance process can help local community build external communication and tie in wide partnership in order to foster community's well being.

With some improvement and modification, PES implementation can be tested nationwide. There is a need that campaign on PES implementation should be broadened among all stakeholders. It is also required that some big companies be encouraged to initiate the implementation; especially those commercializing as well as consuming water in large amount. Government, on the other hand, should play its main role as the initiator and regulator in order to improve and maintain PES program.

4. LAND USES OPPORTUNITY COST IN CENTRAL SULAWESI

4.1 Measuring Opportunity Costs of REDD+

Although according to the spatial function 65% of the land surface of Central Sulawesi Province are forest area, however, according to BPS, it is estimated that only 38% of the province has forest cover.[171] The province of Central Sulawesi is home for 2,633,420 inhabitants, where 40% the province economy are depent on the agricultural sector (**Table 20**).

Table 20. Socio-economic and demograpic indicators of Central Sulawesi Province

Indicators	Situation
Population	2,633,420 people
Population density	43 people/km^2
Gross Domestic Regional Product (GDRP)	IDR 36,124,486,000,000
Per capita income (PCI)	IDR 13,717,708
Contribution of agricultural sector to the province economy	40%
Contribution of agicultural sector to the employment in the province	60% (600 thousand people)

Source: Wulan (2012); BPS (2010)

Plantation is one of the most important land uses in Central Sulawesi Province. It covers about 126,000 hectares that could be categorized into two groups: large scale and small-scale plantation. Main commodities for Central Sulawesi in terms of land areas as well as economic contribution are cocoa, clove and oil palm. Cocoa and clove is usually managed by small holder farmers (less than 5 ha), while oil palm is managed by large scale company. Some smallholder plantations are managed as agroforestry system (mix garden). Cocoa is the main agricultural commodity in Central Sulawesi. In 2010, export volume of cocoa bean was more than 109 thousand tons with total value reached USD 297 million. In 2011, mining sector that has a relatively small contribution to the regional economy or about 1.71 percent has growth by 35.16 percent (Bappeda, 2012). Central Sulawesi also has high potential on oil, gas, nickel, coal, chromites and marble. Hence, in the future mining sector might become an important sector for the Province. Currently, logging companies (IUPHHK-HA or HPH) in Central Sulawesi are mostly inactive. However, small logging concessions (IPK) and illegal logging continue to

[171] Wulan (2012). The Opportunity Cost Study of the Major Land Uses inCentral Sulawesi. ConsultantReport. UN-REDDProgramIndonesia, Jakarta.

operate, while official revenue to the local government from forestry sector is considerably low. These activities, however, are decreasing in the recent years (Wulan 2012).

Deforestation rate in the period 2000-2011 is almost 46,000 hectares per year and in 2011, degraded areas in the Province was more than 400,000 hectares (Ditjenplan 2011). The underlying causes of deforestation in Central Sulawesi Province are mainly due to low law enforcement, ineffective spatial planning, ineffective forest management unit and problematic tenurial system; while the main drivers of deforestation and forest degradation in the region are forest conversion for plantation. In 2010, the statistic showed that only about 38 percent of the area of Central Sulawesi is classified as forest (BPS 2011). Forest that is currently undisturbed or designated to be conserved such as National Park, Forest Protection categorized as one land use class. Logging areas are determined from secondary forest and the changes from undisturbed forest to logging areas are considered as degradation. Plantation is disaggregated into four main land uses that are cocoa plantation, coconut plantation, and oil palm plantation. Most production forest across Central Sulawesi is managed by logging concessionaries (IUPHHK-HA or HPH). Some 23 ha of the production forest in five districts has also been allocated for community timber plantation (HTR). Currently, there are thirteen permits of logging concessions and one permit timber plantation (IUPHHK-HT) which total permit areas cover about 867,555 ha scattered in eight districts. However, since five years most logging concessions have been temporarily stopped their operation, meaning no timber harvesting (Wulan 2012). The opportunity costs of REDD could be estimated by capturing physical characteristics and economic distinctiveness. The opportunity cost indicate the forgone profits from alternative land uses, which correspond to the minimum price to be paid for REDD+ services. The costs of REDD+ fall into two categories:[172]

1) **The opportunity cost**
   It equals to the forgone profits from alternative land uses such as logging, plantations, or food crops, that is related to the minimum price to be paid for REDD+ services.

2) **The transaction cost**
   It encompasses all costs associated with government transaction costs, i.e. costs for establishing and running the scheme of REDD+ and private transaction costs, i.e. costs of individual landowners have to bear in order to participate in the REDD+ program. It includes costs for measurement, monitoring, capacity building, planning, brokerage, verification, certification, insurance, etc.

The opportunity costs have to be considered in the planning and implementation of REDD+ scheme because of the multipurpose of forests. The characteristics of those multiple forest products, i.e. goods and services, differ from one to another. Generally, there are three characteristics of relation amongst forest products:

1) **Trade-off**
   Usually, goods and services that closely related to land use have “trade off” characteristics. The relation between production of timber and cacao, for instance, is “trade-off” because

[172] Wertz-Kanounnikoff (2008) in Wulan (2012). The Opportunity Cost Study of the Major Land Uses inCentral Sulawesi. Consultant Report. UN-REDD Program Indonesia, Jakarta.

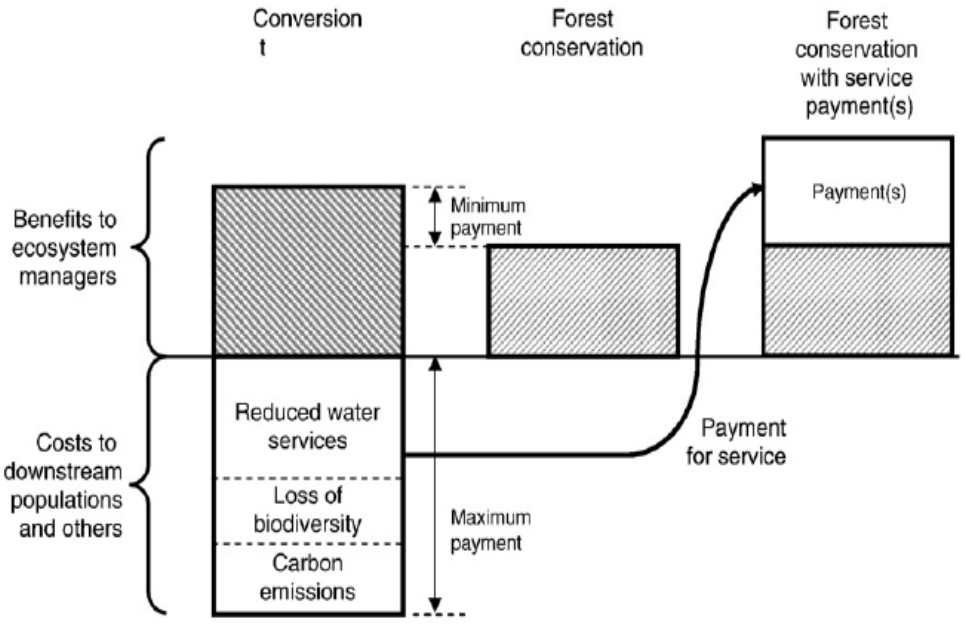
both wooden trees and cacao plantations need space for growing. Therefore, increasing plantation of wooden trees will reduce space for cacao in the same area.

2) **Substitution**
Some forest products, e.g. timbers' species, could substitute each others. "Ramin wood" could be substituted by "rubber wood" because they have smilar physical characteristics. In some extent, the function of woods for furniture could be substituted also by bamboo or rattan. Palm or coconut trees could also substitute the function of "woods", not only for furniture but also for housing.

3) **Complementer**
Some other forest products have complementer function. The most common complementer products are wooden trees and tolerant crops in an agroforestry system. By choosing appropriate species of trees and crops, a well managed agroforest could produce timbers and crop yields together.

Due to multiple function of forests, in the case of "trade-off function", conserving forest means foregone the benefit (goods or services) from the alternative land uses, such as lose of benefit from agriculture production if the forest converted into agricultural land. It also includes the revenue from timber if the forest is harvested in a production forests or private forests. The minimum payment for environmental service, e.g. opportunity costs of REDD, is equal to the difference between the conversion benefits and conservation benefits. Thus, the opportunity cost of avoiding deforestation is the difference between the benefits provided by the forest and those that would have been provided by the alternative uses[173] (**Figure 17)**.

Figure 17. Minimum Amount of Payment for Forest Environmental Services[174]



[173] Pagiola & Platais (2007). Payments for Environmental Services: From Theory to Practice. World Bank, Washington.
[174] Pagiola & Platais (2007), id.; Engel *et al.* (2008). Designing payments for environmental services in theory and practice: An overview of the issues. Ecological Economics 65 (2008) 663-674. Elsevier.

It is important to note that in many cases opportunity costs have to be considered as the largest portion of REDD+ costs.[175] The REDD+ scheme could be implemented successfully if the benefits from carbon market are higher than the opportunity costs of the conversion of land uses (from one type of land cover to another type). The additionality of carbon sink and/or stocking shall be based on the changing of actual land covers. Accordingly, the additionality could be resulted not only from preserving primary forests but also changing from the situation of low carbon stock to become higher carbon stock. Since not all forest areas (legal term) are forested (forest cover), then the term of "deforestation" or decreasing carbon stock has to be defined carefully. It means that the conversion of forest area into agriculture purpose does not mean automatically as carbon release. In some cases of the conversion of heavy degraded forest land or shrubs, the conversion into agricutural plantation could become net carbon sink (**Figure 18**).

Figure 18. Various possibilities of land cover change[176]

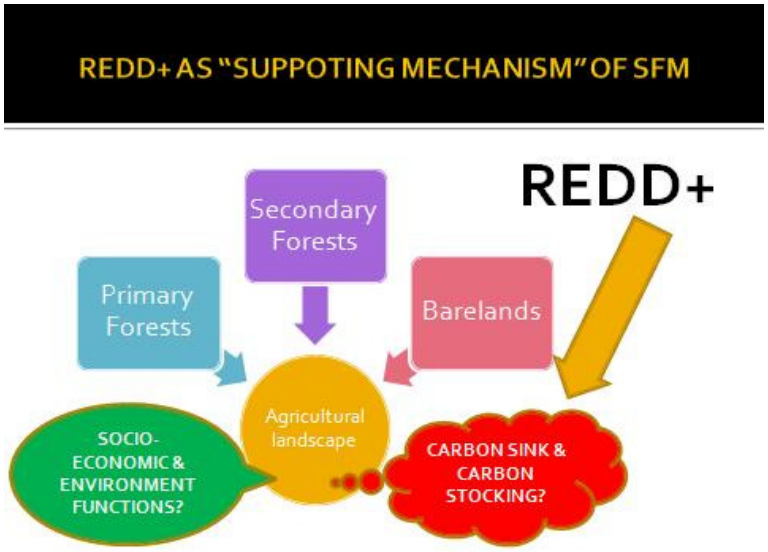


Table 21 points out that preventing primary forest from conversion to agriculture plantation has additionality or saving carbon stock for about 130 ton carbon per hectare because carbon stock in primary forest is estimated 195 ton per hectare, while in agriculture plantation is only 63 ton per hectare. On contrary, conversion of heavy degraded forests or shrubs, even though they are located in the forest area (legal term), to be an agriculture plantation is not carbon source. Instead of net carbon source, development of crop plantation in a heavy degraded forest or bareland in forest area is net carbon sink (the additionality is about 50 ton carbon per hectare) because volume of carbon stock in agricuture plantation (ca. 63 ton carbon stock per hectare) is much higher than barelands or shrubs (15 ton per hectare). To estimate the

[175] Pagiola and Bosquet (2009); Wulan (2012)The Opportunity Cost Study of the Major Land Uses in Central Sulawesi. Consultant Report. UN-REDD Program Indonesia, Jakarta.

[176] Nurrochmat (2011). Pendanaan SFM& Mitigasi Perubahan Iklim di Sektor Kehutanan. Worksghop "Opsi Pendanaan (Financing Option) Mitigasi Perubahan Iklim di Sektor Kehutanan". Ruang Rimbawan I – Manggala Wanabakti Jakarta, 20 September 2011

opportunity cost of different land uses types, a simple calculation below being employed: Carbon uptake in biological sinks is measured in units of C, while emission reductions are measured in units of CO_2. Therefore 3.67 is the conversion factor of these measurements based on molecular weight which is 44 tCO_2 contained 12 tC or 1 tC = 3.67 tCO_2. Basically, there are six steps to calculate the value of carbon in REDD scheme:

1) Measuring the carbon stock in a respective site before and after project.
2) Calculating the additionality (distance) of carbon stock before and after project (if additionality concept is applied), or average carbon stock in a respective site (if the transferred right is environmental services).
3) Measuring the opportunity costs of the alternative land uses (direct economic value, potential leakages, and potential loss of economic linkages).
4) Determining the most suitable and acceptable carbon trading scheme.
5) Measuring optimal price of carbon (in ton CO_2 equivalent). The benefit of carbon trade could be calculated by the following formula:
   The benefit of carbon = additionality of carbon stock or total carbon stock (ton C per ha x size) x 3.67 x price in ton CO_2 e (depend on the accepted trading scheme).
6) Generally, the REDD scheme will be accepted if the benefit transfer from carbon is equal or higher than the opportunity costs of the alternative land uses.

Table 21. Above-ground biomass of various land use systems in Indonesia[177]

Land Cover Type	Carbon Stock (tC per ha)	Reference/ Assumptions
Primary Forest	195.4	TSP/PSP NFI – MoFor
Secondary Forest	169.7	TSP/PSP NFI – MoFor
Primary Mangrove Forest	170	Bappenas Study, 2010
Primary Peat Forest	196	Based on IFCA Study (MoFor, 2008)
Secondary Mangrove Forest	120	Komiyama, 1998 in (Bappenas Study, 2010)
Secondary Peat Forest	155	Based on IFCA Study (MoFor, 2008)
Forest Plantation	100	Ditjenplan, MoFor
Shrub	15	Wasrin, 2000 in (Bappenas Study, 2010)
Swamp Shrub	15	Ditjenplan, MoFor
Agriculture Plantation	63	Rogi (2002); Palm et al. (2004); IPCC (2006)
Cocoa	29.3	Yuliasmara, 2008 in (ICRAF Study, 2010)
Coconut	30.7	FAO, 1997
Oil palm	40	ICRAF Study (2010)
Settlement	1	Ditjenplan, MoFor
Bare Land	0	Ditjenplan, MoFor
Grassland	4.5	Ditjenplan, MoFor
Annual Crop Agriculture	8	Ditjenplan, MoFor
Agriculture Land (agroforestry)	10	Ditjenplan, MoFor
Rice Field	5	Ditjenplan, MoFor
Pond	0	Ditjenplan, MoFor
Airport	0	Ditjenplan, MoFor
Transmigration	10	Combination settlement and agriculture land
Mining	0	Ditjenplan, MoFor
Swamp	0	Ditjenplan, MoFor
Water	0	Ditjenplan, MoFor

Source: Data are compiled from Directorate of Forest Resources Monitoring and Inventory, Ditjenplan, MoFor; Bappenas Study (Boer et al., 2010) and ICRAF Study (Dewi et al., 2010).

[177] Wulan (2012). The Opportunity Cost Study of the Major Land Uses in Central Sulawesi. Consultant Report. UN-REDD Program Indonesia, Jakarta.

4.2 Opportunity Costs of Land Use Change in Central Sulawesi

To measure total compensation needed for REDD+ scheme in the province of Central Sulawesi, it is important to identify the land covers and then, implication of land cover changes to the changing of carbon stock and to opportunity costs have to compensate**. Table 21** indicates land use types and sizes in Central Sulawesi Province.

Table 22. Land Cover in Central Sulawesi 2010[178]

No	Land use Type	Size (ha)*	Percentage (%)	Size (ha)**	Percentage (%)
1	Settlement	164,264	2.41	29,341	0.48
2	Paddy Field	154,412	2.27	103,817	1.70
3	Dryland Agriculture	673,057	9.89	433,425	7.10
4	Plantation	711,526	10.46	126,680	2.07
5	Agriculture land (agroforestry)	565,154	8.31	587,707	9.63
6	Mining	162,692	2.39	11,894	0.19
7	**Forest**	**2,609,697**	**38.36**	**4,306,752**	**70.54**
	– *Primary Forest*	*n.a.*	*n.a.*	*2,554,789*	*41.85*
	– *Secondary Forest*	*n.a.*	*n.a.*	*1,751,963*	*28.70*
8	Shrubs	244,673	3.60	363,928	5.96
9	Water body	83,120	1.22	66,790	1.09
10	Bareland	n.a.	n.a.	41,356	0.68
11	Grassland	n.a.	n.a.	30,890	0.51
12	Others/No data	1,434,705	21.09	2,565	0.04
	Total	**6,803,300**	**100.00**	**6,105,145**	**100.00**

Source: *BPS, 2011 (based on data from Regional Office of the National Land Agency - BPN)

** Directorate of Forest Inventory and Monitoring, Ditjenplan, MoFor (2011)

Cocoa and coconut are the main cash crop in the region. Central Sulawesi is the largest producer of cocoa in Indonesia and most of the product is exported as unfermented cocoa bean. The large expansion of cocoa across Central Sulawesi started in 1970s, but it has expanded rapidly since the 1990. The area of cocoa plantation has been increased from about 15,000 hectares to more than 200,000 hectares in 2010. Currently, most cocoa plantation are almost 25 year of age or even more. Consequently, the productivity considerably drop by half which the average productivity per ha is about 800 kg. In addition to the age of plantation, pest and disease also become a major problem for productivity of cocoa in Central Sulawesi. The quality of cocoa bean is also low due to limitation of farmer knowledge in garden management as well as post—harvesting processing. It was also reported that clove is one of the high-value agricultural commodities in Central Sulawesi. The prices are very attractive to farmers. However, the replanting activities to regenerate clove plantation is rarely found because people believe that the older the clove tree, the higher the productivity. In addition to cocoa, coconut, and clove, oil palm is a newly growing plantation in Central Sulawesi. The oil palm plantations covers the area about 1,608 ha in 2010 across four districts, which are increase about 17 percent compared to 2006. Based on the statistics data, the productivity of oil palm in this

[178] Id.

region is very low that is about 6 tons per hectares.Although not be a dominant landscape, paddy fields are also found in some areas of Central Sulawesi province. The area of paddy field in Central Sulawesi is about 103,817 ha with productivity in 2010 is 957,107 tons. The average paddy field holding per household is less than 0.5 ha. The yields are mainly purposed for self-consumption.[179]

Table 23. Profitability of selected land uses in Central Sulawesi Province

	Land use	Return to Land NPV (IDR'000/ha/year)	Years to positive cash flow	Establishment Cost (IDR'000/ha/year)	Return to Labour (IDR/ps-day)
1.	Timber Concession (HPH)	15,200	1	170	66,159
2.	Large scale oil palm Plantation	72,309	6	14,231	190,236
3.	Smallholder cacao Plantation	13,764	8	35,549	72,697
4.	Smallholder coconut Plantation	2,378	19	25,968	56,045
5.	Smallholder clove	17,195	11	40,232	92,339
6.	Paddy field	30,655	n.a	n.a	63,079

Source: Wulan (2012)

Table 22 shows that the analysis of the land use systems within 25 years production scenario at 12.5% discount rate. The oil palm plantation stands out as the most profitable systems in Central Sulawesi, which reach about IDR 72 million per hectare (or USD 7,973/ha); whilst coconut plantation being the lowest that is IDR 2.4 million per hectare (or USD 262/ha). Commercial logging is also profitable with NPV about IDR 15 million per hectare (or USD 1,676/ha). Although oil-palm gives high benefits, the plantation workers receive less portion of those benefits. The wage rate for plantation workers is almost four times below return to labor. Timber concession also creates profit although it is lower compared to oil palm plantation business. The establishment cost of logging is very low because usually it provides positive cash flow at the first year of its operation. Although logging operation is profitable and lower establishment costs, many logging companies in Central Sulawesi are almost inactive. It occurs because there are long list of obligations that should be met by logging concessions. Accordingly, the transaction costs of logging operation are higher and causes for a situation of "high cost economy". Coconut plantations are usually belong to smallhoders and they have lower profitability rather the other businesses such as logging operation, oil-palm or cocoa plantations. The productivity of smallholder coconut system in Central Sulawesi is quite low because many trees are quite old and needs to be regenerated. Profitability of paddy per hectare in the region is quite high that is IDR 30 million per ha. However, most farmers have less than 0.25 hectare per household and the output are mainly for self- consumption. The paddy systems purposely maintain for securing their staple food rather than for cash income. It is indicated that the opportunity cost of various land use system in Central Sulawesi ranges from 0.4 to 17.8 USD per tCO_2. The current estimates shows that in average the opportunity cost of land-based emission reductions in Indonesia ranges between USD 2.5 to USD 12/tCO_2 or

[179] Id.

about USD 5/tCO_2[180]. Theoretically, if the carbon price is USD 5/tCO_2, reducing emission from converting forest to cocoa, coconut, and clove plantation as well as paddy field would be compensated. Preventing forest conversion to these four land use systems would reduce emissions by 654 tCO_2per hectare.[181] Wulan's study on opportunity costs gave insights for the reasonable levels of financial compensation of REDD+ schemes. However, it does not mean that benefits from REDD+ could be easily compensate income from cocoa, coconut and clove plantations. **Looking only at the financial benefits of REDD+ is not sufficient to be compared with the opportunity costs of alternative land uses.** Instead of measuring gross benefits, calculating net profit of REDD is much more relevant. Several costs components of REDD+ have to be considered in decreasing benefits, such astransaction costs,implementation costs,andmonitoring costs. Despites measuring opportunity costs of the alternative land uses at farmer level, wider socio-economic consequences of REDD+ such as **potential leakage, economic linkages, and multiplier impacts of the alternative land uses are also critically important to be taken into account** before adopting certain scheme of REDD+.

[180] Niles *et al.* (2002); Grieg-Gran (2006)
[181] Wulan (2012)

5. Monitoring, FPIC and Grievance Mechanism

5.1 Monitoring

To ensure the effective implementation of BDS in REDD+, all related stakeholders of REDD+ must be involved and understand their responsibilities and ownership of REDD+. Consistent with the principle of setting monitoringat the lowest feasible level, the REDD+ BDS monitoring activities involve representatives from local organizations; villages,local authorities, forest owners, and CSOs. The term "participatory monitoring" applies to monitoring activities that involve local people who may have not received specialist, professional training and who have varying skills, expertise, societal roles and interests[182]. While forest monitoring has historically been conducted by external professionals using strict scientific methods, recently, these monitoring responsibilities have been taken up by local communities using more participatory and locally appropriate techniques of measurement[183].Participatory monitoring is an ongoing process where local forest users systematically record information about their forest, reflect on it and take management action in response to what they learn[184].

Monitoring systems that involve local people in scientifically-designed projects have many advantages, such as enriched data, lower total costs and a better chance of being sustained. Some types of information can only be provided by local people, such as changes or events that have occurred over long timeframes, information about traditional use and community perceptions about the forest. Participatory monitoring in REDD+ can create spaces and opportunities for more inclusive, better-informed decision making.

Box 1. Principles of monitoring

Overall Principles:

- International REDD revenues will be distributed on a transparent, clearly explained and understood and equitable basis.
- The incentives directed to influencing the practices and behaviour should be provided at the lowest feasible level, down to local communities and local government as much as possible.
- Revenues retained by central government and sub-national entities will only cover their costs of administering the revenue distribution system.
- REDD revenues contribute to sustainable livelihoods and poverty alleviation for forest-dependent peoples.
- All relevant stakeholders and rights holders are able to participate fully and effectively in REDD.

[182] Evans K (2008). Participatory monitoring in tropical forest management: a review of tools, concepts and lessons *Learned.* Bogor, Indonesia: Center for International Forestry Research (CIFOR), p. 1-5.

[183] Palmer BF (2011). Community forest monitoring in REDD+: the 'M' in MRV? Environmental Science & Policy, Volume 14, Issue 2, March 2011, p. 181-187

[184] Id.

- All stakeholders and rights holders have timely access to appropriate and accurate information to enable good governance of the REDD.
- The relevant commercial monitoring and financial checks and balances will be required.

Operational Principles:

- Monitoring should be based on clear, accepted and simply measured data
- Monitoring should be conducted at the lowest level that balances costs of monitoring and meaningful metrics
- Capacity to measure must be present or can be built
- Methods and means of monitoring should be consistent between measurements in space and time or the data collected able to be compared between samples in space and time.

In the village/community level, REDD+ benefits may be distributed in the form of a 'development fund', or other monetary or non-monetary benefits. Monitoring of a development fund is needed to make sure benefits will go to the activities prioritized by local people[185]. This may involve participatory village planning with involvement from all households, local organizations and commune representatives to define and prioritize the activities. REDD+ benefits will be distributed to the village based on the village development plan approved by local authorities (commune and district) in order to avoid any overlaps in funding allocation. Local authorities (commune, district, province), and local banks might then make sure and/or monitor the benefits that go to the fund with the village setting up a financial monitoring team including members from existing organizations (farmers, youth, women's, veterans) and CSOs to monitor the use of fund[186].

For the allocation/transaction of the fund from provincial/district level to local household, the distribution of the benefits at the local level, representatives of locally based government organizations (farmers, youth, women's, veterans), and from CSOs may be contracted by the provincial 'REDD+ monitoring bodies' to undertake the task according to guidelines established by the national 'REDD+ monitoring body'[187].

Monitoring of financial flows/auditing

According to the newly published REDD+ National Strategy, an accountability mechanism will be placed to ensure maximum operational transparency. Independent financial audits will be carried out periodically by one of the five best international audit institutions[188]. REDD+ Funding Instrument financial reports and the audit report for the REDD+ Agency will be published and available to the public[189]. The Chairman of the REDD+ Agency will forward reports to the Minister of Finance for the purpose of accountability for the funds received

[185] UNREDD-GTZ, Design of a REDD Compliant Benefit Distribution System for Viet Nam, January 2010, p. 160-161.
[186] Id.
[187] Id.
[188] REDD+ National Strategy, Indonesian REDD+ Task Force, June 2012, p. 13.
[189] Id.

through the National Budget and/or grants in which are recorded as State Revenue[190]. The local level (provincial and district) flows/auditing is not yet discussed in the National Strategy. It is mentioned however, that at the Sub-National Level, each provincial government may create a REDD+ Institution to organize and implement its Regional REDD+ Strategy and Action Plan, developed from the REDD+ National Strategy. Regional REDD+ Agencies will coordinate thematic activities, including assurance of the effectiveness of REDD+ funding[191]. The National Strategy also stated that districts also can establish REDD+ institutions to consistently and efficiently coordinate all aspects of district-level REDD+ activities and report results to the provincial level. Data and information collected locally on developments in REDD+ program activities and projects will inform the national REDD+ Agency[192]. Based on that, assuming that REDD+ Institutions will be established in the district and provincial levels, these agencies will request for or organize financial audits periodically then they will report the auditing results to REDD+ Agency. In the community level however, it is also important to establish a participatory monitoring and auditing scheme, which will involve all related stakeholders in REDD+ in the area. Effectiveness, efficiency, fairness, transparency and accountability will be the key principles in implementation of REDD+ in Indonesia.

5.2 Free, Prior, and Informed Consent in REDD+[193]

The emergence of REDD+ has served to highlight the neglect of FPIC principles and respect for FPIC in practice in the forest sector as a whole. Project proponents have usually taken at face value claims by government and non-government organization (NGO) stakeholders to 'represent' indigenous peoples and local communities, and have continued on this basis with greater or lesser degrees of engagement and negotiation. This pragmatic approach has been adopted for many reasons including:

- The potential complexity, time, and likely expense of conducting a local consultation process effectively;
- Indigenous people and local communities may not be aware that they have a right to be involved;
- Project proponents may not be aware of their emerging obligation to seek consent; and
- There is uncertainty about what a robust consultation and consent process might entail.

The UN-REDD program is a recent, notable exception to this trend. However, FPIC in the context of REDD+ poses particular challenges because of the evolving nature, scope, and scale of REDD+ programs, and the difficulties inherent in 'informing' people of details that few project staff may have a firm understanding of themselves. The REDD+ schemes are further complicated by the question of who 'owns' the rights over the forests and the carbon within them. REDD+ requires security of tenure, and has therefore brought renewed attention to the

[190] Id.
[191] Id, p.8.
[192] Id, p.8.
[193] Center for People and Forest (RECOFCT) and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), February 2011, and "Penerapan PADIATAPA: Proses Pembelajaran dan Uji Coba untuk Membangun Kesepakatan dengan Warga di Desa Lembah Mukti, Kecamatan Damsil, Kabupaten Donggala, Sulawesi Tengah". The research was conducted by Directorate General of Planology of Forestry Ministry and UN-REDD Program Indonesia.

issue of forest tenure, which is disputed between governments and indigenous peoples and local communities throughout Southeast Asia. As governments attempt to take advantage of the potential financial value of standing forest through REDD+, it is not clear how they will act. Will they attempt to resolve these disputes by recognizing the rights of indigenous peoples and local communities, as required by international instruments and law? Or will they try to assert state control over the land and the carbon stored on and in it? In the latter case, loss of access to forests and a denial of the right to a share of REDD+ benefits could have dire, long-term effects on the welfare and resilience of these communities.

The communities affected by REDD+ have rights under international conventions, national laws, and voluntary industry standards, including the right to give or withhold consent for the field activities or policy and management changes involved in a REDD+ project or program. The right to FPIC requires governments and project proponents to ensure that REDD+ is implemented in a way that fully respects the rights of affected communities. In view of the adverse social impacts experienced by some carbon offset projects involving plantation forestry, FPIC has become a cornerstone of many indigenous groups' demands – whether or not the land rights of indigenous peoples and local communities are recognized nationally. Increasingly, where significant grievances and disputes occur, international courts now require proof of respecting indigenous peoples' right to FPIC.[194]

While REDD+ projects and policies may generate benefits for rural communities, numerous potentially serious risks for indigenous peoples and local communities have been identified, including[195]:

- Violations of customary land rights and harsh enforcement measures. This can lead to loss of access to forests for subsistence and income generation needs, land use conflicts, and physical displacement from forests.
- Marginalization by new land-use zoning exercises. Governments might undertake such exercises to capitalize on forest carbon revenues for the state, stalling or reversing the recent trends of decentralizing forest ownership and management responsibilities to communities.
- Decoupling forest carbon rights from forest management or ownership rights, thereby blocking communities' legal right to financially benefit from new forest carbon projects.
- Inability to participate in Payment for Ecosystem Services (PES) schemes, including REDD+, due to a lack of property rights (to forests or forest carbon), information, and high implementation and transaction costs.
- Exploitative carbon contracts. These could lead communities to unknowingly accept terms that sign away land use rights, assume liability for forest loss, or accept payments that undervalue the opportunity costs of foregone land use.

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[194] Weitzner V (2009). *Bucking the Wild West - Making Free, Prior and Informed Consent Work*, Speaking Notes for Free, Prior and Informed Consent Panel, Prospector and Developer's Association of Canada annual convention, p3. Available at: www.nsi-ins.ca

[195] Lawlor K and D Huberman. 2009. Reduced Emissions from deforestation and forest degradation (REDD) and human rights. Chapter 12 in Rights-based approaches: Exploring issues and opportunities for conservation. Edited by J. Campese et al. IUCN and CIFOR, Bogor, Indonesia: 271. Available at: www.cgiar.cifor.org

- Capture by elites (from within or outside the community) of intended REDD+ benefits due to inadequate forest governance systems.
- Decreased production of food locally, creating food security risks and deepening poverty.

Elements of Free, Prior, and Informed Consent

Short discribtion about FPIC elements are discribes as follows:

- **Free** should imply no coercion, intimidation or manipulation;
- **Prior** should imply consent has been sought sufficiently in advance of any authorization or commencement of activities and respect of time requirements of indigenous consultation/consensus processes;
- **Informed** – should imply that information is provided that covers (at least) the following aspects: nature, size, pace, reversibility and scope of any proposed project or activity; reason/s or purpose of the project and/or activity; duration of the above; The locality of areas that will be affected; e. A preliminary assessment of the likely economic, social, cultural and environmental impact, including potential risks and fair and equitable benefit sharing in a context that respects the precautionary principle; f. Personnel likely to be involved in the execution of the proposed project (including indigenous peoples, private sector staff, research institutions, government employees, and others); and g. Procedures that the project may entail.
- **Consent**
  Consultation and participation are crucial components of a consent process. Consultation should be undertaken in good faith. The parties should establish a dialogue allowing them to find appropriate solutions in an atmosphere of mutual respect in good faith, and full and equitable participation. Consultation requires time and an effective system for communicating among interest holders. Indigenous peoples should be able to participate through their own freely chosen representatives and customary or other institutions. The inclusion of a gender perspective and the participation of indigenous women are essential, as well as participation of children and youth as appropriate. This process may include the option of withholding consent. Consent to any agreement should be interpreted as indigenous peoples having reasonably understood it.

Potential Risks of FPIC Implementation

Project proponents should be aware of a number of risks for themselves and local communities when engaging in processes to obtain FPIC. None of these risks are created by the right to FPIC itself, but they may emerge as a result of the consent process, and they may require a significant investment of resources to resolve before a REDD+ project can be developed. Key risks include[196]:

a. Mapping of tenure rights through participatory mapping processes may reveal contested claims and lead to conflicts over resources within or between communities. Considerable time and resources (e.g., for independent mediation) may be needed to resolve disputes. It

[196] RECOFTC-GIZ (2011). Free, Prior, and Informed Consent in REDD+ p. 27-28.

may be possible for a REDD+ project to receive the consent of two different communities, even when those communities contest each other's claims.

b. The mapping of community tenure areas may lead a government to change its position from ignoring a community's use of a particular area to actively denying their rights, and then requiring the community to stop living in or using the area. REDD+ project proponents should be prepared to assist a community in this situation and to advocate for the community's rights to be respected by government. The project proponent can still seek the consent of a community to develop a REDD+ project on its customary territory even if they have been denied access or forcibly removed from it by government.

c. Refusal of consent: when FPIC is explained to developers and government officials, it is often difficult for them to accept that communities have the right to withhold consent. As has been explained above, this right is fundamental to FPIC, and is supported by numerous international laws, instruments, and conventions. In explaining the risk of a community withholding consent, it is important to emphasize (a) the risk of proceeding without consent, (b) that the right to FPIC is the right of a community, and not an individual right of veto over a proposed development, and (c) giving *and* withholding of consent is time-specific – both can be re-visited and revised. It is also location specific: A community may agree that part of their customary area is included in a REDD+ project, but may want another area to be kept outside of the project.

d. In many areas of Southeast Asia, FPIC is also being promoted by NGOs to support communities affected by plantation and forestry industries, so as to give these communities more leverage in their negotiations with companies. As a result, FPIC and the NGOs that promote it may be seen as 'anti-development.' REDD+ project proponents need to manage this risk by ensuring that regular communication is maintained with government, proponents, and other stakeholders to avoid them misunderstanding the right to FPIC and the process to obtain consent.

e. In many cultures and land systems, ownership is demonstrated through clearing and planting forest. Even though this contradicts the aims of a REDD+ program and has little meaning in the relation to the right to FPIC, there is a risk that the appearance of a new investor in a forest area will stimulate speculative land clearance.

Considering the potential risk of REDD+ implementation above, the report also describe about the prosedures that contain several phases and elements must be taken in order to respecting indigenous and local communities rights. Indigenous peoples and local communities are likely to have to undertake a great deal of work, in terms of meetings and consultations within the community, with neighboring communities, with independent advisors and experts, and with project developers and government. This is necessary before they can be expected to decide whether or not to participate in a REDD+ project. This table states the three stages which form the of FPIC.

Table 24. Procedures for Respecting the Right to FPIC[197]

Phases	Elements
Preparation of Rights Holder Engagement	1. Mapping Rights, Rights Holders and Land Use 2. Identifying Appropriate Decision-Making Institutions 3. Identifying National Support Structures for Rights Advocacy 4. Developing a Process for Seeking and Obtaining Consent 5. Developing the Content for Consent Agreements 6. Agreeing on a Communication Plan 7. Developing a Capacity-Building Strategy
Implementition Process for Respecting the Right to FPIC	1. Integrating the Right to FPIC with REDD+ Project Design 2. Ensuring Alternative Information and Independent Advice
Monitoring and Recourse: Maintaining Consent	1. Monitoring What is Agreed in Implementation 2. Developing a Grievance Process 3. Verifying Consent

5.3 Grievance Mechanism

Grievance mechanisms will help build a governance system that respects, protects and ensures human rights, including indigenous peoples' rights. A human rights-based approach implies working towards the implementation of human rights, through a process characterized by human rights principles like accountability and transparency, participation and inclusion, non-discrimination and equity, and the 'rule of law'[198]. Carefully crafted formalized feedback mechanisms will increase transparency and accountability in REDD+. They will help underpin democratic and rights based processes, and contribute to improved forest governance[199]. In addition, there is a need for institutionalized mechanisms that allow feedback, participation and complaints from forest dwellers and those acting on their behalf, in addition to others experiencing that their land and interests are threatened by REDD+[200]. Such a system would allow early warning and timely feedback, and adjustments and continuous improvements of REDD+ plans and policies.

A human rights based approach implies clearly identifying 'rights holders' and 'duty bearers', and holding the duty bearers accountable for human right violations. As shown, REDD+ may undermine human rights, including the rights of indigenous peoples to self determination, land, territories and resources, and also their right to give or withhold their Free, Prior and Informed Consent regarding measures that will affect them[201]. In order to hold states or other actors accountable, 'rights holders' need access to grievance mechanisms. These may take many forms. A grievance mechanism is here understood as an institution or process through which stakeholders are able to raise concerns, grievances and legitimate complaints.

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197 RECOFTC-GIZ, 2011, Free, Prior, and Informed Consent in REDD+ p. 31

198 United Nations: The Human Rights-Based Approach. Statement of common understanding. Inter- Agency Workshop on a human rights-based approach in the context of UN reform, 3 to 5 May 2003.

199 http://www.regnskog.no/languages/english/_attachment/13108?_ts=130dab801c3, last viewed July 6, 2012, 4:43 PM.

200 Id.

201 See for instance IWGIA and AIPP. REDD+ and Indigenous Peoples. A briefing paper for policy makers, 2010.

A grievance mechanism should be able to deal effectively with complaints from forest dependent communities, or others filing a complaint on their behalf. To fulfill this purpose, we suggest that a grievance mechanism for REDD+ should comply, among others, with the following criteria[202]:

- ability to respond quickly;
- independence, transparency, fairness and impartiality;
- easy accessibility, and set-up to hear plaintiffs;
- inclusion of independent (non-State) experts;
- inclusion of experts from indigenous peoples and civil society;
- authority to order restitution or compensation, and to stop ongoing or planned activities that would undermine human rights and safeguards.

The following is an overview of some key national and international grievance and redress options that are, or may become, relevant to REDD+.

- National grievance options would in general be easier to access for rights holders than international ones. Some grievance mechanisms are associated with the State's governance system, like local and national courts and dispute resolution mechanisms, ombudsman offices, and national human rights institutions[203].
- National human right institutions and ombudsmen and government agencies dealing with indigenous peoples' issues may be charged with overlooking the national situation on REDD+. In cases where their mandates are not relevant to REDD+, these could be broadened, and resources could be made available for capacity building or for expanding the staff to include experts on REDD+. The institution needs to be independent in order to provide sound and critical assessments of the national REDD+ situation[204]. These bodies may receive complaints and provide conflict resolution and arbitration, investigate and if necessary build a case that could be taken on by national courts, the international human rights system, the World Bank inspection panel or other relevant entities[205]. They would thereby also ensure national and international attention to problems linked to REDD+[206].
- The national legal system may be invoked in cases where national laws have been violated. Claims may also be filed against a State or a business actor in the country of the alleged perpetrator.

Examples of existing national level grievance mechanism bodies/agencies[207]:

- The Aarhus Convention (UN/ECE Agreement on Access to Information Public Participation in Decision-making and Access to Justice in Environmental Matters) is directly relevant to REDD+. Individuals affected by REDD+ activities supported by a State Party to the Arhus Convention may present claims through the Convention's non-compliance mechanism. A

[202] Partly taken from: NGO Forum on AIB (Asian Development Bank): Submission on the Accountability Mechanism Review. 15 September 2010. (www.forum-adb.org)
[203] http://www.regnskog.no/languages/english/_attachment/13108?_ts=130dab801c3, last viewed July 6, 2012, 4.41PM.
[204] Id.
[205] Id.
[206] Id.
[207] Id.

Compliance Committee safeguards the rights of indigenous and forest-dependent peoples, including the right to full and effective participation. NGOs that qualify as observers under the Aarhus Convention may nominate candidates to serve on the committee.

- The National office of the public auditor could be called on if there is suspicion that REDD+ leads to corruption or other illegal acts.
- National OECD focal points may deal with complaints related to business conduct. The National Contact Point (NCP) is a government office responsible for encouraging observance of the OECD Guidelines for Multinational Enterprises, working with corporate responsibility. Any person or organization may approach a National Contact Point with regard to matters related to the Guidelines. They interact with these and with companies, and provide annual reports and statements.

Box 2. Safeguard in REDD+

The Cancun Agreement states that:

" When undertaking activities referred to in paragraph 70 of this decision, the following safeguards should be promoted and supported:

(a) Actions complement or are consistent with the objectives of national forest programs and relevant international conventions and agreements;

(b) Transparent and effective national forest governance structures, taking into account national legislation and sovereignty;

(c) Respect for the knowledge and rights of indigenous peoples and members of local communities, by taking into account relevant international obligations, national circumstances and laws, and noting that the United Nations General Assembly has adopted the United Nations Declaration on the Rights of Indigenous Peoples;

(d) The full and effective participation of relevant stakeholders, in particular, indigenous peoples and local communities, in actions referred to in paragraphs 70 and 72 of this decision;

(e) Actions are consistent with the conservation of natural forests and biological diversity, ensuring that actions referred to in paragraph 70 of this decision are not used for the conversion of natural forests, but are instead used to incentivize the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits;

(f) Actions to address the risks of reversals;

(g) Actions to reduce displacement of emissions.

From: Ad Hoc Working Group on Long-term Cooperative Action under the Convention

Thirteenth session Cancun, 29 Nov. - 10 Dec. 2010. Annex 1.

Box 3. Adat Grievance Mechanism in Toro: *Pengadilan Adat* (Adat Court)

Ngata Toro (Toro village) is a forest village in Sigi District, Central Sulawesi province. It has been working on the conservation and sustainable use of natural resources through the revival of village customary law (adat). This reversion to adat began when their customary land (tanah adat) was included in the Lore Lindu National Park. There is a large expanse of forest in Central Sulawesi, most of which is situated within the Lore Lindu National Park, established in 1993 . The Park accounts for about 3% of the provincial land mass and has the highest species diversity in Sulawesi. The 64 villages located around Lore Lindu National Park have a population of approximately 64,000 (based on 2009 data), and Toro village, with a population of 2400 in 602 households, is one of them .

The customary land area of Toro comprises 22,950 ha, of which approximately 1,000 ha is permanent farm land. The remainder is forest, most of which has been incorporated into Lore Lindu. Since their time of establishment (approximately 600 years ago) , Toro people has established their own indigenous institution. Their village views that there are a living triangle between God, Man and Nature. So, they appointed several people as their village government (Tondo Ngata), comprising of Totua Ngata, Maraka Ngata and Tina Ngata. Totua Ngata is the village elder, Maraka Ngata is the village head and Tina Ngata is the village's women elders. Each has their own specific business to manage. For example, Tina Ngata, as the women's elder are responsible for women's affairs such as marriage and women's roles in the community.

Forest is regarded as sacred in Toro, mostly because it is a place where they live and a place where they find food. The Toro people divided their forest into 3 zones, wanakiki and wana (forest areas which are strictly cannot be cultivated or harvested) and pangale (a forest area which is fine to be managed, as long as it is not on a slope, river's stream or 30 meters of the river bank).

To make sure that the wanakiki and wana are conserved, Toro people has their 'adat court' (peradilan adat). In 1993 there was a case when a group of people from Nusa Tenggara Barat (NTB) was caught red-handedly cutting trees in the prohibited forest area. Directly they were asked to go to face the Tondo Ngata in the adat court. Tondo Ngata decided that the purpertraitor have to pay some fine, amounting of a copper plate and one male bull, and a promise that they will not repeat the same action in Toro. Similar case also happened recently in 2010, when a group of Toro people were caught red-handedly cutting trees in the wanakiki and wana areas. They were also brought to the adat court and resolved there.

There is local wisdom in the adat court. There is also social punishment, understanding and compassion, both for the people of Toro and their nature. As Andreas, one of the elder of Toro puts it so gently, 'The adat court is not just resolving physical problems, but also resolving the problems of the hearts'. The adat court and adat law is living well and flourishing in Ngata Toro.

Source: Meeting with Elders and Community Leaders in Toro, June 14, 2012

http://satoyama-initiative.org/en/case_studies-2/area_asia-2/creation-and-management-of-diverse-secondary-forest-in-central-sulawesi-indonesia/, accessed on July 5, 2012, 5:41PM.
Meeting Notes with Toro Community on June 14, 2012.

6. Identifying Suitable BDS for Central Sulawesi

6.1 Project Location Short Brief

In October 2010, the UN-REDD program selected Central Sulawesi province as the focus of its Demonstration Activities to prepare for the implementation of REDD.To support the program the Governor issued a Decree in February 2011 to establish a Provincial Working Group on REDD+. Five areas have been nominated as UN-REDD program sites, namely: Damsels region in Donggala district, Tinombo region in Parigi Moutong district, forests in Lore Lindu National Park in Poso district, and forests in Tojo Una-una and Toli-toli. Scope of analysis in this part are 5 Kabupaten/District in Central Sulawesi. There are Kabupaten Donggala, Kabupaten Tolitoli, Kabupaten Sigi, Kabupaten Tojo Una-Una, and Kabupaten Parigi Mautong. This part will give brief information of each district relating to public life, livelihoods, geographic and economic condition, and administrative aspect[208].

Kabupaten Donggala

With the city of Donggala as the capital, Kabupaten Donggala is about 34 km to the west of Palu. Administratively, Donggala is divided into 16 districts, 141 villages and 9 villages with a total area of 5,275.69 km^2, or 7.75 percent of the total area of Central Sulawesi. Kabupaten Donggala is bordering with Kabupaten Tolitoli on the north, Makassar Strait in the west, Kabupaten Parigi Moutong on the east and South Sulawesi Province on the south. Donggala topographical conditions vary greatly with different slopes. The highest peak in the southeastern district with a height of ± 700 m above sea level. Based on the results of population census in 2010 by the BPS, the population reached 277,236 people consisting of 135,057 male and 142,179 female, with the population density reached an average of 57 people/Km^2. Agriculture sector is a sector that plays an important role in the regional economy and is the largest contributor to the formation of the Gross Regional Domestic Product (GDP) amounting to 43.95%. Flagship commodities developed in Donggala include coconut, cocoa, palm oil, clove, coffee, pepper and cashew nuts. In 2009 the most widely produced commodity is palm oil production reached 24,860 tonnes of by 6,837 hectares planted acreage, cocoa production reached 30,828 tons by 30,005 ha planted acreage, cloves production reached 907 tonnes with a total area of 4,229 ha of planting, coffee production reached 371 tons with a total area of 772 hectares, and the planting of pepper production reached 202 tons with a total area of 331 hectares.

Donggala has 708,078 Ha of forest area, consisting of 232,995 hectares of protected forest, production forest used to keep 11,624 ha, 294,427 hectares of limited production forest, the forest can be converted up to 33,296 ha, 135,736 ha of preservation and tourism forest.

[208] This section cited the regional government's websites for each kabupaten; demographic data cited from *Sulawesi Tengah dalam Angka*/Central Sulawesi in Figure 2011.

Contribution of the forestry sub-sector to the GDP formation Donggala reached 2.40%. Types of wood products made from meranti, palapi, nyatoh, motoa, chrysolite, and jungle mix, but there is also rattan and resin. In 2009 the production of marine capture fisheries and the public reached 27,113.50 tons with a production value amounting to Rp. 54.016 billion. Pond aquaculture production reached 489.60 tons with a production value of Rp. 23.693 billion. Marine aquaculture production reached 1293.7 tons with a production value of Rp. 55.627 billion.

Kabupaten Tolitoli

With the distrisct of Tolitoli as the capital, Kabupaten Tolitoli is about 439 km to the North of Palu. Administratively, Tolitoli is divided into 10 districts, 86 villages and five villages with a total area of 4,079.77 km^2. Kabupaten Tolitoli is bordering with Kabupaten Buol and Sulawesi Sea on the North, Makassar Strait in the West, Kabupaten Buol on the East and Kabupaten Donggala on the South. Based on the results of population census in 2010 by the BPS, Population Tolitoli reach 211,283 people comprised of 108,081 men and 103,202 women with population density of 49 people/km^2. Agricultural sector is a crucial potential sector of the economy of Tolitoli, because most people have a livelihood by farming by the use of agricultural land approximately 12.43 percent. In 2009, total production of rice is 92,766 tonnes, with 6,385 ha of planting area.

Plantation commodities trading is a strategic source of income for Tolitoli. In 2009 total production of coconut plantations reached 14,569 tons with area reached 14,833 hectares. Total production of cocoa reached 11,250 tonnes of with a total area of 13,580 hectares. Total production of cloves reached 10,634 tonnes with a planting area of 24,985 hectares, and total production of coffee plants reach 472 tons with a total area of 952 hectares. Like Donggala, fisheries sector in Tolitoli is also one of the leading economy sectors. In 2009, marine capture fisheries production reached 10,992.04 tons with a production value amounting to Rp. 56.32 billion. Pond aquaculture production reached 104.90 tons with a production value of Rp. 31.78 billion. Marine aquaculture production reached 992.80 tons with a production value of Rp. 3.23 billion.

Kabupaten Sigi

Kabupaten Sigi is located in south of Palu, with the district of Bora as the capital. Administratively, Sigi Regency area is 5,196.02km^2 divided into 15 districts and 157 villages. Kabupaten Sigi is bordering with Kabupaten Donggala and Palu city on the north, West Sulawesi and Kabupaten Donggala in the west, Kabupaten Poso and Kabupaten Parigi Moutong on the east and South Sulawesi on the south. Based on the results of population census in 2010 by the BPS, the number of Sigi population reaches 214,700 people, comprising 104,170 men and 110,530 women with average population density of 36 people/km^2.

The agricultural sector is the largest contributor to the GDP formation, reaches 52.58 percent. Plantation sector in Sigi has some commodities such as: Cocoa that amounting to 12,383 tonnes production, with a total area 15,039 hectares. Coconut contributing 9084 tons production with a 5,339 hectares of total area. Coffee contributing 3,711 tons production, with a total area 5942 hectares. Cloves production reaches 139 tons with a total area 1,191 hectares.

Kabupaten Tojo Una-Una

With the district of Ampana as the capital, Kabupaten Tojo Una-Una is about 300 km of Palu. Tojo Una-Una consists of the mainland and the islands with a land area of 5,721.51 km^2 (8.41 percent) and 3,566.21 km^2 of sea area. Administratievly, Tojo Una-Una is divided into nine districts and 115 villages. Kabupaten Tojo Una-Una is bordering with Tomini Bay and Gorontalo Province on the north, Kabupaten Poso in the west, Tomini Bay and Kabupaten Banggai on the east and Kabupaten Morowali on the south. Based on the results of population census in 2010 by the BPS, the population of Tojo Una-Una reached 137,880 people, consisting of 67,118 Men and 70,762 Women with average population density The average 33 jiwa/km^2. Agriculture sector is a sector that plays an important role in improving standards of living. Agricultural sector the largest contributor to the GDP formation is 43.75 percent. Corn production is the largest contributor to the total commodity corn production in Central Sulawesi with corn production in 2009 amount 61,486 tonnes.

Forest area in Tojo Una-Una is 25,832 ha, comprising 10,659 hectares of protected forest, 11,759 ha of production forest, 193 ha of limited production forest, and 3,221 ha forest can be converted. Plantation in the management is divided into two groups, namely a large plantation and plantation business. Plantations are generally located in the district of Tojo Una-Una is a plantation with a varied ownership. Plantation crops planted in Tojo Una-Una in the form of coconut, cloves, coffee, chocolate, hazelnut, cashew nuts and sago.

Fishery become potential in Tojo Una-Una becaisu it is located in the strategic waters of the Gulf Tomini. Fish species spread widely in this area are tuna, skipjack, flying, grouper, snapper, napoleon, squid, shrimp and ornamental fish. Potential for fisheries in the Gulf of Tomini is 77,285 tonnes per year, with a number of marine fish stocks estimated 196,753 tonnes per year consisting of a large palagis species such as tuna, tuna, shark, Spanish mackerel and small palagis fish. While the potential non-fish such as squid, sea cucumber, pearl and seaweed. In 2009 the number of fisheries production in Tojo Una-Una is 6,355.77 tons with a production value of 26.555 billion dollars, while total production of 7,917.80 tonnes of aquaculture production valued 13.77 billion dollars.

Tojo Una-Una which consists of the mainland and the cluster of small islands exotic save tremendous tourism potential particularly beautiful marine tourism. This is evidenced by the launching of Tojo Una-Una as a tourist destination through the tourist route "Makassar, Toraja, Tojo Una-Una" is abbreviated as MATOTO. Tourism Office Tojo Una-Una recorded until the year 2009 a total of 40 attractions scattered throughout the district. Of the total attraction, the 24 attractions are the beach attractions, 7 attractions mountains, a forest and 8 attractions of cultural attractions.

Kabupaten Parigi Mautong

Formed on 2 July, 2002, with the district of Parigi as the capital, Kabupaten Parigi Mautong is about 66 km of Palu. Currently Moutong Parigi District consists of 20 subdistricts and 175 villages and five villages, with an area of 6,231.85 km2. The administration until 2009 Parigi Moutong district has 20 districts, 175 villages / village. Kabupaten Parigi Mautong is bordering with Kabupaten Buol, Tolitoli and Gorontalo Province on the north, Kabupaten Donggala and

Palu city in the west, Tomini Bay on the east and Kabupaten Poso and South Sulawesi on the south.

Based on the results of population census in 2010 by the BPS, the population reached 413,645 people in Parigi Moutong, which consists of 200,916 men and 212,729 wiht the average population density of 61 jiwa/Km^2. Parigi Moutong is one of the agricultural area in Central Sulawesi that agriculture sector is a sector that plays an important role in the regional economy. Agriculture is the largest contributor to the formation of the Gross Regional Domestic Product (GDP) is equal to 52.98 percent. Commodities which have been developed consisting of cocoa, coconut, cloves, coffee, cotton, pecan and cashew nuts.

Parigi Moutong has 396,236 ha of forest area, consisting of 162,640 hectares of protected forest, 22,467 ha of production forest, 127,607 hectares of limited production forest, 22,808 hectares of converable forest, and 60,714 ha of tourism forest. Types of wood products made from meranti, palapi, nyatoh, motoa, chrysolite, jungle mix, rattan and resin. In 2009 the production of marine capture fisheries and the public reached 23,583.13 tons with a production value amounting to Rp 267.9 billion, pond aquaculture production reached 1,188.70 tons with a production value of Rp 49.166 billion, and marine aquaculture production reached 7,886.50 tons with a production value of Rp. 24.92 billion.

6.2 *"Musrenbang" :* a proposed way to identy BDS at grassroot level

Since the launch of decentralization, the principal instrument introduced by the Government of Indonesia for public consultation is the ***Musrenbang*** *(Musyawarah Rencana Pembangunan)* or Multi Stakeholder Consultation Forum for Development Planning. In support of this participatory Musrenbang process, a number of regional governments have tried to increase participation by passing perda, or local bylaws, to legislate transparency in budgeting and deepen the consultative approach down to the community level. They have also looked for ways to actively involve members of regional legislative councils (Dewan Perwakilan Rakyat Daerah, DPRD) and civil society organizations in community planning to: improve information flows; increase the capacity for budgetary debates; and train villagers and officials in new methodologies to encourage the prioritization of resources. The *Musrenbang* is atype of grassroots consultations that are proposed to identify a proper BDS at local level. It becomes an effective way to encourage a sense of local ownership in community projects, build and sustain democratic institutions, reduce conflicts and achieve development objectives. In the decades leading up to decentralization, public consultations were conducted in various forms in Indonesia, but these consultations often lacked government commitment to broad-based participation, and were largely ceremonial and ritualized in their approach.

Legal Basis of Musrenbang

There are several legislation that become a legal basis to encourage citizen participation in the formal planning and budgeting process (Musrenbang). These include the following:

1. Law No. 32/2004 regarding Regional Governance devolves authority in a number of sectors to regional governments, and makes public participation a primary means to address

community welfare objectives. The law is meant to create a sense of public ownership in local governance; ensure greater transparency and accountability; and put an emphasis on the public good by shaping community aspirations into tangible programs and services.

2. Law No. 25/2004 regarding National Development Planning institutionalizes the creation of multistakeholder consultation forums (Musrenbang) at all levels of government over several time frames (long-term, medium-term and annual plans). It also emphasizes the need to synchronize all approaches such political, democratic, participatory; bureaucratic, technical, bottom-up and top-down into regional planning.
3. Goverment Regulation No. 8/2008 regarding Steps, Procedurs, Monitoring and Evaluation of Regional Development Plans Implementation governing how the steps, procedures, and monitoring and evaluation been done in Regional Develompent Plans.
4. Joint Ministerial Decree 2006 regarding Musrenbang signed between the State Minister for National Development Planning/BAPPENAS and the Home Minister establishes space for public participation in planning and budgeting and regulates "entry points" into this process. It also provides guiding principles on how Musrenbang forums should be convened at different levels of government — the deliberative multi-stakeholder consultation forum at the Regional Working Unit (SKPD) level, for example; and create other guidelines on what these forums should be expected to achieve.
5. Joint Ministerial Decree 2007 sets new procedures, processes and mechanisms for conducting Musrenbang. Improvements over the 2006 decree include the incorporation of more refined principles of public participation such as inclusiveness, gender responsiveness, the need for the organization team to possess competency in participation skills, organization of working groups, framework for discussion and flexibility (negotiating adjustments).

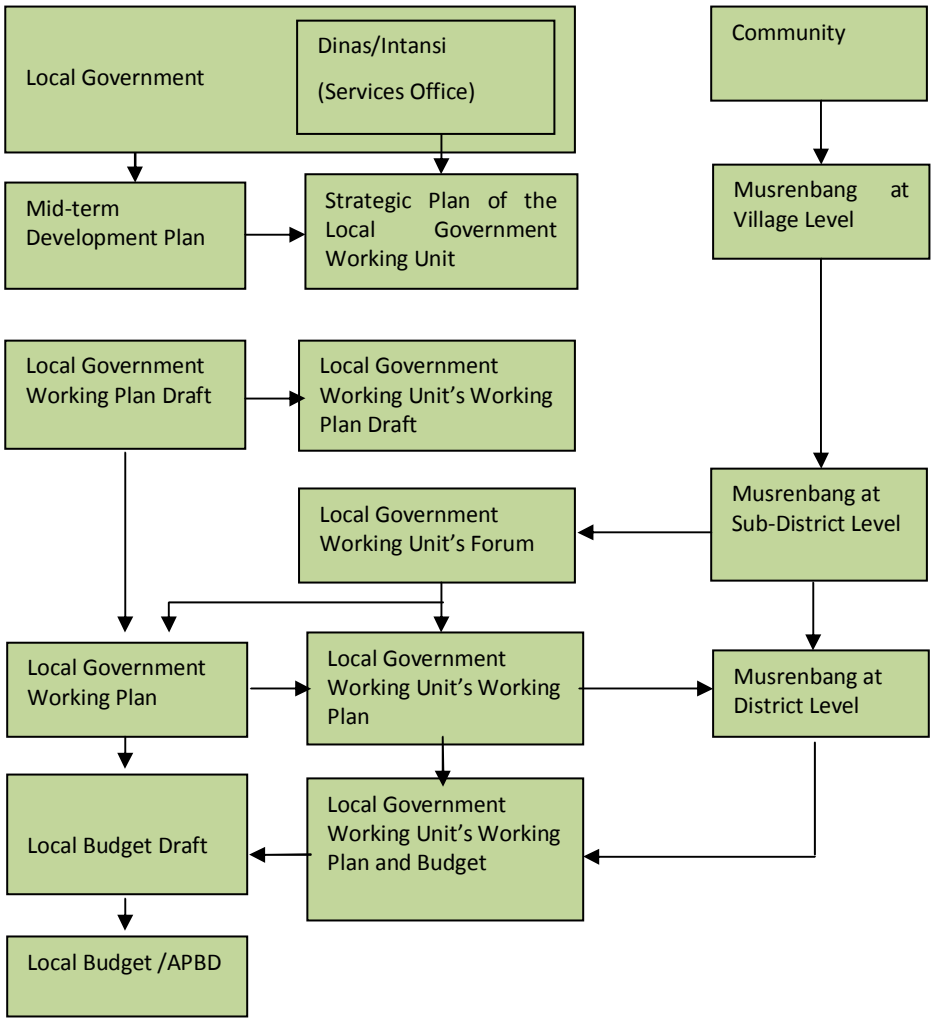
Musrenbang at regional level

Musrenbang is a deliberative multi-stakeholder forum that identifies and prioritizes community development policies. It aims to be a process for negotiating, reconciling and harmonizing differences between government and nongovernmental stakeholders and reaching collective consensus on development priorities and budgets. There is a hierarchy of these forums for synchronizing between 'bottom up' and 'top down' planning.

Based on Government Regulation No.8/2008 stating that regional development plans is a unified system from national development plans.[209] This Plans integrating between regional spatial plans and its development plans. Regional development plans covering long-term regional development plans (RPJPD), mid-term regional development plans (RPJDM), and regional development working plans (RKPD).

[209] Government Regulation No 8/2008 regarding Steps, Procedurs, Monitoring and Evaluation of Regional Development Plans Implementation

Figure 19. Musrenbang Process[210]



At the community level, the purpose of the Musrenbang is to reach agreement on program priorities of the local government departments (Satuan Kerja Perangkat Daerah/SKPD) to be funded from the local annual budget (Anggaran Pendapatan dan Belanja Daerah—APBD) and village allocation funds, and to select the community and government representatives who will attend the Musrenbang at sub district level.

At the sub district level, the role and function of Musrenbang is to reach consensus and agreement on the (a) priority of program and activity by SKPD function to be discussed at the SKPD Forum; (b) selection of sub district representatives to attend the Musrenbang at district level.

At the district level, the function of the Musrenbang is to reach consensus and agreement on the draft final Annual Local Government Work Plan and Budget (Rencana Kerja Pemerintah Daera/RKPD). The latter basically consists of (a) direction of regional development policy; (b)

[210] Based on Law No. 25/2004 regarding National Development Planning

direction for priority programs and activities and indicative budget of SKPD; (Renja SKPD); (c) macro economic and financial framework; (d) priority of programs and activites proposed for funding by the APBD, APBD Province, and other sources of funds; (e) recommendations for regulatory support from Provincial and Central Government; (f) budget allocation for the village allocation fund (through *Alokasi Dana Desa*/ADD).

Recently, sector-specific Musrenbang within a specific local government sectoral department (SKPD forums), such as health or education, have been launched at district and sub-district levels. These allow sector departments to more closely align their sectoral programs with community perspectives and priorities. Outcomes of kecamatan-level Musrenbang feed into these SKPD forums, the results of which then feed into the district-level Musrenbang.

Learning from this discussion, there are several points to be considered if we would like to establish BDS from the national to the local level.

Firstly, on paper, it is clear that there is a reliable BDS process from the national level to the local and community level. Although in practice, we have to be careful of possible corruption leaks in each distribution points.

Secondly, the Districts in Indonesia, since UU no. 32/2009 on Regional Government, have gained autonomy in governing the needs of the local people in their territory. Hence, local budget (APBD) is concentrated more in Districts rather than Provinces. And, since the Districts have already managed their own local budget since 2009, they will have the capability to manage REDD+ budget directly from the Central Government.

Thirdly, REDD+ National Strategy mentioned that at the Sub-National level, each provincial government may create a REDD+ Institution to organize and implement its Regional REDD+ Strategy and Action Plan, developed from the REDD+ National Strategy[211]. Regional REDD+ Agencies will coordinate the following thematic activities: (i) measurement, reporting and verification of emissions reductions; (ii) assurance of the effectiveness of REDD+ funding; and (iii) periodic reporting on developments in regional programs/projects/activities to the national REDD+ Agency[212]. And, district can establish REDD+ institutions to consistently and efficiently coordinate all aspects of district-level REDD+ activities and report results to provincial level[213]. This means that the National Strategy is underlining the role of provincial government as 'supervisory' and the district government as the 'management' role.

Fourthly, it is very important to know when/at what stage the local community can express their opinionon the funds management. The Musrenbang process is very nice on paper, but sometimes in practices is not quite as participative as in the design. In the REDD+ there is a need to emphasize the participatory process, for the success of REDD+ program lies on the involvement of the community. Participatory monitoring and auditing will also be the key point in organizing a successful REDD+ activity.

[211] REDD+ National Strategy, Id, p. 8.
[212] Id.
[213] Id.

Fifthly, accountabilityis very important in REDD+ program/project/activity. REDD+ National Strategy highlighted that the accountability mechanism will take place as periodical independent financial audits carried out by one of the five best international audit institutions[214]. The audit reports will be published and available to the public, and forwarded to the Minister of Finance for the purpose of accountability for the funds received through the National Budget and/or grants in which are recorded as State Revenue[215]. On the other hand, there is nothing in the document which discussed accountability/ audit mechanism for the local level. Hence, local people need to find options of conducting BDS in an accountable manner, without jeopardizing REDD+ activities on the ground.

[214] REDD+ National Strategy, Id, pg.13.
[215] Id.

7. POSSIBLE DESIGNS OF BENEFIT DISTRIBUTION SYSTEM IN CENTRAL SULAWESI

7.1 Forest and Carbon Dynamics: A Financial Framework

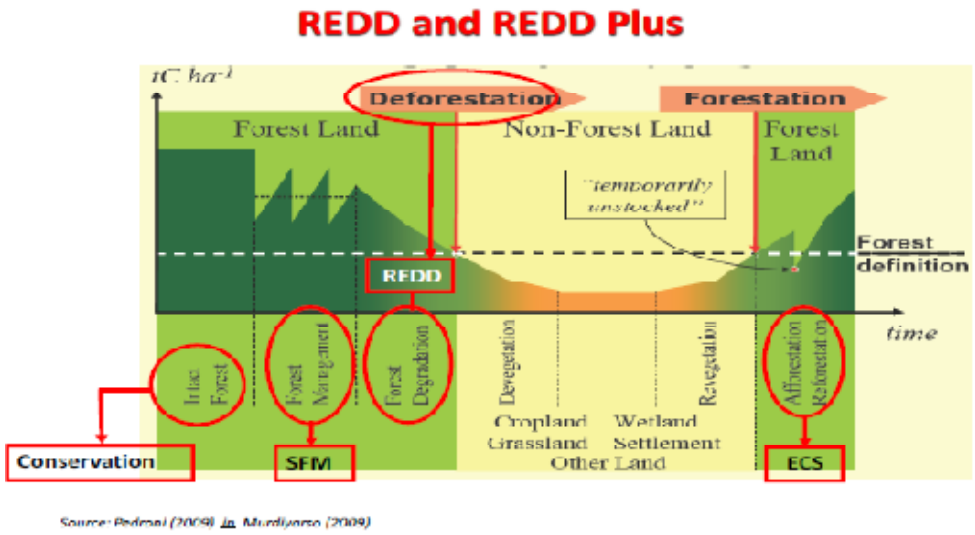
'What is REDD+? Why do we have to care about the world's lungs? Who are going to care about our lungs? And our stomach?' – an Elder in Ngata Toro, Sigi, Central Sulawesi, June 14, 2012.

The benefit of REDD+ could be reached by several forms of the forest carbon dynamics as follows[216]:

1) Intact forest (forest conservation)
2) Sustainable forest management (SFM)
3) Avoided deforestation and forest degradation
4) Enhance carbon stocking through afforestation and/or reforestation

The dynamics of forest carbon are described in the **Figure 20.**

Figure 20. REDD+ and the dynamics of forest carbon



Source: Pedroni (2009) in Mudiyarso (2009)

Basically those forms of forest carbon dynamics are found in Indonesia, especially in Central Sulawesi. Therefore, theoretically all types of REDD+ mechanism could be applied in this province. Then, the challenge would be identifying suitable area fits to each mechanism of REDD+, making appropriate REDD+ plans and "financing" or "marketing" them. It is very important to understand a whole framework of REDD+ financial scheme. In overall, the issues of REDD+ financial scheme could be classified into four clusters (**Figure 21**):

[216] Pedroni in Mudyarso (2009) cited in Sukadri (2009a)

1) Funding options
2) Financing mechanisms
3) Benefit distributions
4) Spending allocations

Funding options

Basically, the sources of funding for REDD+ could be divided into two categories, i.e. global or international funding and national funding. The climate fund as part of the international climate change trust fund (ICCTF), multilateral, or billateral cooperation as well as funding from the international voluntary carbon market (international VCM) are included in the global funding. While, national fundings are involving national budget (APBN), corporate finance from corporate social responsibility (CSR) or other corporate schemes, and national voluntary carbon market (national VCM).

Financing mechanisms

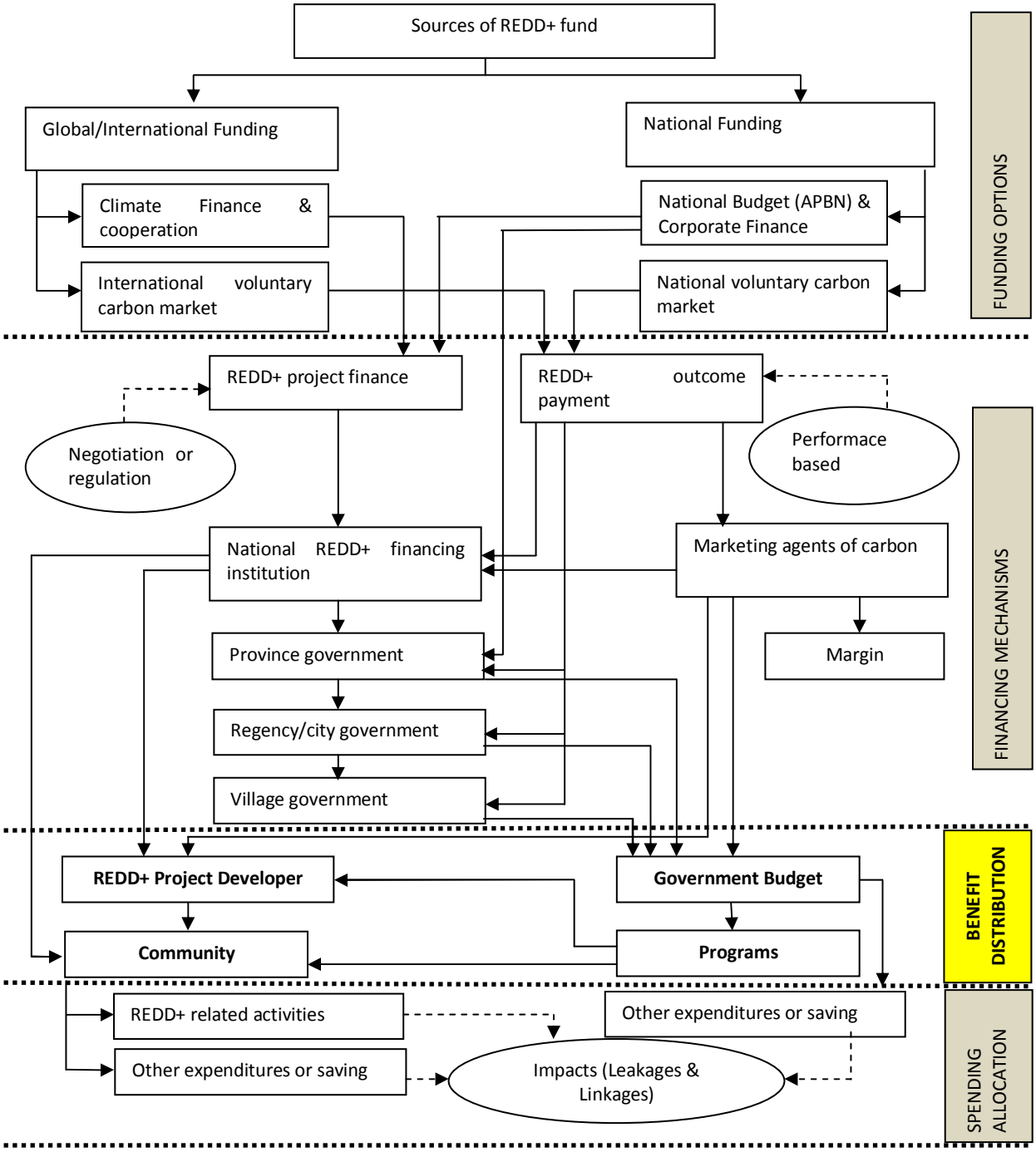
The second cluster of issues has to be concerned after having a fund option is the REDD+ financing mechanisms. Generally, there are two ways of the REDD+ financing mechanisms work in the national fiscal system: first, the REDD+ project finances and second the REDD+ outcome payments. The funds that are coming from international climate finance and national budget (APBN) usually work under a scheme of REDD+ project finance. The funding could be managed by a national REDD+ financing institution or could be distributed through a national fiscal balance system, for instance by financing mechanism of general allocation fund (DAU), special allocation fund (DAK), benefit sharing fund (DBH), or other mechanisms. The amount of REDD+ funds from international climate finance will be managed by central or local government varies, depent on the deals of international or billateral negotiations. Otherwise, if the fund distributed through the national budget (APBN), then the amount of fund will be given to central and regions will be stated and follows the fiscal regulations.

Another REDD+ financing mechanism is called “outcome based payment”. Usually it refers to the international or national voluntary carbon market (VCM). The amount of fund will basically follow the forest carbon market prices or based on a resiprocal approval in voluntary transactions. The fund will be given in some different phases referring to performance agreement. It could be named also as “performance based REDD+ financing scheme”. Transaction could be done directly by “buyer” and “producer” in voluntary forest carbo market, or could be also conducted through a middle-man or third party (marketing agents of forest carbon trade). There are some possibilities of the financing mechanism flow, i.e. 1) Funds are managed by a national REDD+ financing institution; 2) Funds are directly transferred to local governments (province, regency/city or village government); 3) Funds are directly given to the REDD+ project developer included community.

The authoritative body for BDS must be one that is trustworthy, reliable and transparent, as well as a body who respect equality and equity and effectiveness.According to the REDD+ National Strategy, the REDD+ funds will be managed independently, professionally and credibly

outside of the state budgets system[217], in the national level. Trust fund mechanism is one possible option in the national level, which means that a 'trustee' will be appointed and the trustee will be in charge of the distributions mechanism. The trustee, possibly, will also oversee the development of activities (progress) and decide whether the fund recipient will be eligible for continuance of the funding.

Figure 21. The Framework of REDD+ Financing Scheme



[217] REDD+ National Strategy, Id, p. 12.

7.2 BDS Options for Central Sulawesi

In the local level, such as Central Sulawesi, there are several options for the REDD+ BDS:

1) The Trustee can work with the formal distribution channel of the government, meaning that from the provincial level, then the funds distributed to the district level, then down to sub-district, village and to the community level. This route may take similar approach as the 'Musrenbang process' where the community select program priorities to be presented to village, then the village government collects the data and present them to the sub-district and the sub-district agrees on the priority programs to be taken to district government. The district government will then reach agreement of the final workplan and buget of REDD+ activities.

OPTION 1: Trustee works with the Local Government	**National level**	**Local level**
Who is responsible for the distribution?	Trustee (selected by REDD+ Agency)	Local Government & Community
What are the possible rules/ regulations?	1) Law No. 32/2004 regarding Regional Governance 2) Law No. 25/2004 regarding National Development Planning 3) List of Grant Activity Plan *(Daftar Rencana Kegiatan Hibah/DRKH)*	1) Government Regulation No. 8/2008 regarding Steps, Procedures, Monitoring and Evaluation of Regional Development Plans Implementation 2) Joint Ministerial Decree 2006 regarding Musrenbang 3) Joint Ministerial Decree 2007 sets new procedures, processes and mechanisms for conducting Musrenbang. 4) Fiscal Balance Law 33/2004 5) Foreign Grants Agreement
How the benefits are going to be distributed?	Similar approach as the 'Musrenbang process' where the community select program priorities to be presented to the sub-district, then the village government collects the data and present them to the sub-district and the sub-district agrees on the priority programs to be taken to district government. The district government will then reach agreement of the final work plan and budget of REDD+ activities.	
Who are going to monitor and evaluate the distribution?	Trustee can monitor how the progress of the project then decides whether or not to continue to support the activities.	Local government and local community are working together to monitor the REDD+ activities on the ground, and periodically submitting mon-ev report to the Trustee.
Who is responsible to audit the funds and benefit which have been distributed?	Trustee (selected by REDD+ Agency) will be audited by one of the five top auditors in Indonesia, then the audit report will be forwarded to the Ministry of Finance[218].	Local government will be audited by Public Accountant in the area, and then the audit report will be forwarded to the Trustee.

[218] REDD+ National Strategy, id., p. 13.

2) The Trustee can select proposals of REDD+ activities which met the requirement of the REDD+ program. Previously, REDD+ program was announced, a call for proposal was made, and requirements and eligibility for the funding was also announced. Hence the community, as well as NGOs, KPH, and other interested parties can apply to the REDD+ program, and will have the same chance to be selected as an REDD+ grantee[219].

OPTION 2: Trustee selects proposals of activities independently/directly from local communities.	**National level**	**Local level**
Who is responsible for the distribution?	Trustee (selected by REDD+ Agency)	Community
What are the possible rules/ regulations?	1) Law No. 32/2004 regarding Regional Governance 2) Law No. 33/2004 regarding Fiscal Balance 3) Foreign Grants Agreement	Foreign Grants Agreement PP 55/2005
How the benefits are going to be distributed?	Trustee forms a 'board' to select REDD+ proposals, invites REDD+ stakeholders (prominent) to be board members; then, REDD+ program will be announced, (a call for proposal) and requirements and eligibility for the funding was also announced. Hence the community groups, as well as NGOs, KPH, and other interested parties can apply to the REDD+ program, and will have the same chance to be selected as an REDD+ grantee.	
Who are going to monitor and evaluate the distribution?	Trustee (selected by REDD+ Agency)	The REDD+ Project and the community will periodically send progress and monev report to the Trustee.

3) Trustee (under REDD+ Agency) conducts a study of what is needed in the REDD+ project area, in terms of infrastructure, capacity building and training for the local community and a study of WTP in this case to maintain the infrastructure/sustain the skill from the capacity building and training. After the study is conducted, options of development is offered and discussed with the local community, including with how and what the local community are willing to do in order to maintain the infrastructure/sustain the skill from the capacity building and training[220].

[219] Building lesson learned from SGP-PTF UNDP 2007.
[220] Lesson learned from PNPM, the World Bank.

OPTION 3: Trustee assests what is needed in the REDD+ project area	**National level**	**Local level**
Who is responsible for the distribution?	Trustee (under by REDD+ Agency)	Community
What are the possible rules/ regulations?	Presidential Instruction No. 3/2010 on Equitable Development Program	-
How the benefits are going to be distributed?	Trustee (under REDD+ Agency) conducts a study of what is needed in the REDD+ project area, in terms of infrastructure, capacity building and training for the local community and a study of WTP in this case to maintain the infrastructure/sustain the skill from the capacity building and training. After the study is conducted, options of development is offered and discussed with the local community, including with how and what the local community are willing to do in order to maintain the infrastructure /sustain the skill from the capacity building and training.	
Who are going to monitor and evaluate the distribution?	Trustee	Local Community

4) Supervisory Council, consisted of National Government, Provincial Government, District Government, Civil Society and other related stakeholders is created to oversee and make decisions on REDD+ program implementation[221]. An institution will be identified or created to manage program activities, with oversight by the Supervisory Council. The activities managed by the institution will include: (1) Cross-cutting enabling programs: The program will invest in structures and processes that support good forest governance and effective decision making – such as carbon accounting, regulatory reforms, community involvement and improved spatial planning – that will foster sustainable land use and reduced forest loss and degradation. (2) Site-specific demonstration activities: The program will work directly with land managers (e.g. communities, timber concessionaires, oil palm developers) to adopt practices that reduce forest loss and emissions. A result of individual policies and demonstration activities will be evaluated, but success of the overall program will be measured in terms of reduced emissions across the district as a whole. Once market rules are clarified, verified emissions reductions from the program will be bundled for marketing and proceeds will be shared with stakeholders as determined by the oversight body through its participatory planning process.

[221] Drawing lesson learned from Berau-TNC and UNREDD.

OPTION 4: Supervisory Council is created to oversee and make decisions on REDD+ program implementation	**National level**	**Local level**
Who is responsible for the distribution?	Supervisory Council (consisting of National Government, Provincial Government, District Government, Civil Society and other related stakeholders)	Project Management Unit (PMU) with the Community
What are the possible rules/ regulations?	Regulation of the Minister of Forestry of Republic of Indonesia P.30/Menhut-II/2009 on Procedures of Reducing Emmision from Deforestation and Forest Degradation (REDD)	-
How the benefits are going to be distributed?	An institution will be identified or created to manage program activities, with oversight by the Supervisory Council. The activities managed by the institution will include: (1) Cross-cutting enabling programs: The program will invest in structures and processes that support good forest governance and effective decision making – such as carbon accounting, regulatory reforms, community involvement and improved spatial planning – that will foster sustainable land use and reduced forest loss and degradation. (2) Site-specific demonstration activities: The program will work directly with land managers (e.g. communities, timber concessionaires, oil palm developers) to adopt practices that reduce forest loss and emissions. A result of individual policies and demonstration activities will be evaluated, but success of the overall program will be measured in terms of reduced emissions across the district as a whole. Once market rules are clarified, verified emissions reductions from the program will be bundled for marketing and proceeds will be shared with stakeholders as determined by the oversight body through its participatory planning process.	
Who are going to monitor and evaluate the distribution?	Supervisory Council and PMU	PMU and local community

Spending Allocation

In addition to the previous issues of financing scheme of REDD+, i.e. funding options, financing mechanism, and benefit distribution, spending allocation of REDD+ benefit is the last issue has to be concerned in the implementation of REDD+. The benefit sharing of REDD+ received by local government will be posted as regional income and becoming a part of the income source of the regional budget (APBD). The financial benefits of REDD+ could be transferred into regional budget through several ways, among others are general allocation fund (DAU), specific allocation fund (DAK), benefit sharing fund of natural resources (DBH), or posted as region original income (PAD). Some critical questions arose concerning the purpose or uses of budget expenditure. The benefits of REDD+ received by local government are able to be spended for all purposes or strictly limited to support activitied related to forest management or carbon stocking enhancement? The questions have to be answered carefully because except the specific allocation fund (DAK), basically local governments can spend their regional income to meet their own needs ruled in the regional budget (APBD).

Thus, to ensure the effectiveness and sustainability of the REDD+ schemes, three considerations have to be concernned in defining spending allocation of the regional budget, as follows:

1) Sufficiency of budget allocation to implement respective REDD+ programs effectively.
2) Sufficiency of budget to avoid potential leakages of REDD+ programs.
3) Sufficiency of budget to compensate the loss of economic linkages due to implementation of REDD+ programs.

7.3 Framework for the Implementation of REDD+

In the context of international relations and national sovereignty, the concept of REDD+ shall be implemented selectively and carefully. To ensure a proper policy for REDD+, some key questions shall be considered:[222]

- **The cost for preparing REDD+**

  In many cases cost for preparing REDD+ is not considered in the carbon price negotiation. The preparation cost to make readiness of REDD+ is very important to calculate because sometimes the costs have to be spent by the forest owner (producers) are very high, even higher than the financial benefits received from carbon trading.

- **Development pressures on the land**

  The intensity of development pressure to forestlands would influence to the effectiveness of REDD+ implementation. The higher the intensity of development pressure, the lower the effectiveness of the REDD+ implementation.

- **Productivity for agriculture and other economic uses**

  The effectiveness of REDD+ would be highly influenced by the productivity of land for agriculture and other economic uses. If the land productivity of agriculture or other economic uses is high then the pressure for converting forestlands into agriculture or other economic purposes will be also high. The REDD+ programs will be successfully implemented if the benefits from REDD+ are bigger than from agriculture or other land utilizations.

- **Legitimacy of Regional Spatial plan**

  Spatial plan plays very important role to the effectiveness of land uses, included foresland utilizations. The activities of REDD+ programs are mostly conducted in forestlands and the effectiveness of those programs are highly influenced by landuse changes. A legitimed regional spatial plan (RTRW) is needed to regulate land uses effectively.

[222] Stein *et al* (2001). Purchase of Development Rights: Conserving Lands, Preserving Western Livelihoods. A publication from the Western Governors' Association, Trust for Public Land, and National Cattlemen's Beef Association.

- **Environmental and cultural benefits of forest preservation**

  The effectiveness of REDD+ programs will be higher if the environmental and cultural benefits of forest preservation is high. The higher the benefits from forest preservation is supposed to increase the effectiveness of REDD.

- **Proximity to other preserved lands**

  The REDD+ programs in certain forest area might be not so effective if there are any other choices of lands that are available to substitute the function of forest area proposed for REDD+.

- **Leverage of matching funds coming from other funding entities**

  The higher the leverage of matching funds coming from other funding entities will increase the chance for a successful implementation of REDD+. The effectiveness and trust of certain REDD+ project will be stronger with the increasing participation of other funding entities.

The schemes of REDD+ could be implemented if and only if they fulfilled the criteria of the effectiveness, efficiency, and equity. Several important components are recommended to be regulated in order to implement low carbon development schemes effectively (**Table 25**).

Table 25. The Important Components for the Implementation of REDD+

Components	Recommended Level of Regulations	Level of Importance
1. DEFINITION PROPONENTS		
▪ Producer/seller	MR, GV, BB	Important
▪ Buyer	MR, GV, BB	Important
▪ Location	Law, GR, MR, GV, BB	Very important
▪ Type of schemes (i.e. AR-CDM, REDD, etc.)	GR, MR, GV, BB	Very important
▪ Other parties (related stakeholders and their positions)	MR, GV, BB	Important
2. SALE & PURCHASE TERMS		
▪ Volume	MR, GV, BB	Important
▪ Delivery date(s)	MR, GV, BB	Important
▪ Transfer of legal title	Law, GR, MR, GV, BB	Very important
▪ Length and number of verification periods	MR, GV, BB	Very important
▪ Payment (timing and method)	MR, GV, BB	Very important
▪ Currency	BB	Important
▪ Option to purchase additional credits	BB	Important
3. PROJECT DEVELOPMENT & IMPLEMENTATION		
▪ Responsibility for project implementation (validation, registration)	GR, MR, GV, BB	Very important
▪ Monitoring of emission reductions/removals	GR, MR, GV, BB	Very important
▪ Verification/Certification	GR, MR, GV, BB	Very important
4. COST AND TAXES		
▪ Responsibility for costs of validation, registration, verification/certification	GR, MR, GV, BB	Very important
▪ Responsibility for international taxes and local taxes	Law, GR, MR, GV, BB	Very important
5. DEFAULTS AND REMEDIES		
▪ Delivery shortfall provisions	MR, GV, BB	Very important
▪ Events of default	MR, GV, BB	Very important
▪ Time period to cure default	MR, GV, BB	Very important
▪ Termination	GR, MR, GV, BB	Very important
▪ Remedies	MR, GV, BB	Very important
6. GENERAL PROVISIONS		
▪ Governing rules	Law, GR, MR, GV, BB	Very important
▪ Assignment	MR, GV, BB	Very important
▪ Amendments	MR, GV, BB	Very important
▪ Force Majeure	MR, GV, BB	Very important
▪ Representations & warranties	MR, GV, BB	Very important
▪ Compatibility to national & UNFCC policies	Law, GR, MR, GV, BB	Very important

Source: adapted from ERPA-UNDP (modified); Nurrochmat (2011a)

Note: GR=Government Regulation, MR=Minister Regulation, GV=Governor/regency head/major Regulation, BB = Business to Business Agreement

8. SUMMARY AND FUTURE WORK

8.1 Summary

Many issues influenced to the various aspects of the implementation of REDD+. This study identified twelve most important issues concerning the benefits distribution system (BDS) of REDD+ as follows:

1) Formulating the legal framework of REDD+ BDS
2) Clarifying the authority towards REDD+ BDS
3) Strenghening the forest tenure
4) Improving the procedure and administration of REDD+ BDS
5) Defining beneficieries and forms of REDD+ benefit sharing
6) Evaluating the legal consequences of REDD+ BDS
7) Implementing FPIC (free, prior, informed, and consent) of REDD+ BDS
8) Ruling allocation of REDD+ benefit sharing
9) Measuring the transaction costs of REDD+ BDS
10) Regulating spending allocation of REDD+ benefits
11) Implementing REDD+ BDS participatory monitoring
12) Providing grievance mechanism of REDD+ BDS

This study has identified several options to deal with each issue of REDD+ BDS and recommends the best option to implement REDD+ BDS effectively. Those options and recommendations for REDD+ BDS are:

1) Formulating legal framework of REDD+ benefit distribution system.

One of the most crucial issues of the REDD+ BDS have to be addressed is the legal framework. Although the President of Indonesia has formed a Special Task Force for REDD+ institution, who has mandate to formulate the REDD+ National Strategy *(STRANAS),* to form a National 'Body'or agency of REDD+, and to make coordination in implementing REDD+ with align ministries, actually there is no strong legal framework for REDD+ in Indonesia. Most of the activities and institutions related to REDD+ are ruled by presidential decree *(Keppres)* or presidential regulations *(Perpres),* while tasks and responsibilities of the allign ministers and other government institutions are ruled by the laws *(Undang-Undang/UU)* or government regulations *(Peraturan Pemerintah/PP).* Hierarchically, the presidential regulations, presidential decrees, or even ministerial regulations is the most common legal basis for REDD+ programs and sectoral activities related to REDD+ in Indonesia. Consequently, in many cases the Special Task Force of REDD+ is not able to force their rules to the align ministers nor related state institutions effectively. This situation threats for the implementation of REDD+ programs in Indonesia. Therefore, the Government of Indonesia (GoI) has to choose best options for the further implementation of REDD+. Those options are first, use the existing REDD+ legal framework in

Indonesia; second, wait until the REDD+ Task Force succeeded in formulating the enhanced REDD+ legal framework; and third, during the waiting period, all ministries and agencies has to document, list and synchronize all REDD+ related regulations as well as coordinating all align ministries before they enact their own REDD+ regulations. This study recommends to choose the third option because during the waiting period, it is useful to keep track on how and what regulations are being made by align ministries in regards to REDD+. The legal framework working group within the Task Force REDD+ can give an update to each align ministries of what is needed and what is not needed to be regulated/or already regulated by other ministries.

2) Clarifying the authority towards REDD+ BDS.

The REDD+ involves multi sectoral issues, which encompasses 18 different align ministries in Indonesia, among others: Ministry of Forestry, Ministry of Environment, National Agency for Development Planning/BAPPENAS, Ministry of Agriculture, Ministry of Industry, Ministry of Trade, Ministry of Public Works, Ministry of Labor, Ministry of Foreign Affairs, Secretary of State, Ministry of Energy and Mineral Resources, Ministry of Housing, National Land Agency, etc. However, the are still lack of coordination efforts and weak supporting implementation of REDD+ because of two hurdles: first, the REDD+ National Strategy did not clearly state the date of the establishment of the National Agency of REDD+ and second, unclear division of labor between the new National Agency of REDD+ with the agencies and align ministries. It is urgent to develop National Agency of REDD+ because works on the ground are on-going and they cannot wait for too long in order to be coordinated and organized under one roof. It is also primarily important to state clearly the position, tasks, and responsibility of all institutions and align ministries who currently holds the mandate of REDD+. They have to be well communicated, due to the high traffic of information which might confuse parties, coordination and communication are the key factors to manage REDD+ activities. There are three options to define the basis of the authorities for implementing REDD+ in Indonesia. The first option is firsly, using the existing legal framework in Indonesia; secondly, waiting for the establishment of REDD+ National Agency; and thirdly, during the waiting period, ministries and agencies have to document, list and synchronize all REDD+ related activities as well as improving coordination amongst all align ministries, in a routine basis. This study recommends the third option as the best alternative because it is useful to keep track on how and what activities are being made by align ministries in regards to REDD+. Furthermore, the Task Force REDD+ can give an update to each align ministries of the current situation in the establishment of National Agency of REDD+.

3) Strengthening forest tenure.

One of the most important factors to implement REDD+ and then, Benefit Distribution System (BDS) of REDD+ is the clarity of forest tenure. According to the Forestry Law 1999, is a legal classification of an area designated for fixed forest and does not reflect the reality on the ground – forests exist outside of this Forest Area and, conversely, there are denuded areas within the Forest Area. The Forestry Law 1999 contains provisions relating to the sustainable use and multiple functions of forests. However, the law and its implementing regulations on forest tenure are in some extend problematic because there are people who have been living in and outside the forest of Indonesia. Therefore, tenure security is a key underlying issue for REDD+, and in particular for whether REDD+ will present more risks than opportunities for

these forest dependent people. Where tenure security is weak, REDD+ is likely to be more risky for local communities who could face the prospect of being alienated from lands which are conserved only for their GHG emission mitigation potential without allowing for community ownership and use. Uncertain or unresolved tenure arrangements at the local level might lead to a lack of support for REDD+ projects, or even social tensions, which could adversely impact the permanence of REDD+ projects. There are three options to assure the clarity of forest tenure related to the implementation of REDD+ that are first, use the existing legal framework on forest tenure in Indonesia; second, total land tenure reform; and third, improving existing legal framework comprehensively, tenure security, and access to forests. This study concluded that the third option is recommended. Enhancing tenure security of forest dependent communities can help to address legal uncertainties surrounding REDD+ projects. To enhance tenure security, each align ministries will have to compare and contest as well as coordinate their map as 'one map' in order to have a uniformed and standardized Indonesia map, for granting licenses, permits and ownership rights. In this context, a 'one map' policy initiated by Task Force REDD+ is suppposed to improve clarity of land status and strengthen the security of forest tenure.

4) Improving procedures and administration of the Benefit Distribution System (BDS) of REDD+

Unclear procedure and/or administration of BDS REDD+ is another important issue has to be addressed. It has to be understood that each region has local characteristic and therefore, it has to be accounted in designing specific BDS for different areas in Indonesia. At sub-national level, each provincial government needs to create a REDD+ institution to organize and implement its Regional REDD+ Strategy and Action Plan, developed from the REDD+ National Strategy. Districts also can establish REDD+ institutions to coordinate all aspects of district-level REDD+ activities effectively and report results to the provincial level. Data and information collected locally on developments in REDD+ program activities and projects will inform the national REDD+ Agency. Groups and bodies as diverse as business entities, civil society organizations, local government institutions, and community groups can function as implementers. There three options to define the procedure and administration of REDD+ in Indonesia, that are: first, using the existing BDS in Indonesia, where mostly this is formal government payment system (from the Province-District-Sub District-Village-Community); second, imitating BDS best practices in Indonesia and other countries, then try to all regions; and third, adapting existing local payment system in Indonesia, BDS best practices of REDD+ in Indonesia and other countries, as well as the social structure in each areas, then carefully design a BDS which is acceptable and has least corruption possibility for each area. This study suggests option 3 as the best altenative to establish procedure and administration of REDD+. Thus, by choosing the option 3 as the basis to formulate BDS proocedure and administration of REDD+, it could be concluded that the requirements for registration of REDD+ programs/projects/activities are based on the general principles determined by the national REDD+ Agency and must be in line with local policy and custom.

5) Defining beneficiaries and forms of REDD+ benefit sharing.

Making rules to define beneficiaries and forms of REDD+ benefit sharing is primary important issue for the succesfull implementation of REDD+. Regional governments are among the parties with the potential to receive benefits from REDD+ projects. Community members will also receive payments either individually or collectively in line with their roles played within the context of having rights over resources and provision of services. The benefits distributed also to people working as paid staff members for programs or projects. In addition to clarify the beneficiaries of REDD+, it is also very important to define the forms of REDD+ benefit sharing, i.e. in cash (money terms) or in "natura" (facilities, such as improving water irrigation, school, road infrastructures, etc.). There are several ways to define the beneficiaries and forms of REDD+ benefit sharing, which are basically could be ruled nationally by the national government or the rules are devolved to the regions. This study proposes three options to define beneficiaries and forms of REDD+ benefit sharing clearly. Firstly, making fixed procedures of BDS for all REDD+ projects nationally. Secondly, delivering full athority of the BDS REDD+ arrangement to the regional government and/or local entity. Thirdly, considering different BDS for REDD+ projects, specifically paying attention to each beneficiaries in the project, as each location and each projects are unique and only the general principle of BDS REDD+ are determined by the central government. This study concluded that the best option is the third rule. As each REDD+ project is unique, in a specific locations with a different set of social rules, the BDS and beneficiaries in each project will not be exactly the same. Thus, the beneficiaries and forms of REDD+ BDS have to respect the local specifics and at the same time should not challenge the national interests.

6) Evaluating the legal consequences of REDD+ BDS.

One pivotal issue concerning the implementation of REDD+ is measuring and considering the legal consequences of BDS REDD+. One of the most important aspects in evaluating legal consequences of REDD+ BDS is to clarify land rights status and land use rights before and after REDD+. In addition, it is also important to identify the potential loss of income due to REDD+ programs/projects/activities. This study identifies three options to choose the basis for evaluating legal consequences of REDD+ BDS, i.e. first, using current legal system and REDD+ regulation standards offered by donors, developers or current carbon market standards; second, waiting for the national REDD+ Agency to take form and enact REDD+ regulations, and third, measuring legal consequences of the current BDS REDD+ standards and promoting a more rational, equitable, and suitable BDS REDD+ for Indonesia. Option 3 is concluded to become the best choice as the basis for evaluating the legal consequences of REDD+ BDS. Therefore, it requires to measure legal consequences of the current BDS REDD+ standards prior to the implementation of REDD+ and then, promote a more rational, equitable, and suitable BDS REDD+ for Indonesia.

7) Implementing FPIC (free, prior, informed, and consent) of REDD+ BDS.

FPIC can be described as the establishment of conditions under which people exercise their fundamental right to negotiate the terms of externally imposed policies, programs, and activities that directly affect their livelihoods or wellbeing, and to give or withhold their consent

to them. The right to FPIC can therefore be viewed as an additional component to any effective, ongoing consultation process, or as an extension to sound community engagement strategies. The more participatory the process of change is, the less emphasis and time is needed to secure 'consent', as communities will have already actively defined the processes and outcomes of any proposed change. Consultation and participation are crucial components of a consent process. The parties should establish a dialogue allowing them to find appropriate solutions in an atmosphere of mutual respect in good faith, and full and equitable participation. Indigenous peoples should be able to participate through their own freely chosen representatives and customary or other institutions. The inclusion of a gender perspective and the participation of indigenous women are essential, as well as participation of children and youth as appropriate. This process may include the option of with holding consent. Consent to any agreement should be interpreted as indigenous peoples having reasonably understood it. FPIC will act as a social safeguard for REDD+ in Indonesia. Hence, it is crucial to have it introduced and disseminate issues related to climate change, REDD+ and FPIC not only to the local people, but also to the local government and legislators. Regarding the implementation of FPIC on REDD+ BDS, two options may be considered: first, conducting business as usual; second, introducing and disseminating FPIC to all related REDD+ stakeholders, by considering the stakeholder characteristics and suitable communication. This study recommends the second option for better process and result of REDD+ BDS. FPIC is important in REDD+ areas, because in almost all of Indonesia's forest, there will be local people or adat people who have already settled years (sometimes centuries) in those forests. Organizing REDD+ activities or project of any kind, without asking or giving their Free Prior Informed Consent will not guarantee a smooth acceptance from the local/adat community.

8) Ruling allocation of REDD+ benefit sharing.

Determining allocation of REDD+ benefit sharing amongst stakeholders is very important to ensure the sustainability of REDD+ program/project/activity. The benefit sharing allocation, both vertically and horizotally, has to be defined clearly prior to the starting of REDD+ project. This study proposes three options to rule the allocation of benefit sharing of REDD+. Firstly, allocation of benefit sharing is fully defined by stakeholders/community. Secondly, allocation of benefit sharing is fully determined by regulations. Thirdly, the general principle of BDS is defined by regulations, but technical detail should be made at local level. Option 3 is recommended as the best way to rule allocation of REDD+ benefit sharing. It is important to regulate the general principles to avoid sectoral conflicts and to ensure the REDD+ BDS design does not challenge the national interests. The technical details, however, has to meet the local needs and respect with local specifics.

9) Measuring the transaction costs of REDD+ BDS.

The implementation of REDD+ is costly. The transaction costs of REDD+, included preparation costs, implementation costs, monitoring, and other costs, have to be calculated prior to the implementation of the REDD+. It is very important to calculate the transaction costs before REDD+ project implemented because in many cases the transaction costs are very high, much higher than the financial benefits will be received from REDD+ project. Three options may be considered, i.e. first, transaction cost is looked at as a consequence of the REDD+

implementation, therefore the transaction costs have to be beared fully by the supliers; second, the transaction costs have to be beared entirely by donors or buyers; and third, the transaction costs have to be measured and shall be used as the basis for price negotiations in carbon trading/carbon projects , including to determine REDD+ BDS. This study recommends the third option 3. It means that the transaction cost shall become one of the main considerations to accept or refuse certain proposal of REDD+ program/project/activity.

10) Regulating spending allocation of REDD+ benefits.

The spending allocation of the REDD+ benefits is one of the major concerns for the sustainability of REDD+. The sustainability of development and leakage of the REDD+ project are strongly influenced by whether the benefits from REDD+ are spent properly. There are three options to regulate spending allocation of REDD+ benefits. First, right for spending of the REDD+ benefits is fully defined by beneficiaries at local level. Second, spending allocation of the REDD+ benefits is regulated by law or other state regulations. Third, general principle for spending allocation of the REDD+ benefits has to be defined by law or other state regulations, however the technical details have to be devolved at the local level. Option 3 is recommended as the best way to regulate spending allocation of REDD+ benefits. It is important to regulate the general principles for spending allocation of the REDD+ benefits by law or government regulations to avoid bias of narrower interests of region or short-term interests of regional head. At the same time, however, the technical details shall be regulated at the lowest level to respect the local specifics.

11) Implementing REDD+ BDS participatory monitoring.

Participatory monitoring in REDD+ is important to create spaces and opportunities for more inclusive, better-informed decision making. Monitoring systems that involve local people in REDD+ program/projects have many advantages, such as enriched data, lower total costs and a better chance of being sustained. Three options are identified to conduct participatorry monitoring of REDD+ BDS, i.e. first. full participatory monitoring in all locations and forms of BDS REDD+; second, improving the existing participatory monitoring and bringing the advantages of community engagement and ensuring the involvement of critical stakeholders at the local level; and third, non-participatory monitoring by parties and persons from outside. Option 2 is recommended as the best form of the participatry monitoring of REDD+ BDS in Indonesia. Full participatory monitoring looks good, but it does not fit for all situation. It is ideal for the situation of the educated or enlighted participants. Thus, improved participatory monitoring is needed to bring the advantages of community engagement and to involve of various interets at the local level.

12) Providing grievance mechanism of REDD+ BDS.

Any distribution systems of benefits, however well designed, will inevitably give rise to complaints by those, who think that they have not been rewarded appropriately and/or are losing out to free-riders, who receive benefits but have made no contribution to forest protection andreducing carbon emissions. With the current situation of tenure, boundaries overlaps and adat community rights problems, grievance mechanism has to be considered in the implementation of REDD+ BDS. There are three options for grievance mechanism of REDD+

BDS. First, grievance mechanism that is entirely managed by government; second, grievance mechanism, which is independent and specific for REDD+ related activities; and third, grievance mechanism that includes civil society participation at local level, under the supervision of the National REDD+ Agency. This study considers that the option 3 is recommended. Given the importance of managing complaints to ensure that the BDS rewards those who deserve to be rewarded on the basis of emissions reductions and to generate information that can be used to improve the BDS, a credible grievance mechanism is required. GoI should consider to establish a grievance mechanism that allows complaints to be managed transparently and efficiently and how Indonesian civil society organizations can be most appropriately integrated into such a mechanism. In this context, the supervision of the grievance mechanism shall be taken by an institution at the national level, such as National REDD+ Agency.

There are several options could be considered for the REDD+ BDS mechanisms at local level, i.e. Province of Central Sulawesi:

First, the Trustee works with the formal distribution channel of the government. It means that from the provincial level, then the funds distributed to the district level, then down to sub-district, village and to the community level. This route may take similar approach as the *"Musrenbang"* process, where the community select program priorities to be presented to the village, then the village government collects the data and present them to the sub-district and the sub-district agrees on the priority programs to be taken to district government. Then, the district government reaches agreement of the final workplan and budget of REDD+ activities.

Second, the Trustee selects proposals of REDD+ activities, which met the requirement of the REDD+ program. The community, as well as NGOs, KPH, and other interested parties can apply proposal to the REDD+ program. Thus, stakeholders or parties want to get benefits from REDD+ program have to apply proposal actively and met to the REDD+ program requirements.

Third, Supervisory Council, consisted of National Government, Provincial Government, District Government, Civil Society and other related stakeholders is created to oversee and make decisions on REDD+ program implementation[223]. An institution will be identified or created to manage program activities, with oversight by the Supervisory Council. The activities managed by the institution will include: (1) Cross-cutting enabling programs: The program will invest in structures and processes that support good forest governance and effective decision making – such as carbon accounting, regulatory reforms, community involvement and improved spatial planning – that will foster sustainable land use and reduced forest loss and degradation. (2) Site-specific demonstration activities: The program will work directly with land managers (e.g. communities, timber concessionaires, oil palm developers) to adopt practices that reduce forest loss and emissions. A result of individual policies and demonstration activities will be evaluated, but success of the overall program will be measured in terms of reduced emissions across the district as a whole. Once market rules are clarified, verified emissions reductions from the program will be bundled for marketing and proceeds will be shared with stakeholders as determined by the oversight body through its participatory planning process.

[223] Drawing lesson learned from Berau-TNC and UNREDD.

8.2 Future Works

It is useful for the Government of Indonesia (GoI) to publicize their current positions, for example, how things are going in Central Kalimantan after the signing of LoI with Norway, the implementations of Presidential Instruction 10/2011 on Moratorium on New Permits and Improvements of Primary Forests and Peatland Governance to keep the public informed and the momentum going. Those information will be needed to improve existing policies related to REDD+ and to strengthen legal framework of REDD+. There is also an urgency to quickly establish the National Agency of REDD+ because REDD+ activities on the ground have already rolled off, the momentum is already created and reached its peaks, and public expectation to see 'success' of REDD+ activities are high. The current government administration only has two more years to wrap things up until 2014. If until 2014 REDD+ National Agency is not yet established under an act of law of some kind, it will be hard to lock the commitment of the next administration to REDD+ related activities. It is also important to consider that Indonesia will be the first nation in the world who established a National Agency of REDD+, which will show to the world the Indonesia's commitment on combating deforestation and forest degradation and keeping safe our forests. Therefore, a detailed workplan on when and what steps taken to quickly established the National Agency of REDD+ is needed.

It is strongly recommended that customary land ownership in and around forest areas is mapped, documented and registered as part of REDD projects. The boundaries of authority can be established pursuant to existing laws and regulations. New laws should allow for groups to register boundaries of authority. The existing option of registering individual title requires communities to dismantle or abandon customary rules governing land use and ownership in order to gain security of tenure. New laws should allow for groups to have a number of choices in relation to registration to reflect the wide variety of rights in Indonesia. This would allow communities to gain security of tenure while at the same time protecting their traditions of holding land communally or subject to community interests.

It has to note that a uniformity of BDS for REDD+ will be impossible, because each region in Indonesia has its own uniqueness. A BDS action plan for each district will be the first step to figure out how is the benefit going to be distributed. A clear, detailed and accessible BDS is needed for each REDD+ projects. In designing the BDS, it is very important to include all stakeholders in the REDD+ projects and make sure that all of them are aware and in agreement with the BDS design. Aside from coordination and support from law enforcer agencies, there is also a need to work together with the legislatives and political parties in order to gain political support. Any form of coordination, such as working group or MoU between Task Force REDD+ and legislatives bodies will help gaining political support for promoting a more rational, equitable, and sustainable BDS REDD+ standards in Indonesia, as well as strengthening law enforcement in REDD+ related activities.

To ensure the effective implementation of REDD+ BDS, it is primary important to identify needs and wants of the REDD+ stakeholders prior to develop the FPIC, guidelines, mechanism and its implementation in REDD+ areas of Indonesia. The GoI should also review participatory

monitoring methods with ademonstrated history of success. Based on this review, GoI should prepare the general principles for participatory REDD+ monitoring. The benefits of REDD+ shall be higher than the opportunity costs beared by the people. Therefore, measuring the opportunity costs, e.g. costs of preparation, implementation, monitoring, reporting, and verifification of REDD+ in each specific REDD+ project site, is a must. It is also very important to measure the leakage and linkage of each REDD+ projects, e.g. output, income, and employment multipliers.

One of the most determinant factors affecting the sustainabilit and impacts of REDD+ program is the capacity of stakeholders. Thus, it is extremely importing to improve knowledge and capacity of local people and REDD+ BDS institutions at local level. While at national level, GoI shall define the general guidance for the spending allocation for REDD+ benefits. GoI should also review participatory monitoring methods with a demonstrated history of success. Based on this review, GoI should prepare principles for participatory REDD+ monitoring. Finally, it is very important to identify all potential complains concerning BDS REDD+. Then, the GoI should undertake a more detailed analysis of the appropriate institutional structure of a participatory grievance mechanism. This should lead to a communications strategy through which information on the proposed grievance mechanism is widely disseminated to all stakeholders.

References

[ADB] Asian Development Bank, 2005. Proposed Loan, Republic of Indonesia: Rural Infrastructure Support Project.

Angelsen A (ed.), 2008. Moving Ahead with REDD Issues, Options and Implications. CIFOR. Bogor

Badan Penelitian dan Pengembangan Kehutanan, 2010. Policy Brief: Bagaimana mekanisme distribusi Peran dan Manfaat REDD+ yang Efisien dan Berkeadilan, Bogor

Bappeda Banten, 2002. Penyusunan Master Plan Pengembangan dan Konservasi Daerah Aliran Sungai Cidanau (Master Plan Arrangement for Conservation and Development of the Cidanau Watershed). Badan Perencana Pembangunan Provinsi Banten (Provincial Development Planning Board of Banten) and PT Formasi Empat Pola Selaras Konsultan. Serang.

Bappeda Sulteng, 2012. Capaian Hasil Pembangunan Provinsi Sulawesi Tengah. Badan Perencanaan Pembangunan Daerah(BAPPEDA), Pemerintah Provinsi Sulawesi Tengah, Palu.

[BPK] Badan Pemeriksa Keuangan, 2008. Pemeriksaan dana perimbangan (fiscal balance fund audit), Majalah Triwulan BPK-RI April-Juni 2008, Badan Pemeriksa Keuangan Republik Indonesia, Jakarta.

[BPS] Badan Pusat Statistik, 2010. Sulawesi Tengah Dalam Angka.

[BPS] Badan Pusat Statistik, 2011. Sulawesi Tengah Dalam Angka.

Boer R, Sutardi and D Hilman, 2007. Indonesia Country Report: Climate Variability and Climate Change,and their ImplicationMinistry of Environment (accessed 7/14/2012).

Bofin P, 2011. REDD Integrity: Addressing governance and corruption challenges in shemes for Reducing Emissions from Deforestation and Forest Degragation, p.12

Brown T, 2011. REDD+ Financing Options: Considerations for a “Payment-Incentive” Mechanism. The World Bank. Paper presented in the Workshop”Pemangku Kepentingan Terkait REDD+ Partnership Indonesia”, September 20, 2011.

Budhi GS, Kuswanto SA and M Iqbal, 2008. Concept and Implementation of PES Program in the Cidanau Watershed: A Lesson Learned For Future Environmental Policy. Analisis Kebijakan Pertanian Volume 6 No. 1, Maret 2008: 37-55.

Cahyat A, 2011. Guidebook to Local Governments in Indonesia, Draft September 2011.

Case M, Ardiansyah F and E Spector, 2007. Climate Change in Indonesia Implications for Humans and Nature. Word Wide Life (accessed 7/14/2012).

Costa MP, 2008. Avoided Deforestation as a GHG Mitigation Compliance Activity. EcoSecurities Group Plc.

Davis C, 2010. Governance in REDD+ Taking stock of governance issues raised in readiness proposals submitted to the FCPF and the UN-REDD Program, Background paper for Expert Workshop: Monitoring Governance Safeguards in REDD+, 24-25 May 2010, Chatham House, London.

Dearing JW and EM Rogers, 1996. Agenda Setting. Thousand Oaks. SAGE.

Departemen Keuangan, 2011. Anggaran Pendapatan dan Belanja Pemerintah Daerah tahun 2011 (Local governments' budget plan 2011), Departemen Keuangan Republik Indonesia, Jakarta.

DGEEU, 2009. Bring Village to Live with Self-Management Power Plant. Accessible at http://www.djlpe.esdm.go.id/modules/news/mbl_detail.php?news_id=1550

Dongges Ch, Edmonds G and B Johannessen, 2007. Rural road maintenance: Sustaining the benefits of improved access. Bangkok: International Labour Office.

Dunlop J, 2009. REDD, Tenure and Local Communities. A Study from Aceh, Indonesia (Banda Aceh: International Development Law Organization, p. 3-27 (accessed 7/14/2012).

Engel S, Pagiola S and S Wunder, 2008. Designing payments for environmental services in theory and practice: An overview of the issues. Ecological Economics 65 (2008) 663-674. Elsevier.

Evans K and MR Guariguata, 2008. Participatory Monitoring in Tropical Forest Management: A Review of Tools, Concepts and Lessons Learned. Bogor, Indonesia: Center for International Forestry Research (CIFOR), p. 1-5.

[FAO] Food and Agriculture Organizations, 2001. Illegal activities and corruption in the forestry sector, State of the World's Forests 2001, Food and Agriculture Organization of the United Nations, Rome.

FAQ Norway-Indonesia REDD Partnership.

Forest Peoples Program, PUSAKA, Yayasan Merah-Putih Palu Sulawesi Tengah, 2011. Central Sulawesi, UN-REDD Indonesia's Pilot Province, Rights, Forest and Climate Briefing Series—October 2011, p. 1-2.

Ginoga K, Nurfatriani F and Indartik, 2010. Mekanisme insentif dan pendanaan REDD+ . In: REDD+ and Forest Governance. Pusat Penelitian dan Pengembangan Perubahan Iklim dan Kebijakan, Bogor. pp: 53-74.

Gintings ANg, Ginoga KL, Sumedi N, Djaenudinn D, Nurfatriani F, Indartik and M Lugina, 2011. Pengumpulan Informasi dan Kompilasi Mekanisme Pembayaran Jasa Lingkungan Melalui Penelusuran Literatur dan Internet serta Komunikasi Langsung dengan Stakeholder. Kerjasama UN-REDD dan Badan Litbang Kehutanan, Jakarta.

Global Canopy Program, 2008. The Little REDD Book. A guide to governmental and nongovernmental proposals for reducing emissions from deforestation and degradation. Oxford.

[GoI] Government of Indonesia, 2007. Indonesia Country Report. Climate Variability and Climate Change, and Their Implication. Ministry of Environment, Jakarta.

Graham J, Amos B and T Plumptre, 2003. Principles for Good Governance in the 21st Century. Policy Brief No.15– August 2003. Institute on Governance. Ottawa, Canada.

Grieg-GranM,2006. The Cost of Avoiding Deforestation Report prepared for the Stern Review of the Economics of Climate Change. International Institute for Environmentand Development (IIED), London.

Grundmann R, 1998. Die Soziologische Tradition und die Natürliche Umwelt. In: Hradil, S. (Hrsg.): Differenz und Integration. Die Zukunft der Modernen Gesellschaft. Verhandlungen des 28. Kongresses der Deutschen Gesellschaft für Soziologie in Dresden 1986. Campus, Frankfurt a. M. S. 533-550.

Hamilton K, Sjardin M, Marcello T and G Xu, 2008. Forging a Frontier: Status of Voluntary Carbon Markets 2008. Katoomba Group's Ecosystem Marketplace and New Carbon Finance. 8 May 2008.

Ibeka, 2007. Community Private Partnership Pro-Poor Infrastructure: Cinta Mekar Microhydro Training Power Plant, a presentation by Ibeka in the Seminar on Policy Options for the Expansion of Community-Driven Energy Service Provision held by the UNESCAP in Beijing on March 11-12, 2007.

IWGIA and AIPP, 2010. REDD+ and Indigenous Peoples. A briefing paper for policy makers.

Karsenty, A. 2000. Economic instruments for tropical forests: The Congo Basin Case. Instruments for sustainable private sector forestry series. International Institute for Environment and Development, London. Center for International Forestry Research (CIFOR).

Krott M, 2005. Forest Policy Analysis. Dordrecht: Springer.

Lawlor K and D Huberman, 2009. Reduced Emissions from deforestation and forest degradation (REDD) and human rights. Chapter 12 in Rights-based approaches: Exploring issues and opportunities for conservation. Edited by J. Campese et al. IUCN and CIFOR, Bogor, Indonesia: 271. Available at: www.cgiar.cifor.org

Litvack, J., Ahmad, J and R. Bird. 1998. Rethinking Decentralization in Developing Countries. The World Bank. Washington, D.C.

Marbun BN, 2010. Otonomi Daerah, 1945-2010: proses dan realita (Regional autonomy, 1945-2010, process and reality, 2nd ed., Pustaka Sinar Harapan, Jakarta.

[MoF] Ministry of Forestry, 2008. Deforestation Calculation Book 2008. Mapping Inventory Center, Forestry Planning Agency, Ministry of Forestry, Jakarta.

[MoF] Ministry of Forestry, 2010. Berau Forest Carbon Program. Delivering Practical Solutions to Support Development of a National-level REDD Framework in Indonesia. MoF-TNC.

[MoF] Ministry of Forestry, 2012. Statistik Planologi Kehutanan. Direktorat Jenderal Planologi Kehutanan, Kementerian Kehutanan. Jakarta.

NGO Forum on Asian Development Bank, 2010. Submission on the Accountability Mechanism Review. 15 September 2010. www.forum-adb.org

Niles JO, Brown S, Ball PA, and J Fay, 2002. Potential Carbon Mitigation and Income Developing Countries from Change in Use and Management of Agriculture and Forest Lands. Philosophical Transactions of the Royal Society, Series A 1797: 1621-1639.

Nugroho B, 2010. Kelembagaan AR/CDM dan REDD: Tantangan dan Agenda. Disampaikan pada: Capacity Building on Carbon Forestry Mechanism. Bogor, 2-4 Februari 2010.

Nurruchmat DR, 2005. Strategi Pengelolaan Hutan. Upaya Menyelamatkan Rimba yang Tersisa. Pustaka Pelajar, Yogyakarta.

Nurrochmat DR, 2011. Pendanaan SFM & Mitigasi Perubahan Iklim di Sektor Kehutanan. Workshop Opsi Pendanaan (Financing Option) Mitigasi Perubahan Iklim di Sektor Kehutanan. Jakarta, 20 September 2011.

Nurrochmat DR, 2011a. Review infrastructure framework and mechanism related to SFM as important option in reducing emission from deforestation and forest degradation. ITTO Project Report. Indonesia Ministry of Forestry - International Tropical Timber Organization.

Nurrochmat DR, Widyantoro B and T Tiryana, 2011. LaporanKajian Teknis Rencana Makro Kawasan Hutan: Kriteria Arahan Pemanfaatan Ruang Kawasan Hutan Dalam RangkaPengembangan Kebijakan Makro Mitigasi Perubahan Iklim Kehutanan Indonesia. Direktorat Jenderal Planologi Kehutanan, Kementerian Kehutanan, Jakarta.

Nurrochmat DR, Hasan MF, Suharjito D, Budiaman A, Hadianto A, Ekayani M, Sudarmalik, Purwawangsa H, Mustaghfirin, and ED Ryandi, 2012. In: Nurrochmat DR and MF Hasan (Eds). Ekonomi Politik Kehutanan. Mengurai Mitos dan Fakta Pengelolaan Hutan (Edisi Revisi). INDEF. Jakarta.

Ogonowski M, Helme N, Movius D and Schmidt, 2007. Reducing Emissions from Deforestation and Degradation: the Dual Markets Approach. Center for Clean Air Policy. Working paper. 20 pp.

Pagiola S and G Platais, 2007. Payments for Environmental Services: From Theory to Practice. World Bank, Washington.

Pagiola S and BBosquet, 2009.EstimatingtheCostsof REDD+atthe CountryLevel.Version2.2.Forest Carbon PartnershipFacility, WorldBank.

Palmer BF, 2011. Community forest monitoring in REDD+: the 'M' in MRV? Environmental Science & Policy, Volume 14, Issue 2, March 2011, p. 181-187

Panjabi RKL, 1993. Can International Law Improve the Climate? An Analysis of the United Nations Framework Convention on Climate Change Signed at the Rio Summit in 1992, 18 N.C. J. Int'l L. & Com. Reg. 401, 404 (1993).

Phelps J, Webb EL and A Agrawal, 2009. Does REDD+ Threaten to Recentralize Forest Governance? Science, Vol 328. No. 5976.

Pistorius T, 2009. REDD from the Conservation Perspective: Pitfalls and opportunities for mutually addressing climate change and biodiversity conservation, Institute of Forest and Environmental Policy, Albert Ludwigs University, Freiburg.

Pusat Inventarisasi dan Perpetaan Hutan (Indonesia), 2008. Penghitungan Deforestasi Indonesia Tahun 2008.

[PwC] PricewaterhouseCoopers, 2012. Assessing Options for effective mechanism to share benefits. Insights for REDD+ Initiatives. PricewaterhouseCoopers.

[RECOFTC] Center for People and Forest and [GIZ] Deutsche Gesellschaft für Internationale Zusammenarbeit, 2011. Penerapan PADIATAPA: Proses Pembelajaran dan Uji Coba untuk Membangun Kesepakatan dengan Warga di Desa Lembah Mukti, Kecamatan Damsil, Kabupaten Donggala, Sulawesi Tengah. Directorate General of Planology, Ministry of Forestry and UN-REDD Program Indonesia.

[RECOFTC] Center for People and Forest and [GIZ] Deutsche Gesellschaft für Internationale Zusammenarbeit, 2011. Free, Prior, and Informed Consent in REDD+, p. 31.

[SATGAS REDD+] Satuan Tugas Persiapan Kelembagaan REDD+, 2012. Strategi Nasional REDD+ (REDD+ National Strategy), June 2012.

Skutsch MM, Zahabu E, and BS Karky, 2009. Community forest management under REDD: policy conditions for equitable governance, Paper prepared for XIII World Forestry Congress, Buenos Aires, 18-23 October 2009.

Springate-Baginski O and E Wollenberg (eds.), 2010. REDD, forest governance and rural livelihoods: the emerging agenda. CIFOR, Bogor, Indonesia.

Stein ER, McLeod AH and M Hyde, 2001 (Project leaders). Purchase of Development Rights: Conserving Lands, Preserving Western Livelihoods. A publication from the Western Governors' Association, Trust for Public Land, and National Cattlemen's Beef Association.

Sukadri D, 2009. Posisi Indonesia Dalam Negosiasi Perubahan Iklim Global. Dewan Nasional Perubahan Iklim (DNPI). Bahan Presentasi Workshop FKKM, Bogor, 19 Nopember 2009.

Sukadri D, 2009a. REDD dan REDD Plus Dalam Struktur Negosiasi Global. Dewan Nasional Perubahan Iklim (DNPI). Bahan Presentasi, Bogor, 23 Oktober 2009

Sulistiawati L, 2012. Climate Justice from the Bottom-Up: Case Studies from Indonesia. http://threedegreeswarmer.org/2011/02/climate-justice-from-the-bottom-up-case-studies-from-indonesia/last viewed July 6, 2012, 4:31PM.

Suparmoko M and DR Nurrochmat, 2005. Urgensi Implementasi PDRB Hijau di Sektor Kehutanan. Laporan Kajian. Badan Planologi Kehutanan. Departemen Kehutanan, Jakarta.

Tacconi L, Downs F, and P Larmour, 2009. Anti-corruption policies in the forest sector and REDD+. In: Angelsen A. (Ed.) Realising REDD+ National strategy and policy options, Center for International Forestry Research (CIFOR), Bogor.

Tumiwa F, Rambitan HI and O Tanujaya, no date. A Case Studi 1: Cinta Mekar Micro-Hydro Power Plant: Giving Power to the People the Instite for Essential Services Reform (IESR). Accessible at http://www.bicusa.org/en/Document.102200.aspx

UNFCC, Background on the UNFCCC: The international response to climate change. http://unfccc.int/essential_background/items/2877.php

[UN] United Nations, 2003. The Human Rights-Based Approach. Statement of common understanding. Inter- Agency Workshop on a human rights-based approach in the context of UN reform, 3 to 5 May 2003.

[UNDP] United Nations Development Program. 1997. Governance and Sustainable Human Development.

[UNDP] United Nations Development Program, 2005. Small Grants Program for Operations to Promote Tropical Forests (EC-UNDP SGP PTF). Country Guideline Paper Indonesia 2005-2007. January 2005.

[UNPFII] UN Permanent Forum on Indigenous Issues, 2005. Report of the International Workshop on Methodologies regarding Free, Prior and Informed Consent and Indigenous Peoples Document E/C.19/2005/3, Submitted to the Fourth Session of UNPFII, 16-17 may (New York: UN Permanent Forum on Indigenous Issues) (accessed 7/15/2012).

UNREDD-GTZ, 2010. Design of a REDD Compliant Benefit Distribution System for Viet Nam, January 2010.

UN-REDD Program Indonesia, 2011. Central Sulawesi: UN-REDD Indonesia's Pilot Province, Rights, Forest and Climate Briefing Series - October 2011.

UN-REDD Program Indonesia, 2012. Central Sulawesi Readiness to Implement REDD+ After 2012. Jakarta: UN-REDD Program Indonesia (accessed 7/14/2012).

Weber M, [1947] 1997. The Theory of Social and Economic Organization. Free Press.

Weitzner V, 2009. Bucking the Wild West - Making Free, Prior and Informed Consent Work, Speaking Notes for Free, Prior and Informed Consent Panel, Prospector and Developer's Association of Canada annual convention, p. 3. Available at www.nsi-ins.ca

Woods Hole Research Centre, 2007: The Costs and Benefits of Reducing Carbon Emissions from Deforestation and Forest Degradation in the Brazilian Amazon.

World Bank, 2010. Completing decentralization', Indonesia Rising: Policy Priorities for 2010 and Beyond. 53471, The World Bank, Washington, D.C.

World Bank, 2010. PNPM, Village Capacity in Maintaining Infrastructure Evidence from Rural Indonesia, June 2010.

Wulan YC, 2012.The Opportunity Cost Study of the Major Land Uses inCentral Sulawesi. ConsultantReport. UN-REDDProgramIndonesia, Jakarta.

Wunder S, 2005. Payments for Environmental Services : Some Nuts and Bolts. CIFOR's Occasional Paper No. 42. Center for International Forestry Research. Bogor.

[WWF] World Wildlife Fund for Nature, 2009. Cinta Mekar MicroHydro Plant Adopts Community-Based Microhydro Management. Accessible at http://www.wwf.or.id/berita_fakta/berita_fakta/?9160/Cinta-Mekar-Adopts-Community-Based-Microhydro-Power-Plant-Management-System

Yudhoyono SB, 2011. Pidato Presiden Republik Indonesia pada penyampaian keterangan pemerintah atas rancangan undang-undang tentang anggaran pendapatan dan belanja negara tahun anggaran 2012 beserta nota keuangannya di depan rapat paripurna Dewan Perwakilan Rakyat Republik Indonesia' (Presidential speech on the 2012 state budget plan in the front of plenary session of DPR), Jakarta, 16 Agustus 2011.

Websites

http://satoyama-initiative.org/en/case_studies-2/area_asia-2/creation-and-management-of-diverse-secondary-forest-in-central-sulawesi-indonesia/

http://sulteng.go.id/pub3/index.php?option=com_content&view=article&id=108&Itemid=132

http://threedegreeswarmer.org/2011/02/climate-justice-from-the-bottom-up-case-studies-from-indonesia/

http://unfccc.int/essential_background/items/2877.php

http://www.bicusa.org/en/Document.102200.aspx

http://www.djlpe.esdm.go.id/modules/news/mbl_detail.php?news_id=1550

http://www.forestcarbonpartnership.org/fcp/sites/forestcarbonpartnership.org/files/Documents/PDF/REDD-Costs-22.pdf

http://www.norway.or.id/Norway_in_Indonesia/Environment/-FAQ-Norway-Indonesia-REDD-Partnership-/

http://www.regnskog.no/languages/english/_attachment/13108?_ts=130dab801c3

http://www.undp.or.id/pubs/docs/Final%20Country%20Report%20-%20Climate%20Change.pdf

http://www.unescap.org/esd/energy/dialogue/community/documents/Presentation%20of%20Cinta%20Mekar.pdf

http://www.un-redd.org/UNREDDProgram/CountryActions/Indonesia/tabid/987/ language/en-US/Default.aspx

http://www.worldwildlife.org/climate/Publications/WWFBinaryitem7664.pdf

http://www.wwf.or.id/berita_fakta/berita_fakta/?9160/Cinta-Mekar-Adopts-Community-Based-Microhydro-Power-Plant-Management-System

www.cgiar.cifor.org

www.forum-adb.org

www.nsi-ins.ca

www.un.org